Improving the accuracy of the measurement of poverty and well-being: the supplemental poverty measure for the United States

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This presentation was prepared for UNECE Expert Meeting on Measuring Poverty and Inequality. It was developed to promote research and advancements in our understanding of poverty measurement. In that spirit and to encourage discussion and thoughtful feedback at early stages of our work, this presentation has undergone a more limited review than official Census Bureau reports. All views and any errors are solely those of the author and do not necessarily reflect any official position of the Bureau. All comparative statements in this presentation have undergone statistical testing, and, unless otherwise noted, all comparisons are statistically significant at the 10 percent significance level.

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Poverty: The History of a Measure

First Census Bureau Report on Poverty: 1967


The Census Bureau holds a conference in Williamsburg, Virginia, on the measurement of noncash benefits, December 1985.

An Interagency Poverty Studies Task Force is established under the leadership of the Department of Health and Human Services (then Health, Education, and Welfare), 1974.

President Lyndon Johnson declares War on Poverty, January 1964.

The Office of Economic Opportunity adopts Mollie Orshansky’s poverty thresholds as a working definition of poverty for statistical planning, May 1965.

National Academy of Sciences convenes a panel of experts to conduct a study of statistical issues in the measurement and understanding of poverty, June 1992.

An Interagency Technical Working Group on Developing a Supplemental Poverty Measure is formed by Commerce Under Secretary Rebecca Blank and Office of Management and Budget Chief Statistician Katherine Wallman and charged with developing a set of initial starting points to permit the U.S. Census Bureau, in cooperation with the Bureau of Labor Statistics, to produce a Supplemental Poverty Measure, December 2009.

Criticisms of the Official Poverty Measure

• The official measure does not account for:
  • Provision of in-kind benefits
  • Necessary expenses (taxes, health care, work)
  • Changes in family or household structure
  • Higher standards and levels of living since 1965
  • Geographic price differences among regions
• The Supplemental Poverty Measure (SPM) rate in 2017 was 13.9 percent.

• The SPM rate for 2017 was 1.6 percentage points higher than the official poverty rate of 12.3 percent.

• At the state level:
  • 16 states plus the District of Columbia for which SPM rates were higher than official poverty rates
  • 18 states with lower rates
  • 16 states for which the differences were not statistically significant.

For both measures, individuals are considered poor if the resources they share with others in the household are not enough to meet basic needs.

But the two measures are very different.
Who shares resources?

The two measures make different assumptions about who shares resources. The SPM assumes that more people in a household share resources with one another.

The official measure of poverty assumes that all individuals residing together who are related by birth, marriage, or adoption share income.

The SPM starts with the family and then adds some unrelated people such as foster children and unmarried partners.
What resources do people have to meet their needs?

What we count as available resources differs between the two poverty measures.

The official measure uses cash income, such as wages and salaries, Social Security benefits, interest, dividends, pension or other retirement income.

The SPM starts with cash income, then...

**Adding Benefits**

The SPM adds benefits from the government that are not cash but help families meet their basic needs.

**Subtracting Expenses**

The SPM subtracts necessary expenses like taxes, health care, commuting costs for all workers, and child care expenses while parents work.

**Resources**

- Housing subsidies
- SNAP
- Low-income home energy assistance (LIHEAP)
- National school lunch program
- Medical out-of-pocket expenses
- Child support paid
- Taxes
- Expenses related to work
- Child care expenses
- Child support paid
- Medical out-of-pocket expenses (MOOP)
How do we measure needs?

The poverty threshold, or poverty line, is the minimum level of resources that are adequate to meet basic needs.

The official measure uses three times the cost of a minimum food diet in 1963 in today’s prices.

The SPM uses information about what people spend today for basic needs—food, clothing, shelter, and utilities.

1963

\[ \text{food} \times 3 \]

2016

\[ \text{food} + \text{clothing} + \text{shelter} + \text{utilities} \]

Official Measure

Supplemental Measure
### Official and SPM Thresholds for Units with Two Adults and Two Children

<table>
<thead>
<tr>
<th>Official poverty measure</th>
<th>Owners with a mortgage</th>
<th>Owners without a mortgage</th>
<th>Renters</th>
</tr>
</thead>
<tbody>
<tr>
<td>$24,858</td>
<td>$27,085</td>
<td>$23,261</td>
<td>$27,005</td>
</tr>
</tbody>
</table>

Comparison of SPM and Official Poverty Estimates: 2017

(In Percent)

<table>
<thead>
<tr>
<th></th>
<th>Official*</th>
<th>SPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>All People</td>
<td>12.3</td>
<td>13.9</td>
</tr>
<tr>
<td>Under 18 years</td>
<td>17.5</td>
<td>15.6</td>
</tr>
<tr>
<td>18 to 64 years</td>
<td>11.2</td>
<td>13.2</td>
</tr>
<tr>
<td>65 years and older</td>
<td>9.2</td>
<td>14.1</td>
</tr>
</tbody>
</table>

*Includes unrelated individuals under age 15.
Difference in Poverty Rates by State Using the Official Measure and the SPM: 3-Year Average 2015 to 2017

Includes unrelated individuals under age 15.

Change in Number of People in Poverty After Including Each Element: 2017

<table>
<thead>
<tr>
<th>Element</th>
<th>Under 18 years</th>
<th>18 to 64 years</th>
<th>65 years and over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Security</td>
<td>-27.0</td>
<td>-8.3</td>
<td>0</td>
</tr>
<tr>
<td>Refundable tax credits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SNAP</td>
<td>-3.4</td>
<td>-3.2</td>
<td></td>
</tr>
<tr>
<td>SSI</td>
<td>-2.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing subsidies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child support received</td>
<td></td>
<td>-1.0</td>
<td>-1.2</td>
</tr>
<tr>
<td>School lunch</td>
<td></td>
<td>-1.2</td>
<td>-1.0</td>
</tr>
<tr>
<td>TANF/general assistance</td>
<td></td>
<td>-0.5</td>
<td>-0.5</td>
</tr>
<tr>
<td>Unemployment insurance</td>
<td></td>
<td>-0.5</td>
<td>-0.5</td>
</tr>
<tr>
<td>LIHEAP</td>
<td></td>
<td>-0.2</td>
<td></td>
</tr>
<tr>
<td>Workers' compensation</td>
<td></td>
<td>-0.2</td>
<td></td>
</tr>
<tr>
<td>WIC</td>
<td></td>
<td>-0.3</td>
<td></td>
</tr>
<tr>
<td>Child support paid</td>
<td>0.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child support paid</td>
<td></td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Federal income tax</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FICA</td>
<td>4.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work expenses</td>
<td></td>
<td>5.6</td>
<td></td>
</tr>
<tr>
<td>Medical expenses</td>
<td>10.9</td>
<td></td>
<td></td>
</tr>
</tbody>
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Change in Number of People in Poverty After Including Each Element: 2017

Numbers in millions

- Social Security: -27.0
- Refundable tax credits: -8.3
- SNAP: -3.4
- SSI: -3.2
- Housing subsidies: -2.9
- Child support received: -1.0
- School lunch: -1.2
- TANF/general assistance: -0.5
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- Workers' compensation: -0.2
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18 to 64 years
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-2.9
-1.0
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-0.5
-0.2
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-0.3
0.2
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10.9

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Under 18 years 18 to 64 years 65 years and over

Impact of Geographic Adjustments on Poverty Rates

<table>
<thead>
<tr>
<th>Location of Residence</th>
<th>NGA</th>
<th>MRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inside metropolitan statistical areas</td>
<td>13.0</td>
<td>14.1</td>
</tr>
<tr>
<td>Inside principal cities</td>
<td>16.1</td>
<td>17.5</td>
</tr>
<tr>
<td>Outside principal cities</td>
<td>11.2</td>
<td>12.1</td>
</tr>
<tr>
<td>Outside metropolitan statistical areas</td>
<td>16.8</td>
<td>12.8</td>
</tr>
</tbody>
</table>

Comparison of SPM and Official Poverty Estimates by Family Type: 2017

The difference between the official poverty rate and the SPM rate for female reference person families was not statistically significant.

*Includes unrelated individuals under age 15.

SPM uses changes in consumer spending on food, shelter, and clothing to update the thresholds instead of inflation.

Comparing thresholds: 2009-2016

Comparing poverty rates: 2009-2016
SPM Uses Three Thresholds: Renters, Owners with a Mortgage and Owners without a Mortgage

13.9 14.4
12.5 15.5
14.1 15.9

Overall Owners without a Mortgage Aged 65+

Is it confusing to have two poverty measures?

Note: Gray shading indicates recession. Consumption poverty anchored to official poverty rate in 1980.
Media likes to focus on state changes

Poverty in California

Why one of America’s richest states is also its poorest

Accounting for housing costs, California has nation’s highest poverty rate

A new report suggests 19 percent of Californians are impoverished

By Elijah Chiland | Sep 14, 2018, 8:25am PDT
Timeline for SPM Changes

- **Spring 2019 Expert Meeting**
- **Spring 2020 Expert Meeting**
- **September 2020 ITWG decides on changes**
- **September 2021 Release of SPM report using new methodology**

**February 2018 – September 2021**
Working papers and conference presentations discussing potential changes to the measure

**September 2020 – September 2021**
Research showing the impact of the changes on 2019 SPM rates - including research file.
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