

Tech Talk: Poverty – from the September 2012 CSDC Network News

Poverty is one of the most requested data topics, but is the least understood by data users. Let us take a closer look at how poverty is determined for families, individuals and households, along with the poverty measures as they are delineated by the U.S. Census Bureau. We will focus primarily on poverty data as presented in the American Community Survey (ACS).

A Brief History

The U.S. Census Bureau reports poverty estimates as prescribed by the Office of Management and Budget's (OMB's) Statistical Policy Directive 14. Developed in 1964 by the Social Security Administration (SSA), the definition of poverty was originally based on the U.S. Department of Agriculture's (USDA) Economy Food Plan, which is the cheapest of the food plans constructed to sufficiently meet the nutritional needs of families. The SSA set the poverty threshold to three times the cost of the Economy Food Plan for a family of three based on the finding from the USDA's 1955 Household Food Consumption Survey that families of three or more people across all income levels spent approximately one-third of their after-tax income on food. This poverty definition, which was revised in 1969 and 1981, became the official poverty measure used by the federal government.

How is Poverty Determined?

Poverty is defined at the family level. The official poverty measure consists of a set of 48 dollar value thresholds that vary by family size and family composition (presence and number of related children). For one- and two- person families, the age of the householder (under 65 years or 65 years and older) is also considered. The thresholds are updated each year for inflation using the annual average Consumer Price Index for All Urban Consumers (CPI-U). Poverty thresholds, however, are not adjusted for geographic differences in the cost of living; they are the same across the country. Since the ACS is an ongoing survey where income is reported for the past 12 months, the poverty threshold for each family type is determined by multiplying the base-year poverty threshold (1982) by the average of the monthly CPI values for the 12 months prior to the survey month.

If a family's total annual income before taxes is less than the dollar value of its threshold, then that family and every individual in it are considered to be in poverty or below the poverty level. Capital gains and noncash benefits such

as food stamps, public housing, Medicare and Medicaid are not counted as income.

Poverty status is not calculated for every person. In the ACS, the poverty universe or "**persons for whom poverty is determined**" includes all persons except those who are institutionalized, in military group quarters, in college dormitories, and those unrelated individuals under 15 years old. **Unrelated individuals** are persons who are not related to the householder by birth, marriage, or adoption, or householders who are not related to anyone in the household by birth, marriage, or adoption. Poverty status for unrelated individuals greater than 15 years of age is determined by comparing the individual's income to a one-person family threshold.

Since the unit of analysis for measuring poverty is the family, **poverty status for households** is determined by comparing the total income of the householder's family to the threshold corresponding to the size and composition of the family. Householders who are not living with any relatives are considered a one-person family and their individual income will be measured against a one-person family threshold. Persons living in the household who are not related to the householder do not factor into the determination of the poverty status of the household. As they are not members of the householder's family, they do not impact the householder's family size and their income is not added to the householder's family income.

Measures

The **poverty rate** is an estimate of people who are below the poverty level as a percentage or proportion of the population for whom poverty status is determined. The groups that are not in the poverty universe are excluded from the numerator and denominator when calculating poverty rates. To illustrate, a poverty rate of 14.3% tells us that approximately one-seventh of the population for whom poverty status has been determined is classified as being in poverty because their family or individual income is below their appropriate threshold.

The **income-to-poverty ratio** measures a family's depth of poverty or proximity to poverty. For example, a family with an income-to-poverty ratio of 1.5 or 150 percent has an income of one and a half times their threshold. For California program and grant determinations, higher ranges of income-to-poverty ratios have been utilized to adjust for higher costs of living in California relative to other areas in the country.

Sources

In addition to the ACS, the Census Bureau produces poverty estimates through other surveys and programs, including the Annual Social and Economic Supplement to the Current Population Survey (CPS ASEC), the Small Area Income and Poverty Estimates Program (SAIPE), and the Survey of Income and Program Participation (SIPP).

The CPS ASEC is the official source of national poverty estimates because of its detailed questionnaire and its method of data collection, which uses experienced interviewers. The SAIPE program and ACS, however, are preferred sources for poverty data below the national level. The SAIPE program reports estimates of the total number and proportion of people in poverty for school districts, counties, and states. SAIPE estimates are based on various data including administrative records, population estimates and survey data, and as a result, generally have lower variances than ACS estimates. However, the SAIPE program does not provide poverty data by detailed demographic characteristics (e.g. the number of Whites age 55 and over who are in poverty); users should refer to the ACS for this type of data. Lastly, SIPP provides national longitudinal poverty data, which includes poverty information over time for the same households.

For more information to help you identify the appropriate data source for your poverty data needs, please see the Census Bureau's Description of Income and Poverty Data Sources at www.census.gov/hhes/www/poverty/about/datasources/description.html. It is also important to note that poverty estimates may vary across these surveys due to differences in the design of the questionnaire, sample size and methodology utilized to collect the data.