Poverty Measures over Time in the Northwest States

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The Census Bureau recently released its official U.S. poverty rate using Current Population Survey (CPS) data for 2011: 15.0%. Poverty estimates from the American Community Survey (ACS) were released shortly after and soon to follow will be the Supplemental Poverty Measure (SPM). All three rates paint a slightly different picture of poverty, both in the United States and in individual states.¹

This brief provides an overview of how these three poverty rates differ, their relative strengths, and long-term national and state poverty trends for each measure.

In summary:

- All three poverty measures are highly correlated and track unemployment rates closely;
- > ACS poverty rates use larger samples and so provide more reliable estimates for states and local areas:
- > The SPM provides better information on economic well-being by accounting for government benefits, work and health expenses, and cost of living differences across geographic areas;
- Poverty rates have increased in the Northwest area States since 2007 across all three measures.

Three Poverty Measures and their Differences

The poverty measures from the CPS, ACS, and SPM vary in three important ways: 1) the size of samples in states and local areas; 2) how income is measured; and 3) how poverty thresholds are calculated and adjusted (See Table 1 for details of the differences between measures).

The primary way that the CPS and ACS differ is in their sample size; the ACS includes more households and thus produces better estimates of poverty rates for states and local areas.

Both the CPS and ACS use the same definition of household income to calculate poverty: before-tax cash income and public benefits. Noncash benefits, such as food stamps, housing subsidies, and capital gains (and losses) are excluded from both measures. However, the CPS counts income for the previous calendar year and the ACS asks about income over a rolling 12 month period prior to interviews.

The CPS and ACS use the same income thresholds for determining whether or not a family is living in poverty. The CPS and ACS measures use poverty thresholds by family size; if a family's income falls below the threshold, they are classified as poor. The thresholds were established in 1960 and are adjusted annually using the Consumer Price Index. For example, the 2011 poverty threshold for a family of three with one child less than 18 years of age is \$17,922.

¹ The 2011 ACS poverty rates will be released by the U.S. Census Bureau on September 20, 2012. State SPM rates were released for 2009 only; state SPM rates for 2010 and 2011 will be released on November 13, 2012.

² These include: earnings, unemployment compensation or workers' compensation, Social Security, Supplemental Security Income, public assistance, veterans' payments, survivor benefits, pension or retirement income, interest, dividends, rents, royalties, income from estates, trusts, educational assistance, alimony, child support, and assistance from outside the household.

Observers have long criticized the poverty thresholds and the CPS and ACS poverty rates for being unrealistic measures of economic need because the measures of income do not take into account work or health expenses, the value of in-kind benefits such as food stamps, or geographic differences in cost-of-living.

In response, a 2010 interagency working group released its recommendations for the Supplemental Poverty Measure (SPM) that calculates a family's income using CPS *after-tax* income (including the Earned Income tax Credit and payroll taxes). Actual in-kind benefits (including nutritional assistance, subsidized housing, and home energy assistance) reported in the CPS are then added to after-tax income. The SPM also adjusts a family's income for estimated non-discretionary spending, including for childcare and other work-related expenses, health insurance premiums, and out-of-pocket medical expenses. Lastly, the thresholds for the SPM account for changes to the cost-of-living over time, adjusting for changes to the estimated expenditures for food, clothing, shelter, and utilities (at 33 percentile for family size) as measured by the Consumer Expenditure Survey, and differences in geographic area, adjusting for housing price differences across geographic areas using ACS 5-year estimates.

Table 1. Key Characteristics of CPS, ACS, and SPM samples, income measures, and thresholds

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|--------------------------------------|--|--|---|
| Concept | Current Population Survey (CPS) | American Community Survey (ACS) | Supplemental Poverty measure (SPM) |
| Years Available | Conducted annually beginning in 1959. State-level data available in 1980. | Began as decennial Census (1959 – 1999) and released annually after 2002. | Calculated for 2009 and 2010 only. |
| Period of Survey | Conducted February-April each year. | Conducted each month throughout the year. | Same as CPS, first calculated in 2009. |
| Sample Size | Approx. 100,000 addresses nationwide (averaging 2,000 per state). 4 | Began in 2000 with 800,000 addresses. In 2005, sample grew to 3 million per year. | Calculated using CPS data supplemented with SIPP data on expenditures and expenses. |
| Income Measures | Before-tax cash income received in the previous calendar year. | Before-tax cash income received in the previous 12 months. | After-tax income plus in-kind benefits, ⁵ less estimated work and medical expenses. |
| Geographic Areas | Nation, regions, and states (for selected characteristics). | Nation, states, and cities and counties of 65,000 or more. Smaller areas are included in 5 year estimates. | Same as CPS. |
| Poverty Threshold Calculations | Three times the cost of minimum food diet, adjusted for household size and number of children. | Same as CPS. | The 33rd percentile of expenditures on food, clothing, shelter, and utilities adjusted for family size and geographical differences in housing costs. |
| Threshold Adjustments | Adjusted each year based on consumer price index. | Same as CPS. | Adjusted using changes in average expenditures. 6 |

³Short, Kathleen. *The Research SUPPLEMENTAL POVERTY MEASURE: 2010.* U.S. Census Bureau, Issued November 2011.

⁴ The average sample size for the Northwest Area States in the 2011 CPS was 1,116 – the range in sample size was 684 in Montana to 1,728 in Minnesota.

⁵ The in-kind benefits included in the SPM threshold are those allocated for food, clothing, shelter, and utilities, including: housing subsidies, home energy rebate programs, and nutritional assistance (SNAP).

⁶Adjustments use five-year Consumer Expenditure Survey data for expenditures on food, shelter, clothing, and utilities.

Poverty Rates over Time

Although the three poverty rates are closely correlated, the ACS rate is generally slightly higher than the CPS rate (Figure 1). Prior to 2002, no ACS data was available between censes, but when both were available, CPS and ACS poverty rates were similar.⁷

For the two years available (2009 and 2010), the national rates for the SPM were slightly higher than CPS and ACS poverty rates and all three rates increased during those years.

All three poverty rates track unemployment rates closely.

23% 32% 22% 30% 21% 28% 20% 26% 19% 24% 18% 22% 17% 20% Rate 16% 18% 16% %11 12% Diem blokus 12% Diem blokus Poverty 15% 14% 13% 12% 10% 8% 11% 10% 6% 9% 4% 8% 2% 7% 0% **CPS Rate ACS Rate** SPM Rate - - - Unemployment Rate

Figure 1. CPS, ACS, and SPM Poverty Rates and Unemployment Rate from 1959 to present

Poverty during the Recession

Both the CPS and ACS poverty rates were fairly stable from 2004 to 2007, then increased from 2007 to 2010 (Figure 2 and Figure 3). Both national rates climbed to above 15 percent in 2010.

Poverty rates in most of the Northwest area states also increased during this time period. The state CPS rates fluctuated much more than did the ACS rates, likely due to the smaller sample sizes for the CPS, particularly in the less populous states. Every state saw an increase in ACS poverty rate between 2007 and 2011 – the largest increases were in Oregon (4.6 percentage points) and Idaho (4.4 percentage points).

⁷ Official CPS poverty rates at the state level were first calculated in 1980 and rates from the ACS (previously the census) are available every 10 years from 1959 to 2001 and annually since then. State SPM rates were released for 2009 only.

Figure 2. National and State CPS Poverty Rates, 2004-2011

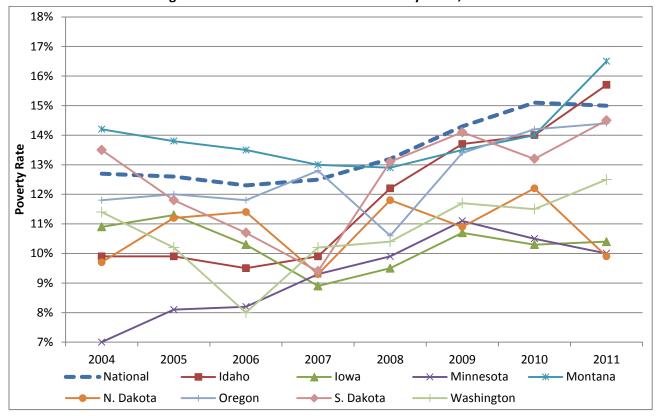


Figure 3. National and State ACS Poverty Rates, 2004-2011

