



# The Supplemental Poverty Measure

By Laura Choi

In November of 2011, the Census Bureau released new research findings on the Supplemental Poverty Measure (SPM), an alternative approach for estimating the prevalence of poverty in the United States. The SPM does not replace the official poverty measure, which is still the basis for determining eligibility for public assistance and federal funding distribution. But scholars and policymakers have pointed out that the official measure is inadequate on many levels and have argued for an updated measure. The SPM is thus an attempt to address some of the weaknesses of the official measure and provide data that is more reflective of current economic conditions.

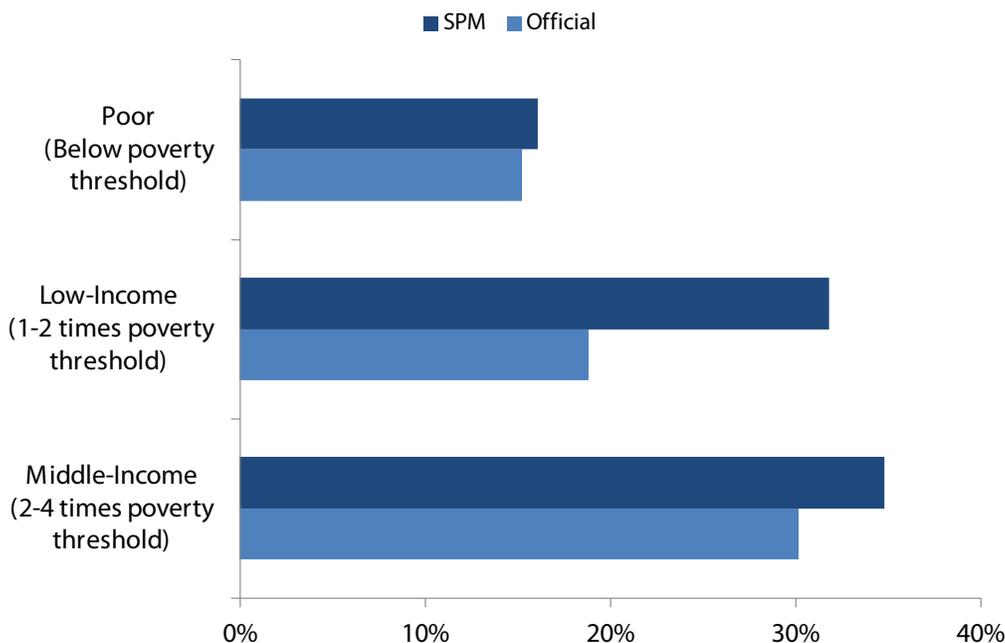
Under the official measure, the poverty threshold for a family of four (two adults and two children) was \$22,314 for 2010; the SPM 2010 threshold for a similarly sized family was \$24,343.<sup>1</sup> As seen below in Fig. 1, the SPM produces a slightly higher estimate of the share of the population in poverty, but results in a much larger increase in the share of the population considered low-income (those with incomes at one to two times the poverty threshold).

The fact that these two measurement approaches create such different estimations of the share of the population considered “low-income” has important implications for community development efforts. This article provides a brief overview of the SPM, how it differs from the official measure, and what it tells us about poverty today. More detailed information on data and methodology is available from the Census Bureau.<sup>2</sup>

## Revisiting the Official Poverty Measure

In 1963, Mollie Orshansky, an analyst at the Social Security Administration, began developing “poverty thresholds” based on a food plan developed by the U.S. Department of Agriculture (USDA). The USDA had four food plans of varying cost that constituted an adequate diet; the “economy food plan,” which was the basis for Orshansky’s poverty thresholds, was the cheapest one and was “designed for temporary or emergency use when funds are low.”<sup>3</sup> Orshansky multiplied the cost of the economy food plan times three, based on a 1955 Household Food

**Figure 1.** Share of People in Different Income Categories, 2010



Source: U.S. Census Bureau, Current Population Survey, 2011 Annual Social and Economic Supplement

Consumption Survey which showed that families spent about a third of their income on food (in contrast, in 2010, the average household spent about one eighth of household income on food<sup>4</sup>). She presented the poverty thresholds as a measure of income inadequacy, rather than adequacy, saying “If it is not possible to state unequivocally ‘how much is enough,’ it should be possible to assert with confidence how much, on an average, is too little.”<sup>5</sup>

Despite the official measure’s shortcomings, it has continued to serve as the metric for determining federal eligibility for public assistance, with few methodological changes. In 1995, the National Academy of Sciences (NAS) released a study that identified the weaknesses of the official poverty measure and offered suggestions for improvement.<sup>6</sup> In this report, the NAS cited the following key concerns about the official measure:

- The measure does not take into account the difference in expenses of families in which the parents do or do not work outside the home (such as costs related to transportation and childcare);
- The measure does not account for significant variations in medical care costs resulting from differences in health status and insurance coverage across different population groups;

- The thresholds do not account for geographic variation of prices, although significant price differences exist for such needs as housing;
- The family size adjustments in the thresholds are anomalous and do not take into account changing demographic and family characteristics (such as the reduction in average family size and increased cohabitation of unmarried couples);
- The original thresholds are adjusted only for inflation and do not take into account the rise in the standard of living over time; and
- The original income measure does not reflect the effects of important government policy initiatives that have significantly altered families’ disposable income and, hence, their poverty status (such as the increase in the Social Security payroll tax or the growth in the Food Stamp Program). In addition, the original poverty measure cannot reflect the effects of future policy initiatives that may have consequences for disposable income.<sup>7</sup>

One of the goals of the NAS recommendations was to develop a measure of poverty that accounts for government spending aimed at improving the lives

of low-income families by taking into account tax and transfer policies such as the food stamp/SNAP program and the Earned Income Tax Credit (EITC).<sup>8</sup> Kathleen Short, an economist at the Census Bureau, explained, “The main driving force behind this measure was to give policy makers a handle of the effectiveness of poverty [programs].”<sup>9</sup>

### Understanding the Supplemental Poverty Measure

As shown in Fig. 2, the SPM and the official poverty measure take different approaches to developing the poverty thresholds.<sup>10</sup> For example, the two measures use different units of analysis. The official poverty measure uses the family unit, as defined by the Census, which includes all individuals living together who are related by birth, marriage, or adoption (unrelated individuals over the age of 15 are considered independent). Under the SPM, the family unit is defined more broadly to include all related individuals who live at the same address, any unrelated children who are cared for by the family (such as foster children), and any cohabitators and their children. The methodology for determining the poverty thresholds also

differs. While the official measure sets the poverty threshold at three times the cost of the minimum food diet in 1963 (adjusted for inflation), the SPM thresholds are based on out-of-pocket spending on food, clothing, shelter, and utilities (FCSU), based on quarterly data from the Consumer Expenditure Survey. In addition, the SPM uses data from the American Community Survey to account for geographic differences in the cost of housing when calculating the FCSU thresholds, unlike the official measure.

Perhaps the most significant difference between the two measures is the estimation of a family’s resources. Under the original measure, a family’s financial resources were defined as gross before-tax cash income. The SPM expands on this definition of resources by adding any federal benefits that help a family meet its FCSU needs (such as food assistance or housing subsidies), then subtracting tax payments (adding back any tax credits) and necessary expenses, such as those related to work, out-of-pocket medical costs, and child support (see Fig. 3). This expanded estimation under the SPM thus provides a more realistic picture of a family’s resources and allows the measure to capture the impact of future federal assistance policies, unlike the original poverty measure.

**Figure 2.** Poverty Measure Concepts: Official and Supplemental

	Official Poverty Measure	Supplemental Poverty Measure
Measurement units	Families and unrelated individuals	All related individuals who live at the same address, including any coresident unrelated children who are cared for by the family (such as foster children) and any cohabitators and their children
Poverty threshold	Three times the cost of minimum food diet in 1963	The 33rd percentile of expenditures on food, clothing, shelter, and utilities (FCSU) of consumer units with exactly two children multiplied by 1.2
Threshold adjustments	Vary by family size, composition, and age of householder	Geographic adjustments for differences in housing costs and a three parameter equivalence scale for family size and composition
Updating thresholds	Consumer Price Index: all items	Five year moving average of expenditures on FCSU
Resource measure	Gross before-tax cash income	Sum of cash income, plus in-kind benefits that families can use to meet their FCSU needs, minus taxes (or plus tax credits), minus work expenses, minus out-of-pocket medical expenses

Source: Census Bureau (2011)

Figure 3. SPM Resources Estimates

SPM Resources = Money Income From All Sources	
<p><b>Plus:</b></p> <ul style="list-style-type: none"> <li>• Supplemental Nutritional Assistance (SNAP)</li> <li>• National School Lunch Program Supplementary Nutrition Program for Women, Infants, and Children (WIC)</li> <li>• Housing subsidies</li> <li>• Low-Income Home Energy Assistance (LIHEAP)</li> </ul>	<p><b>Minus:</b></p> <ul style="list-style-type: none"> <li>• Taxes (plus credits such as the EITC)</li> <li>• Expenses Related to Work</li> <li>• Child Care Expenses*</li> <li>• Medical Out-of-Pocket Expenses (MOOP)*</li> <li>• Child Support Paid*</li> </ul>

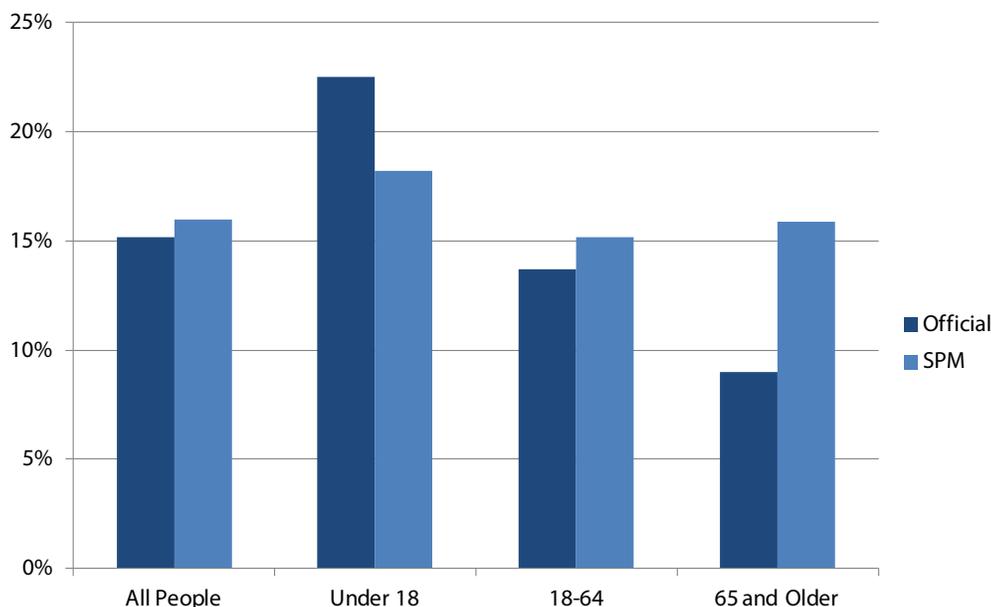
\*Items for which data from new Current Population Survey Annual Social and Economic Supplement questions are used in the SPM estimates. Source: Census Bureau (2011)

### What Does the SPM Tell Us?

Under the SPM's broader methodological approach, the Census Bureau reports that there were 49.1 million people, or 16 percent of the population, living in poverty in 2010; under the official poverty measure, the figures are lower, at 46.6 million people, or 15.2 percent of the population. As seen in Fig. 4, the SPM provides higher poverty estimates than the official measure for adults 18-64 (15.2 percent versus 13.7 percent) and for seniors over age 65 (15.9 percent versus 9 percent), but lower estimates for children (27.7 percent versus 36.1 percent).

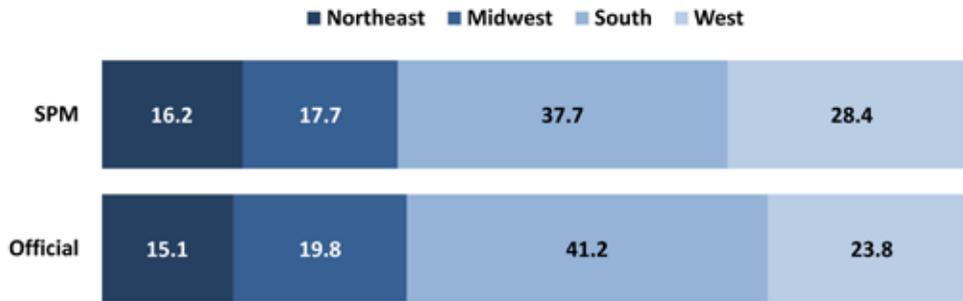
Another interesting result is the impact of regional price differences on the geographic distribution of the population living in poverty. As seen in Fig. 5, under the official measure, 23.8 percent of the poor lived in the West, but under the SPM, this figure increases to 28.4 percent. This difference reflects the fact that the SPM takes geographic price differences in the cost of housing into account, while the official measure does not. A similar effect occurs for the Northeast region.

Figure 4. Poverty Rates for Total Population and by Age Group, 2010



Note: Official measure includes unrelated individuals under the age of 15  
 Source: Current Population Survey, 2011 Annual Social and Economic Supplement

**Figure 5. Distribution of Poverty by Region, 2010**



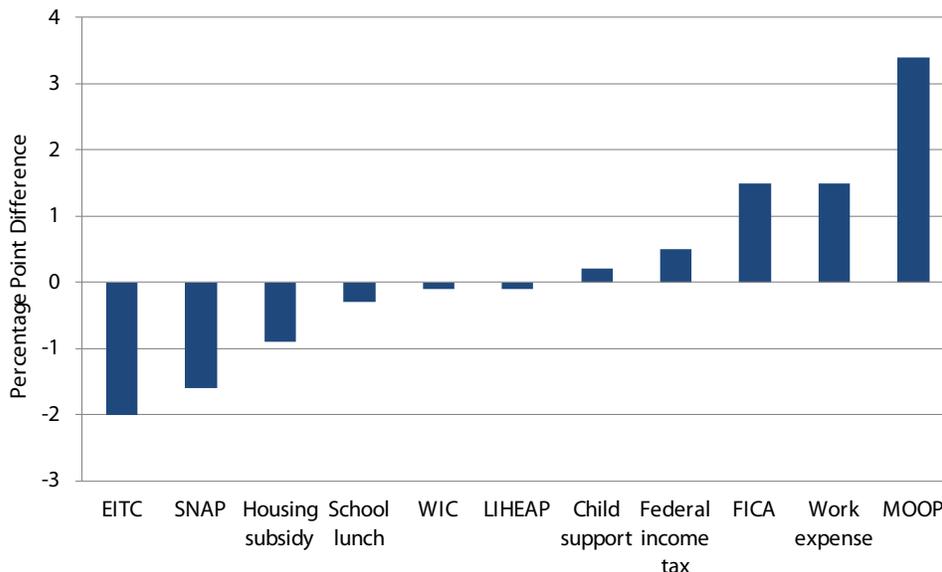
Source: Current Population Survey, 2011 Annual Social and Economic Supplement

### Conclusion

Figure 6 shows the effect of additions and subtractions of various elements to the SPM for 2010, holding all else equal. For example, in 2010, the overall poverty rate under the SPM was 16 percent. If everything else remained unchanged, but the value of the EITC was excluded from the resource estimation, the poverty rate under the SPM would be 18 percent; thus the EITC effectively reduces the SPM poverty rate by two percentage points (or six million fewer people in poverty). Similarly, the inclusion of SNAP (food assistance) benefits results in a negative 1.7 percentage point difference in the poverty rate. If medical out-of-pocket (MOOP) expenses were not accounted for, the SPM poverty rate in 2010 would be 12.7 percent; the inclusion of MOOP expenses thus effectively increases the SPM poverty rate by 3.3 percentage points. Work-related expenses similarly lead to a positive 1.5 percentage point difference in the SPM poverty rate for 2010.

The SPM provides an updated estimation of the poverty thresholds that take into account a broader set of economic factors, such as government benefits, taxes, and necessary expenses. However, the SPM estimates remain supplementary and do not have any impact on federal benefits eligibility, which remains dependent upon the official poverty measure. Ultimately, both the official measure and the SPM are only estimates of poverty by definition. For example, the SPM estimates that a greater proportion of seniors and a smaller proportion of children are in poverty, relative to the official measure, but the actual economic hardships facing these individuals remain unchanged. In addition, the SPM measures income poverty, which is only one component of the complex set of factors that determines the present and future well-being of low- and moderate-income individuals. However, the SPM and the official poverty measure enable data and research that are critical for understanding the landscape of poverty in the U.S., making them important resources for the community development field. **CI**

**Figure 6. Difference in SPM Rate After Including Each Element, 2010**



Source: Current Population Survey, 2010 and 2011 Annual Social and Economic Supplement

# Endnotes

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1. This article reflects the opinions of the author, and not necessarily those of Wells Fargo.

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