The Research SUPPLEMENTAL POVERTY MEASURE: 2011

Current Population Reports

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INTRODUCTION

Last year the U.S. Census Bureau, with support from the Bureau of Labor Statistics (BLS), released the first report describing research on the Supplemental Poverty Measure (SPM).[1] The SPM extends the information provided by the official poverty measure by including many of the government programs designed to assist low-income families and individuals that are not included in the current official poverty measure. The current official poverty measure was developed in the early 1960s, and only a few minor changes have been implemented since it was first adopted in 1969 (Orshansky, 1963, 1965a, 1965b; Fisher, 1992). The official measure consists of a set of thresholds for families of different sizes and compositions that are compared to before-tax cash income to determine a family's poverty status. At the time they were developed, the official poverty thresholds represented the cost of a minimum diet multiplied by three (to allow for expenditures on other goods and services).

[1] Short (2011), <www.census.gov/hhes/povmeas/methodology/supplemental/research/Short_ResearchSPM2010.pdf.> Also see, Short (2012) <www.census.gov/hhes/povmeas/methodology/supplemental/research/sea2011.pdf>, accessed September 2012.

Concerns about the adequacy of the official measure have increased during the past decades (Ruggles, 1990), culminating in a Congressional appropriation in 1990 for an independent scientific study of the concepts, measurement methods, and information needed for a poverty measure. In response, the National Academy of Sciences (NAS) established the Panel on Poverty and Family Assistance, which released its report, titled *Measuring Poverty: A New Approach,* in the spring of 1995 (Citro and Michael, 1995). Based on its assessment of the weaknesses of the current poverty measure, this NAS panel of experts recommended having a measure that better reflects contemporary social and economic realities and government policy. In their report, the NAS panel identified several major weaknesses of the current poverty measure.

- *The current income measure does not reflect the effects of key government policies that alter the resources available to families and, hence, their poverty status.* Examples include payroll taxes, which reduce disposable income, and in-kind public benefit programs, such as the Supplemental Nutrition Assistance Program (SNAP), that free up resources to spend on nonfood items.
- *The current measure does not take into account expenses that are necessary to hold a job and to earn income—expenses that reduce disposable income.* These expenses include transportation costs for getting to work and the costs of child care for working families which have increased as the labor force participation of mothers has increased.
- *The current measure does not take into account variation in medical costs.* These expenses vary across population groups that reflect differences in health status and insurance coverage and does not account for rising health care costs as a share of family budgets.
- *The current poverty thresholds use family size adjustments that are anomalous and do not take into account important changes in family situations.* Some changes include payments made for child support and increasing cohabitation among unmarried couples.

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- *The current poverty thresholds do not adjust for geographic differences in the cost-of-living across the nation.* The panel noted that there are significant variations across geographic areas in the cost of basic goods and services and, in particular, for housing.

To address these weaknesses, the NAS panel recommended changing the definition of both the poverty thresholds and family resources that are compared with those thresholds to determine poverty status. One of the goals of the NAS panel was to produce a measure of poverty that explicitly accounted for government spending aimed at alleviating the hardship of low-income families. Thus, by taking account of tax and transfer policies, such as the food stamp program/SNAP and the earned income tax credit (EITC), the measure would show the effects of these policies on various targeted subgroups, for example, families with children. The current official measure, which does not include these benefits, yields poverty statistics that do not reflect the effects of changes in these policies.

In 1999 and 2001, the Census Bureau released reports that presented a set of experimental poverty measures based on the recommendations of the 1995 NAS panel report (Short et al., 1999; Short, 2001). Some additional variations on that measure were included in order to shed light and generate discussion on the various dimensions included in the proposed revision. Comparisons were made across various demographic subgroups in order to illustrate how their poverty rates were affected by the different measures. That work suggested that these new measures would identify as poor a somewhat different population than is typically described by the official poverty measure. This new poverty population would consist of a larger proportion of elderly people, working families, and married-couple families than are identified by the official poverty measure.[2]

In March of 2010, the Interagency Technical Working Group on Developing a Supplemental Poverty Measure (ITWG) listed suggestions for research on the SPM. The ITWG was charged with developing a set of initial starting points to permit the Census Bureau, in cooperation with the Bureau of Labor Statistics (BLS), to produce a report on the SPM that would be released along with the official measure each year. Their suggestions included:

- The *SPM thresholds* should represent a dollar amount spent on a basic set of goods that includes food, clothing, shelter, and utilities (FCSU) and a small additional amount to allow for other needs (e.g., household supplies, personal care, non-work-related transportation). This threshold should be calculated with five years of expenditure data for families with two children using Consumer Expenditure Survey (CE) data, and it should be adjusted (using a specified equivalence scale) to reflect the needs of different family types and geographic differences in housing costs. Adjustments to thresholds should be made over time to reflect real change in expenditures on this basic bundle of goods at the 33rd percentile of the expenditure distribution.
- *SPM family resources* should be defined as the value of cash income from all sources, plus the value of in-kind benefits that are available to buy the basic bundle of goods (FCSU) minus necessary expenses for critical goods and services not included in the thresholds. In-kind benefits include nutrition assistance, subsidized housing, and home energy assistance. Necessary expenses that must be subtracted include income taxes, Social Security payroll taxes, childcare and other work-related expenses, child support payments to another household, and contributions toward the cost of medical care and health insurance premiums, or medical out-of-pocket costs (MOOP).[3]

This report presents a poverty measure that is based largely on the NAS Panel's recommendations, with deviations reflecting more recent research and suggestions from the ITWG. Particular emphasis is on internal consistency between the thresholds and resources. The NAS Panel noted: "It is important that family resources are defined consistently with the threshold concept in any poverty measure."[4] The SPM, as defined by the ITWG, is an internally consistent poverty measure that is based on spending "outflows" and money "inflows." Spending outflows, or outlays[5] are those for basic needs only: food, clothing, shelter, utilities, and other basic necessary goods and services. Resources include money income from all sources plus the value of near-money benefits that help the family meet spending needs, less necessary expenses, like work-related expenses and

[2] These experimental poverty measures have been updated regularly and are available at <www.census.gov/hhes/povmeas/methodology/nas/index.html>, accessed September 2012.

[3] For information, see ITWG, *Observations from the Interagency Technical Working Group on Developing a Supplemental Poverty Measure (Interagency)*, March 2010, available at <www.census.gov/hhes/www/poverty/SPM_TWGObservations.pdf>, accessed September 2012.

[4] Citro and Michael, 1995, p. 9.

[5] For the BLS definition of expenditure outlays, see Rogers and Gray, 1994.

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 cohabitors and their relatives
Poverty Threshold	Three times the cost of a 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 by tenure 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 and child support paid to another household

taxes that must be paid. A family is designated as poor if its annual money inflow, net of necessary expenses, falls below the threshold level of money outflow.[6]

The SPM does not take account of assets that may be used to meet necessary expenses. Assets can add to the resources that are used to meet basic needs, so some analysts advocate counting them in measuring poverty. Others may argue that many assets are not very liquid or suggest that poor families have so few assets that including them would not change poverty measures much. If our purpose is to target families who are in need, then it is clear that families with no assets are worse off than those who have some. On the other hand, families who have incurred large debts are more vulnerable to financial trouble than those who have not. The NAS panel discussed a "crisis definition of resources." This definition included those assets families have on hand that could be converted to cash to support current consumption. They suggested that this "crisis definition" is only relevant for a very short-term measure of poverty, because, in their words, "...assets can only ameliorate poverty temporarily."[7] They suggested that it is important, however, to develop measures of the distribution of wealth and to examine the relationship between asset ownership and poverty status. While spending down assets can enhance income to make ends meet, servicing debt can be a drain on family income that would otherwise be sufficient to purchase basic necessities.[8]

The ITWG stated that the official poverty measure, as defined in Office of Management and Budget (OMB) Statistical Policy Directive No. 14, will not be replaced by the SPM. They noted that the official measure is sometimes identified in legislation regarding program eligibility and funding distribution, while the SPM will not be used in this way. The SPM is designed to provide information on aggregate levels of economic need at a national level or within large subpopulations or areas and, as such, the SPM will be an additional macroeconomic statistic providing further understanding of economic conditions and trends.

This report presents updated estimates of the prevalence of poverty in the United States, overall and for selected demographic groups, using the official measure and the SPM. The first section presents differences between the official poverty measure and the SPM. Comparing the two measures sheds light on the effects of in-kind benefits, taxes, and other nondiscretionary expenses on measured economic well-being. The composition of the poverty populations using the two measures is examined across subgroups to better understand the incidence and receipt of benefits

[6] See Garner and Short, 2010, for further discussion of measurement consistency.

[7] Citro and Michael, pp. 214–218.

[8] Interest payments on mortgages are included in SPM thresholds as a part of shelter costs, while income from assets, such as interest and dividends, are included in cash income. Short and Ruggles (2005), examined methods of taking account of net worth in experimental poverty measures using the Survey of Income and Program Participation.

and taxes that are missed in the official statistics. The distribution of income-to-poverty threshold ratios and poverty rates by state are estimated and compared for the two measures. The second section of the report examines the SPM itself. Effects of benefits and expenses on SPM rates are explicitly examined and SPM estimates for 2011 are compared with the 2010 figures to assess changes in SPM rates from the previous year.

POVERTY ESTIMATES FOR 2011: OFFICIAL AND SPM

The measures presented in this study use the 2012 Current Population Survey Annual Social and Economic Supplement (ASEC) income information that refers to calendar year 2011 to estimate SPM resources.[9] These are the same data as are used for the preparation of official poverty statistics and reported in DeNavas et al. (2012).

The "Orshansky" thresholds are used for the *official* poverty estimates presented here, however, unlike published estimates, unrelated individuals under age 15 are included in this poverty universe. Since the CPS ASEC does not ask income questions for individuals under age 15, they are excluded from the universe for official poverty calculations. For the official poverty estimates shown in this report, all unrelated individuals under age 15 are included and presumed to be in poverty. For the SPM, they are assumed to share resources with the household reference person.

Two Adult, Two Child Poverty Thresholds: 2010 and 2011

(Dollars)

	2010	s.e.	2011	s.e.
Official	22,113	na	22,811	na
Research Supplemental Poverty Measure				
Owners with a mortgage	25,018	323	25,703	347
Owners without a mortgage	20,590	341	21,175	298
Renters	24,391	379	25,222	378

The SPM thresholds for 2011 are based on out-of-pocket spending on food, clothing, shelter, and utilities (FCSU). Thresholds use 2007–2012 quarterly data from the CE; the thresholds are produced by staff at the BLS.[10, 11] Three housing status groups were determined and their expenditures on shelter and utilities produced within the 30th–36th percentiles of FCSU expenditures.[12] The three groups are: owners with mortgages, owners without mortgages, and renters. The thresholds used here include the value of Supplemental Nutrition Assistance Program (SNAP) benefits in the measure of spending on food.[13] The American Community Survey (ACS) is used to adjust the FCSU thresholds for differences in spending on housing across geographic areas.[14]

The two measures use different units of analysis. The official measure of poverty uses the census-defined family that includes all individuals residing together who are related by birth, marriage, or adoption and treats all unrelated individuals over age 15 independently. For the SPM, the ITWG suggested that the "family unit" should include all related individuals who live at the same address, as well as any coresident unrelated children who are cared for by the family (such as foster children), and any cohabitors and their children. Independent unrelated individuals living alone are one-person SPM units. This definition corresponds broadly with the unit of data collection (the consumer unit) that is employed for the CE data used to calculate poverty thresholds. These units are referred to as *SPM Resource Units*. Selection of the unit of analysis for poverty measurement implies assumptions that members of that unit share income or resources with one another.

Thresholds are adjusted for the size and composition of the SPM resource unit relative to the two-adult-two-child threshold using an equivalence scale.[15] The official measure adjusts thresholds based on family size, number of children and adults, as well as whether or not the householder is aged 65 and over. The official poverty threshold for a two-adult-two-child family was $22,811 in 2011.

[9] The data in this report are from the "Annual Social and Economic Supplement (ASEC)" to the 2011 and 2012 Current Population Survey (CPS). The estimates in this paper (which may be shown in text, figures, and tables) are based on responses from a sample of the population and may differ from actual values because of sampling variability or other factors. As a result, apparent differences between the estimates for two or more groups may not be statistically significant. All comparative statements have undergone statistical testing and are significant at the 90 percent confidence level unless otherwise noted. Standard errors were calculated using replicate weights. Further information about the source and accuracy of the estimates is available at <www.census.gov/hhes/www/p60_238sa.pdf>, <www.census.gov/hhes/www/p60_239sa.pdf>, and <www.census.gov/hhes/www/p60_243sa.pdf>, accessed September 2012.

[10] Bureau of Labor Statistics, Experimental Poverty Measure Web site, <www.bls.gov/pir/spmhome.htm>, accessed September 2012.

[11] See <www.bls.gov/cex/anthology08/csxanth2.pdf> or <www.bls.gov/cex/anthology08/csxanth3.pdf> for information on the CE, accessed September 2012.

[12] See Garner and Gudrais (2011) and appendix for descriptions of threshold calculation.

[13] For consistency in measurement with the resource measure, the thresholds should include the value of in-kind benefits, though additional research continues on appropriate methods, see Garner and Hokayem (2012).

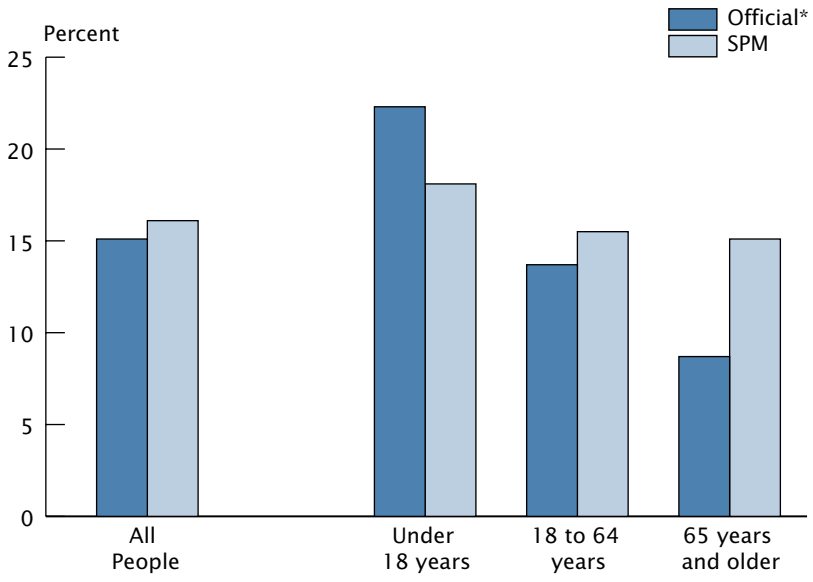
[14] See Renwick (2011) and appendix for description of the geographic adjustments.

[15] See Betson (1996) and appendix for description of the three-parameter scale.

Resource Estimates SPM Resources = Money Income From All Sources	
Plus:	**Minus:**
Supplemental Nutritional Assistance (SNAP)	Taxes (plus credits such as the Earned Income Tax Credit [EITC])
National School Lunch Program	Expenses Related to Work
Supplementary Nutrition Program for Women Infants and Children (WIC)	Child Care Expenses*
Housing subsidies	Medical Out-of-pocket Expenses (MOOP)*
Low-Income Home Energy Assistance (LIHEAP)	Child Support Paid*

*Items for which data from new CPS ASEC questions are used in the SPM estimates.

Figure 1.
Poverty Rates Using Two Measures for Total Population and by Age Group: 2011



*Includes unrelated individuals under age 15.
Source: U.S. Census Bureau, Current Population Survey, 2012 Annual Social and Economic Supplement.

The SPM thresholds vary by housing tenure status and are higher for owners with mortgages and renters than the official threshold. These two groups comprise about 76 percent of the total population. The official threshold increased by $698 between 2010 and 2011. SPM thresholds for all three tenure groups increased significantly between 2010 and 2011, but the increases were not statistically different from the increase in the official threshold for the same period.

Following the recommendations of the NAS report and the ITWG, SPM resources are estimated as the sum of cash income; plus any federal government in-kind benefits that families can use to meet their food, clothing, shelter, and utility needs; minus taxes (plus tax credits), work expenses, and out-of-pocket expenditures for medical expenses. The research SPM measure presented in this study adds the value of in-kind benefits and subtracts necessary expenses, such as taxes, child care expenses, and medical out-of-pocket expenses. For the SPM measure, estimates from new questions about child care and medical out-of-pocket expenses (MOOP) are available and subtracted from income.[16] The text box summarizes the additions and subtractions for the SPM measure; descriptions are in the appendix.

Poverty Rates: Official and SPM

Figure 1 shows poverty rates for the two measures for the total population and for three age groups; under 18 years, ages 18 to 64, and 65 years and over. Table 1 shows rates for a variety of selected demographic groups. The percent of the population that was poor using the official measure for 2011 was 15.0 percent (DeNavas et al., 2012). For this study, including unrelated individuals under age 15 in the universe, the poverty rate was

[16] Documentation concerning the quality of these data is available in various working papers at <www.census.gov/hhes/povmeas/publications/working.html>, accessed September 2012.

Table 1.

Number and Percent of People in Poverty by Different Poverty Measures: 2011

(Numbers in thousands, confidence intervals [C.I.] in thousands or percentage points as appropriate. People as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www.census.gov/apsd/techdoc/cps/cpsmar12.pdf*)

Characteristic	Number** (in thousands)	Official**				SPM				Difference	
		Number		Percent		Number		Percent			
		Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Number	Percent
All people	**308,827**	**46,618**	**769**	**15.1**	**0.2**	**49,695**	**905**	**16.1**	**0.3**	***3,077**	***1.0**
Sex											
Male	151,175	20,686	377	13.7	0.3	23,112	474	15.3	0.3	*2,426	*1.6
Female	157,653	25,932	497	16.4	0.3	26,583	503	16.9	0.3	*651	*0.4
Age											
Under 18 years	74,108	16,506	385	22.3	0.5	13,429	381	18.1	0.5	*–3,077	*–4.2
18 to 64 years	193,213	26,492	472	13.7	0.2	30,020	577	15.5	0.3	*3,527	*1.8
65 years and older	41,507	3,620	167	8.7	0.4	6,247	229	15.1	0.5	*2,627	*6.3
Type of Unit											
In married couple unit	186,235	13,849	575	7.4	0.3	18,576	632	10.0	0.3	*4,727	*2.5
In female householder unit	63,347	18,773	538	29.6	0.8	18,996	515	30.0	0.7	223	0.4
In male householder unit	32,307	5,582	249	17.3	0.7	7,071	313	21.9	0.9	*1,488	*4.6
In new SPM unit	26,939	8,414	368	31.2	1.0	5,052	302	18.8	1.0	*–3,362	*–12.5
Race[1] and Hispanic Origin											
White	241,586	31,101	648	12.9	0.3	34,427	729	14.3	0.3	*3,326	*1.4
White, not Hispanic	195,148	19,358	554	9.9	0.3	21,427	587	11.0	0.3	*2,068	*1.1
Black	39,696	11,016	405	27.8	1.0	10,214	410	25.7	1.0	*–801	*–2.0
Asian	16,094	1,981	193	12.3	1.2	2,719	215	16.9	1.3	*738	*4.6
Hispanic (any race)	52,358	13,323	431	25.4	0.8	14,670	504	28.0	1.0	*1,347	*2.6
Nativity											
Native born	268,851	39,022	692	14.5	0.3	39,368	756	14.6	0.3	346	0.1
Foreign born	39,976	7,596	311	19.0	0.7	10,327	385	25.8	0.9	*2,731	*6.8
Naturalized citizen	17,934	2,233	152	12.5	0.8	3,286	184	18.3	0.9	*1,053	*5.9
Not a citizen	22,042	5,363	274	24.3	1.1	7,041	329	31.9	1.3	*1,678	*7.6
Tenure											
Owner	206,718	16,217	567	7.8	0.3	19,978	616	9.7	0.3	*3,761	*1.8
Owner/Mortgage	136,699	7,932	397	5.8	0.3	11,138	480	8.1	0.3	*3,206	*2.3
Owner/No mortgage/rent free	73,418	9,232	443	12.6	0.5	9,592	400	13.1	0.5	*360	*0.5
Renter	98,710	29,454	652	29.8	0.6	28,966	740	29.3	0.6	–488	–0.5
Residence											
Inside metropolitan statistical areas	261,455	38,502	852	14.7	0.3	43,322	898	16.6	0.3	*4,820	*1.8
Inside principal cities	100,302	20,127	666	20.1	0.6	21,748	721	21.7	0.6	*1,621	*1.6
Outside principal cities	161,153	18,375	630	11.4	0.3	21,574	700	13.4	0.4	*3,199	*2.0
Outside metropolitan statistical areas[2]	47,372	8,116	595	17.1	0.8	6,373	492	13.5	0.7	*–1,743	*–3.7
Region											
Northeast	55,035	7,266	316	13.2	0.6	8,262	337	15.0	0.6	*996	*1.8
Midwest	66,115	9,313	403	14.1	0.6	8,454	349	12.8	0.5	*–860	*–1.3
South	115,068	18,512	573	16.1	0.5	18,432	650	16.0	0.6	–79	–0.1
West	72,610	11,527	430	15.9	0.6	14,547	512	20.0	0.7	*3,020	*4.2
Health Insurance coverage											
With private insurance	197,323	9,806	380	5.0	0.2	15,010	475	7.6	0.2	*5,204	*2.6
With public, no private insurance	62,891	23,077	512	36.7	0.7	19,677	490	31.3	0.7	*–3,400	*–5.4
Not insured	48,613	13,736	425	28.3	0.8	15,008	451	30.9	0.8	*1,273	*2.6

See footnotes at end of table.

Table 1.

Number and Percent of People in Poverty by Different Poverty Measures: 2011—Con.

(Numbers in thousands, confidence intervals [C.I.] in thousands or percentage points as appropriate. People as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www.census.gov/apsd/techdoc/cps/cpsmar12.pdf*)

Characteristic	Number** (in thousands)	Official**				SPM				Difference	
		Number		Percent		Number		Percent			
		Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Number	Percent
Work Experience											
Total, 18 to 64 years	193,213	26,492	472	13.7	0.2	30,020	577	15.5	0.3	*3,527	*1.8
All workers	144,163	10,345	257	7.2	0.2	13,611	350	9.4	0.2	*3,266	*2.3
Worked full-time, year-round	97,443	2,732	122	2.8	0.1	4,983	177	5.1	0.2	*2,252	*2.3
Less than full-time, year-round	46,720	7,614	230	16.3	0.5	8,628	279	18.5	0.6	*1,014	*2.2
Did not work at least 1 week	49,049	16,147	379	32.9	0.7	16,409	400	33.5	0.7	*262	*0.5
Disability Status[3]											
Total, 18 to 64 years	193,213	26,492	472	13.7	0.2	30,020	577	15.5	0.3	*3,527	*1.8
With a disability	14,968	4,313	175	28.8	1.0	4,133	186	27.6	1.1	*–180	*–1.2
With no disability	177,309	22,105	459	12.5	0.3	25,795	526	14.5	0.3	*3,690	*2.1

* Statistically different from zero at the 90 percent confidence level.

** Includes unrelated individuals under the age of 15.

† A 90 percent confidence interval is a measure of an estimate's variability. The larger the confidence interval in relation to the size of the estimate, the less reliable the estimate. Confidence intervals shown in this table are based on standard errors calculated using replicate weights instead of the generalized variance function used in the past. For more information, see "Standard Errors and Their Use" at <www.census.gov/hhes/www/p60_243sa.pdf>.

[1] Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White ***and*** American Indian and Alaska Native or Asian ***and*** Black or African American, is available from Census 2010 through American FactFinder. About 2.9 percent of people reported more than one race in Census 2010. Data for American Indians and Alaska Natives, Native Hawaiians and Other Pacific Islanders, and those reporting two or more races are not shown separately.

[2] The "Outside metropolitan statistical areas" category includes both micropolitan statistical areas and territory outside of metropolitan and micropolitan statistical areas. For more information, see "About Metropolitan and Micropolitan Statistical Areas" at <www.census.gov/population/www/estimates/aboutmetro.html>.

[3] The sum of those with and without a disability does not equal the total because disability status is not defined for individuals in the Armed Forces.

Source: U.S. Census Bureau, Current Population Survey, 2012 Annual Social and Economic Supplement.

15.1 percent.[17] The research SPM yields a rate of 16.1 percent for 2011. While, as noted, SPM poverty thresholds are higher, other parts of the measure also contribute to differences in the estimated prevalence of poverty in the United States.

In 2011, there were 49.7 million poor using the SPM definition of poverty, more than the 46.6 million using the official definition of poverty with our universe. For most groups, SPM rates were higher than official poverty rates. Comparing the SPM to the official measure shows lower poverty rates for children, individuals included in new SPM resource units, Blacks, those living outside metropolitan areas, those in the Midwest, those covered by only public health insurance, and individuals with a disability. Most other groups had higher poverty rates using the SPM measure rather than the official measure. Official and SPM poverty rates for people in female householder units, native born citizens, renters, and residents of the South were not statistically different. Note that poverty rates for those 65 years of age and over were higher under the SPM measure compared with the official measure. This partially reflects that the official thresholds are set lower for families with householders in this age group, while the SPM thresholds do not vary by age.

Distribution of the poverty population by characteristics: Official and SPM

Table 2 compares the distribution of people in the total population across selected groups to the distribution of people classified as poor using the two measures. Figure 2 shows these estimates across age groups. The bottom bar shows the representation of these groups in the total population. The share of people 65 years of age and over in poverty was higher when the SPM

[17] The 15.0 and 15.1 rates are not statistically different.

Table 2.

Distribution of People in Total and Poverty Population: 2011

(Numbers in thousands, confidence intervals [C.I.] in thousands or percentage points as appropriate. People as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www.census.gov/apsd/techdoc/cps/cpsmar12.pdf*)

Characteristic	Total population		Official**		SPM		Difference/ Official** vs SPM
	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	
All people	**308,827**	**–**	**46,618**	**769**	**49,695**	**905**	
	(percent of column total)						
Sex							
Male	49.0	0.0	44.4	0.4	46.5	0.4	*2.1
Female	51.0	0.0	55.6	0.4	53.5	0.4	*–2.1
Age							
Under 18 years	24.0	0.0	35.4	0.5	27.0	0.5	*–8.4
18 to 64 years	62.6	0.1	56.8	0.5	60.4	0.5	*3.6
65 years and older	13.4	0.1	7.8	0.3	12.6	0.4	*4.8
Type of Unit							
In married couple unit	60.3	0.4	29.7	1.1	37.4	1.0	*7.7
In female householder unit	20.5	0.3	40.3	1.0	38.2	0.9	*–2.0
In male householder unit	10.5	0.2	12.0	0.5	14.2	0.6	*2.3
In new SPM unit	8.7	0.2	18.0	0.7	10.2	0.6	*–7.9
Race[1] and Hispanic Origin							
White	78.2	0.0	66.7	0.9	69.3	0.8	*2.6
White, not Hispanic	63.2	0.1	41.5	0.9	43.1	0.9	*1.6
Black	12.9	0.0	23.6	0.8	20.6	0.7	*–3.1
Asian	5.2	0.1	4.2	0.4	5.5	0.4	*1.2
Hispanic (any race)	17.0	0.0	28.6	0.8	29.5	0.8	*0.9
Nativity							
Native born	87.1	0.2	83.7	0.6	79.2	0.6	*–4.5
Foreign born	12.9	0.2	16.3	0.6	20.8	0.6	*4.5
Naturalized citizen	5.8	0.1	4.8	0.3	6.6	0.3	*1.8
Not a citizen	7.1	0.2	11.5	0.5	14.2	0.6	*2.7
Tenure							
Owner	66.9	0.4	34.8	1.0	40.2	1.0	*5.4
Owner/Mortgage	44.3	0.4	17.0	0.8	22.4	0.9	*5.4
Owner/No mortgage/rent free	23.8	0.4	19.8	0.9	19.3	0.8	–0.5
Renter	32.0	0.4	63.2	1.0	58.3	1.0	*–4.9
Residence							
Inside metropolitan statistical areas	84.7	0.9	82.6	1.2	87.2	0.9	*4.6
Inside principal cities	32.5	0.6	43.2	1.2	43.8	1.2	0.6
Outside principal cities	52.2	0.8	39.4	1.2	43.4	1.2	*4.0
Outside metropolitan statistical areas[2]	15.3	0.9	17.4	1.2	12.8	0.9	*–4.6
Region							
Northeast	17.8	0.1	15.6	0.7	16.6	0.7	*1.0
Midwest	21.4	0.1	20.0	0.8	17.0	0.7	*–3.0
South	37.3	0.1	39.7	1.0	37.1	1.0	*–2.6
West	23.5	0.1	24.7	0.8	29.3	0.8	*4.5
Health Insurance Coverage							
With private insurance	63.9	0.3	21.0	0.8	30.2	0.8	*9.2
With public, no private insurance	20.4	0.3	49.5	0.8	39.6	0.7	*–9.9
Not insured	15.7	0.2	29.5	0.7	30.2	0.7	*0.7

See footnotes at end of table.

Table 2.
Distribution of People in Total and Poverty Population: 2011—Con.

(Numbers in thousands, confidence intervals [C.I.] in thousands or percentage points as appropriate. People as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www.census.gov/apsd/techdoc/cps/cpsmar12.pdf*)

Characteristic	Total population		Official**		SPM		Difference/ Official** vs SPM
	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	
	(percent of column total)						
Work Experience							
Total, 18 to 64 years	62.6	0.1	56.8	0.5	60.4	0.5	*3.6
All workers	46.7	0.2	22.2	0.5	27.4	0.5	*5.2
Worked full-time, year-round	31.6	0.2	5.9	0.2	10.0	0.3	*4.2
Less than full-time, year-round	15.1	0.2	16.3	0.5	17.4	0.5	*1.0
Did not work at least 1 week	15.9	0.2	34.6	0.6	33.0	0.6	*–1.6
Disability Status[3]							
Total, 18 to 64 years	62.6	0.1	56.8	0.5	60.4	0.5	*3.6
With a disability	4.8	0.1	9.3	0.4	8.3	0.3	*–0.9
With no disability	57.4	0.2	47.4	0.6	51.9	0.6	*4.5

* Statistically different from zero at the 90 percent confidence level.

** Includes unrelated individuals under the age of 15.

† A 90 percent confidence interval is a measure of an estimate's variability. The larger the confidence interval in relation to the size of the estimate, the less reliable the estimate. Confidence intervals shown in this table are based on standard errors calculated using replicate weights instead of the generalized variance function used in the past. For more information see "Standard Errors and Their Use" at <www.census.gov/hhes/www/p60_243sa.pdf>.

[1] Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White ***and*** American Indian and Alaska Native or Asian ***and*** Black or African American, is available from Census 2010 through American FactFinder. About 2.9 percent of people reported more than one race in Census 2010. Data for American Indians and Alaska Natives, Native Hawaiians and Other Pacific Islanders, and those reporting two or more races are not shown separately.

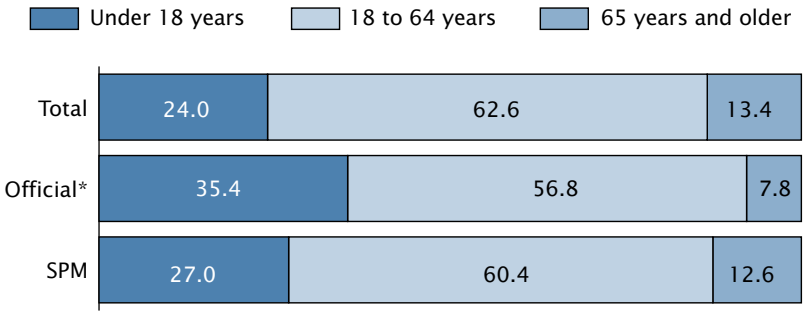
[2] The "Outside metropolitan statistical areas" category includes both micropolitan statistical areas and territory outside of metropolitan and micropolitan statistical areas. For more information, see "About Metropolitan and Micropolitan Statistical Areas" at <www.census.gov/population/www/estimates/aboutmetro.html>.

[3] The sum of those with and without a disability does not equal the total because disability status is not defined for individuals in the Armed Forces.

Source: U.S. Census Bureau, Current Population Survey, 2012 Annual Social and Economic Supplement.

Figure 2.
Composition of Total and Poverty Populations by Age Group: 2011

(In percent)



*Includes unrelated individuals under age 15.
Source: U.S. Census Bureau, Current Population Survey, 2012 Annual Social and Economic Supplement.

is used, 12.6 percent compared with 7.8 percent with the official measure, while the share of children was lower.

The SPM also results in a higher share of the poor for men, those who were 18 to 64 years of age, in married-couple families, with male householders, Whites, Asians, and Hispanics, the foreign born, homeowners with mortgages, individuals with private health insurance and the uninsured, all workers, and individuals with a disability. The shares were also higher with the SPM for those residing in metropolitan areas but outside principal cities and the Northeast

Table 3.

Percent of People by Ratio of Income/Resources to Poverty Threshold: 2011

(Numbers in thousands, confidence intervals [C.I.] in thousands or percentage points as appropriate. People as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www.census.gov/apsd/techdoc/cps/cpsmar12.pdf*)

Characteristic	Less than 0.5		0.5 to 0.99		1.0 to 1.99		2.0 to 3.99		4 or more	
	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)
OFFICIAL**										
All people	**6.7**	**0.2**	**8.4**	**0.2**	**19.4**	**0.3**	**30.5**	**0.3**	**35.1**	**0.4**
Age										
Under 18 years	10.3	0.4	12.0	0.4	22.3	0.5	29.1	0.5	26.3	0.5
18 to 64 years	6.3	0.2	7.4	0.2	17.0	0.3	30.2	0.4	39.1	0.4
65 years and older	2.3	0.2	6.5	0.4	24.9	0.7	34.2	0.8	32.2	0.8
Race[1] and Hispanic Origin										
White	5.6	0.2	7.3	0.2	18.6	0.3	30.9	0.4	37.7	0.4
White, not Hispanic	4.5	0.2	5.5	0.2	15.9	0.3	31.4	0.4	42.8	0.5
Black	13.0	0.8	14.8	0.8	23.6	0.9	28.6	0.9	20.1	0.9
Asian	5.5	0.8	6.8	0.9	16.9	1.3	29.6	1.5	41.2	1.7
Hispanic (any race)	10.6	0.5	14.9	0.7	29.6	0.9	28.7	0.8	16.2	0.6
SPM										
All people	**5.2**	**0.2**	**10.9**	**0.3**	**32.0**	**0.4**	**34.2**	**0.3**	**17.7**	**0.3**
Age										
Under 18 years	5.1	0.3	13.0	0.5	38.8	0.6	31.6	0.6	11.4	0.4
18 to 64 years	5.5	0.2	10.1	0.3	29.3	0.4	35.3	0.4	19.9	0.3
65 years and older	4.3	0.3	10.8	0.5	32.4	0.7	33.6	0.8	18.9	0.7
Race[1] and Hispanic Origin										
White	4.7	0.2	9.5	0.2	30.2	0.4	35.8	0.4	19.7	0.3
White, not Hispanic	4.0	0.2	7.0	0.2	26.8	0.4	39.1	0.4	23.1	0.4
Black	7.9	0.6	17.8	0.9	40.6	1.0	25.6	1.0	8.1	0.6
Asian	5.9	0.7	11.0	1.1	32.2	1.6	33.8	1.6	17.0	1.2
Hispanic (any race)	7.7	0.5	20.4	0.9	44.7	1.0	21.6	0.8	5.6	0.4

** Includes unrelated individuals under the age of 15.

† A 90 percent confidence interval is a measure of an estimate's variability. The larger the confidence interval in relation to the size of the estimate, the less reliable the estimate. Confidence intervals shown in this table are based on standard errors calculated using replicate weights instead of the generalized variance function used in the past. For more information, see "Standard Errors and Their Use" at <www.census.gov/hhes/www/p60_243sa.pdf>.

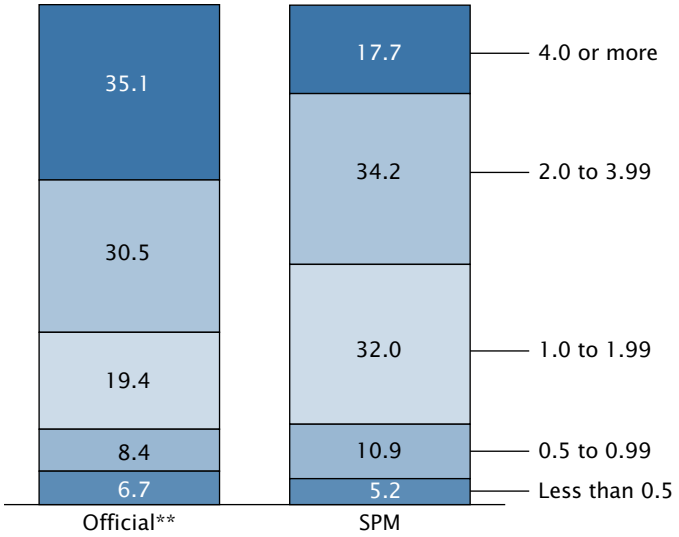
[1] Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White ***and*** American Indian and Alaska Native or Asian ***and*** Black or African American, is available from Census 2010 through American FactFinder. About 2.9 percent of people reported more than one race in Census 2010. Data for American Indians and Alaska Natives, Native Hawaiians and Other Pacific Islanders, and those reporting two or more races are not shown separately.

Source: U.S. Census Bureau, Current Population Survey, 2012 Annual Social and Economic Supplement.

and West regions compared to the official measure. These differences by residence and region reflect the adjustments for geographic price differences in housing that are made to the SPM thresholds.

The share of the poor who were in the category labeled "new SPM units" was lower than the official measure by about 8 percentage points—as these are the units that include additional members, such as cohabiting partners, whose income is not included in the family definition employed by the official measure. The proportion that were female, children, in female householder families, Blacks, native born, renters, living outside metropolitan areas, in the Midwest and the South, have only public insurance, did not work, and had no disability was smaller using the SPM compared with the official measure. The shares of the poverty population of those who own their home

Figure 3.
Distribution of People by Income-to-Threshold Ratios: 2011
(In percent)



*Includes unrelated individuals under age 15.
Note: Total does not sum to 100.0 due to rounding.
Source: U.S. Census Bureau, Current Population Survey, 2012 Annual Social and Economic Supplement.

without a mortgage or reside inside principal cities were not statistically different under the two measures.

Distribution of income-to-poverty threshold ratios: Official and SPM

Comparing the distribution of gross cash income with that of SPM resources also allows an examination of the effect of taxes and transfers on SPM rates. Table 3 shows the distribution of income-to-poverty threshold ratios for various groups. Dividing income by the poverty threshold controls income by unit size and composition. Figure 3 shows the percent in income-to-threshold ratio categories of the distribution for all people. In general, the comparison suggests that there was a smaller percentage of the population in the lowest category of the distribution using the SPM. For most groups, including targeted in-kind benefits reduced the percent of the population in the lowest category—those with income below half their poverty threshold. This was true for most of the groups shown in Table 3 except for those over age 64. They showed a higher percent below half of the poverty line with the SPM, 4.3 percent compared to 2.3 percent with the official measure. As shown earlier, many of the in-kind benefits included in the SPM are not targeted to this population. Further, many transfers received by this group are in cash, especially Social Security payments, and are captured in the official measure as well as the SPM.

Note that the percent of the 65 years and over age group with cash income below half their threshold was lower than that of other age groups under the official measure (2.3 percent), while the percent for children was higher (10.3 percent). Subtracting MOOP and other expenses and adding in-kind benefits in the SPM narrowed the differences across the three age groups. On the other hand, the SPM shows a smaller percentage with income or resources in the highest category—four or more times the thresholds. The SPM resource measure subtracts taxes, compared with the official that does not, bringing down the percent of people with income in the highest category.

Table 3 shows similar calculations by race and ethnicity. Using the SPM, smaller percentages had income below half of their poverty thresholds, compared with the official measure, for all groups shown except for Asians. The percentage of Asians in this category was not statistically different with the two measures. For Blacks, the percentage in this lowest category fell from 13.0 percent with the official measure to 7.9 percent with the SPM. The percentage of Whites and Hispanics in the lowest category was also lower using the SPM.

Another notable difference between the distributions using these two measures was the larger number of individuals with income-to-threshold ratios between 1.00 and 1.99. This group was 19.4 percent of the population using the official measure and 32.0 percent of the population using the SPM. Since the effect of taxes and transfers is often to move family income from the extremes of the distribution to the center of the distribution, that is, from the very bottom with targeted transfers or from the very top via taxes, the increase in the size of this category is to be expected. Altogether, about half of all people lived below 2 times the SPM threshold, and almost 99 million were not poor but fell in the moderate income status (Short and Smeeding, 2012, examine this group in more detail).

Table 4.

Percentage of People in Poverty by State Using 3-Year Averages Over 2009[1], 2010[1], and 2011

(People as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www.census.gov/apsd/techdoc/cps/cpsmar12.pdf*)

State	Official** 3-year average 2009–2011				SPM 3-year average 2009–2011				Difference	
	Number	90 percent C.I.† (±)	Percent-age	90 percent C.I.† (±)	Number	90 percent C.I.† (±)	Percent-age	90 percent C.I.† (±)	Number	Percent
United States	**45,847**	**549**	**15.0**	**0.2**	**48,423**	**610**	**15.8**	**0.2**	***2,576**	***0.8**
Alabama	778	92	16.5	2.0	685	76	14.5	1.6	*–93	*–2.0
Alaska	86	11	12.3	1.5	88	10	12.6	1.5	2	0.3
Arizona	1,233	133	19.2	2.1	1,268	155	19.8	2.4	35	0.5
Arkansas	511	71	17.7	2.5	449	61	15.6	2.1	*–61	*–2.1
California	6,065	229	16.3	0.6	8,773	276	23.5	0.7	*2,708	*7.3
Colorado	639	68	12.8	1.4	715	57	14.3	1.2	*75	*1.5
Connecticut	325	35	9.2	1.0	422	34	12.0	1.0	*97	*2.8
Delaware	115	11	12.9	1.2	125	11	14.0	1.2	*10	*1.1
District of Columbia	115	9	19.0	1.5	141	9	23.2	1.5	*26	*4.3
Florida	2,870	150	15.3	0.8	3,667	180	19.5	1.0	*797	*4.2
Georgia	1,788	142	18.6	1.5	1,821	141	19.0	1.5	33	0.3
Hawaii	165	19	12.5	1.5	229	24	17.4	1.8	*64	*4.9
Idaho	226	38	14.6	2.5	185	26	11.9	1.8	*–41	*–2.6
Illinois	1,773	112	13.9	0.9	1,910	117	15.0	0.9	*137	*1.1
Indiana	1,038	113	16.3	1.8	931	90	14.6	1.4	*–108	*–1.7
Iowa	323	31	10.7	1.0	253	23	8.4	0.8	*–70	*–2.3
Kansas	398	53	14.3	2.0	312	48	11.2	1.8	*–86	*–3.1
Kentucky	733	76	17.1	1.8	574	67	13.4	1.6	*–160	*–3.7
Louisiana	849	88	19.1	2.0	758	63	17.0	1.4	*–91	*–2.0
Maine	167	18	12.7	1.3	143	15	10.9	1.2	*–23	*–1.8
Maryland	577	50	10.0	0.9	784	63	13.6	1.1	*207	*3.6
Massachusetts	720	77	11.0	1.2	898	78	13.7	1.2	*178	*2.7
Michigan	1,467	117	15.1	1.2	1,317	110	13.5	1.1	*–150	*–1.5
Minnesota	566	57	10.8	1.1	541	53	10.3	1.0	–25	–0.5

See footnotes at end of table.

Poverty rates by state: Official and SPM

The Census Bureau recommends using the American Community Survey (ACS) for state-level poverty estimates. However, the SPM cannot be calculated using data from that survey. (Future research will discuss use of the ACS.) With the CPS, the Census Bureau recommends the use of 3-year averages to compare estimates across states.[18] This is the first year for which 3 years of SPM estimates are available. Table 4 shows 3-year averages of poverty rates for the two measures for the U.S. total and for each state. The 3-year-average poverty rates for the United States for the years 2009, 2010, and 2011 were 15.0 percent with the official measure and 15.8 percent using the SPM.

Figure 4 shows the United States divided into three categories by state: states with higher and lower rates using the SPM compared with the official measure and states that are not statistically different. The 14 states for which the SPM rates were higher than the official poverty rates are those with lighter shades. These states were California, Colorado, Connecticut, Delaware, Florida, Hawaii, Illinois, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New York, and Virginia. The SPM rate for the District of Columbia was also higher. Higher SPM rates by state may occur from many sources. Geographic adjustments for housing costs may result in higher SPM thresholds, a different mix of housing tenure or metropolitan area status, or higher nondiscretionary expenses, such as taxes or medical expenses.

Medium shades represent the 26 states where SPM rates were lower than the official poverty rates. These states were Alabama,

[18] See *Current Population Survey, 2011 ASEC Technical Documentation*, <www.census.gov/apsd/techdoc/cps/cpsmar12.pdf>, accessed September 2012.

Table 4.

Percentage of People in Poverty by State Using 3-Year Averages Over 2009[1], 2010[1], and 2011—Con.

(People as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www.census.gov/apsd/techdoc/cps/cpsmar12.pdf*)

State	Official** 3-year average 2009–2011				SPM 3-year average 2009–2011				Difference	
	Number	90 percent C.I.† (±)	Percentage	90 percent C.I.† (±)	Number	90 percent C.I.† (±)	Percentage	90 percent C.I.† (±)	Number	Percent
Mississippi	613	41	21.1	1.5	460	45	15.8	1.6	*–153	*–5.3
Missouri	916	99	15.5	1.7	763	117	12.9	2.0	*–154	*–2.6
Montana	148	19	15.0	2.0	118	19	12.0	1.9	*–29	*–3.0
Nebraska	186	23	10.3	1.3	175	21	9.6	1.2	–12	–0.6
Nevada	406	41	15.1	1.5	522	45	19.4	1.7	*115	*4.3
New Hampshire	97	12	7.4	0.9	136	12	10.4	0.9	*39	*3.0
New Jersey	934	97	10.7	1.1	1,254	112	14.4	1.3	*319	*3.7
New Mexico	405	41	20.0	2.0	312	32	15.4	1.6	*–94	*–4.6
New York	3,067	179	16.0	0.9	3,409	154	17.8	0.8	*341	*1.8
North Carolina	1,574	119	16.7	1.3	1,298	118	13.8	1.3	*–276	*–2.9
North Dakota	75	11	11.4	1.7	59	7	9.0	1.1	*–16	*–2.4
Ohio	1,678	158	14.8	1.4	1,433	107	12.6	0.9	*–245	*–2.2
Oklahoma	537	60	14.5	1.6	471	51	12.7	1.4	*–66	*–1.8
Oregon	547	53	14.3	1.4	539	58	14.1	1.6	–8	–0.2
Pennsylvania	1,527	107	12.1	0.9	1,454	99	11.5	0.8	–73	–0.6
Rhode Island	143	13	13.8	1.2	134	10	12.9	1.0	–9	–0.9
South Carolina	763	61	16.7	1.3	696	54	15.2	1.2	*–67	*–1.5
South Dakota	116	22	14.5	2.8	88	13	11.0	1.6	*–29	*–3.6
Tennessee	1,049	124	16.6	2.0	931	116	14.8	1.9	*–118	*–1.9
Texas	4,479	238	17.8	1.0	4,145	208	16.5	0.8	*–334	*–1.3
Utah	287	34	10.4	1.2	293	42	10.5	1.5	5	0.2
Vermont	67	7	10.8	1.2	57	7	9.2	1.2	*–10	*–1.6
Virginia	866	89	11.0	1.1	1,004	91	12.7	1.2	*139	*1.8
Washington	818	88	12.1	1.3	812	82	12.0	1.2	–6	–0.1
West Virginia	309	28	16.9	1.6	225	21	12.3	1.2	*–84	*–4.6
Wisconsin	654	79	11.6	1.4	596	71	10.6	1.3	*–58	*–1.0
Wyoming	56	6	10.0	1.2	51	7	9.2	1.1	*–5	*–0.9

* Statistically different from zero at the 90 percent confidence level.

** Includes unrelated individuals under the age of 15.

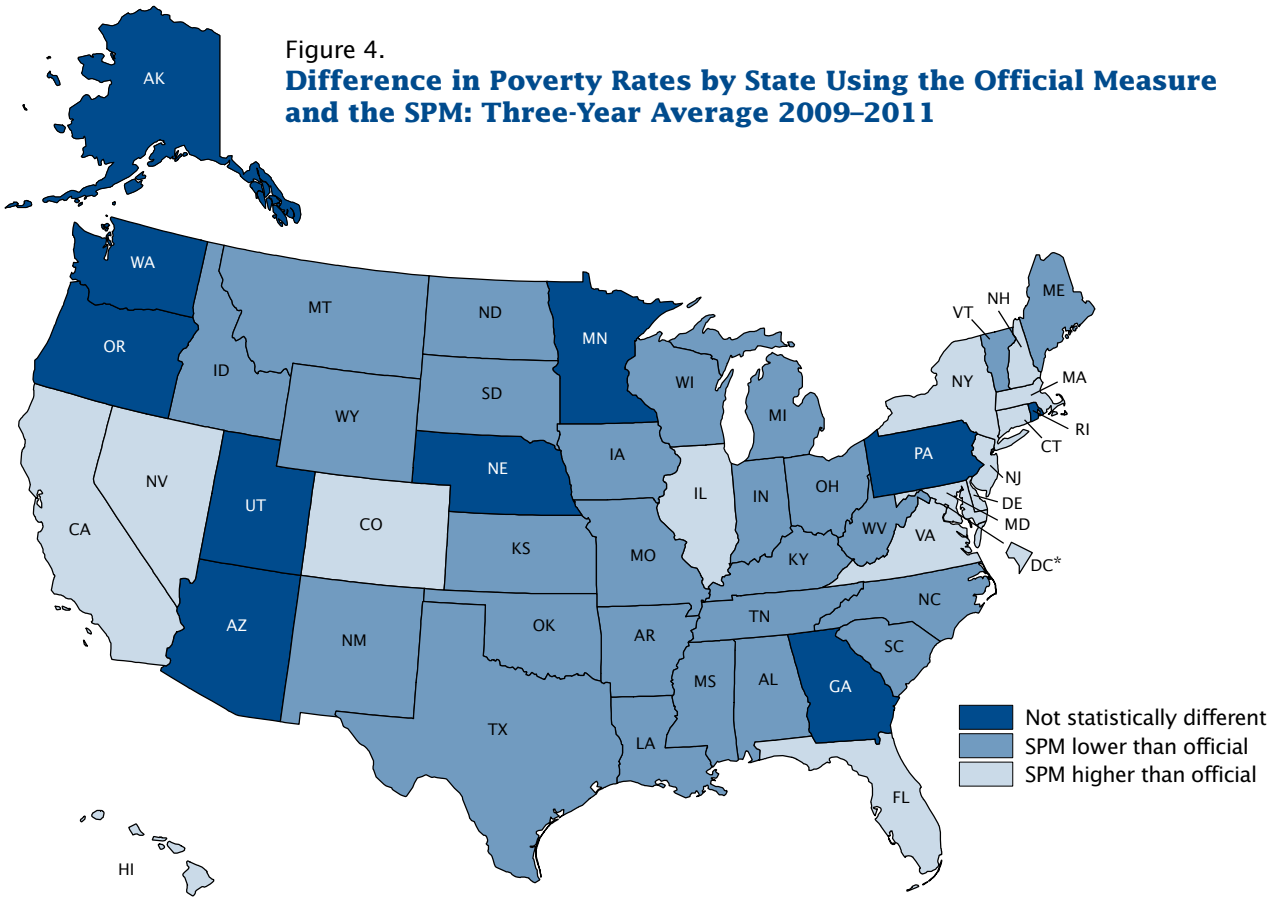
† A 90 percent confidence interval is a measure of an estimate's variability. The larger the confidence interval in relation to the size of the estimate, the less reliable the estimate. Confidence intervals shown in this table are based on standard errors calculated using replicate weights instead of the generalized variance function used in the past. For more information, see "Standard Errors and Their Use" at <www.census.gov/hhes/www/p60_243sa.pdf>.

[1] Consistent with 2011 data through implementation of Census 2010 based population controls.

Source: U.S. Census Bureau, Current Population Survey, 2010–2012 Annual Social and Economic Supplements.

Arkansas, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Michigan, Mississippi, Missouri, Montana, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Vermont, West Virginia, Wisconsin, and Wyoming. Lower SPM rates would occur due to lower thresholds reflecting lower housing costs, a different mix of housing tenure or metropolitan area status, or more generous noncash benefits. Darker shades are those ten states that were not statistically different under the two measures and include Alaska, Arizona, Georgia, Minnesota, Nebraska, Oregon, Pennsylvania, Rhode Island, Utah, and Washington State. Details are in Table 4.

Figure 4.
Difference in Poverty Rates by State Using the Official Measure and the SPM: Three-Year Average 2009–2011



Source: U.S. Census Bureau, Current Population Survey, 2010–2012 Annual Social and Economic Supplements.

THE SUPPLEMENTAL POVERTY MEASURE

The effect of cash and noncash transfers, taxes, and other nondiscretionary expenses

The purpose of this section is to move away from comparing the SPM with the official measure and look only at changes *within* the SPM measure. This exercise allows us to gauge the effects of taxes and transfers and other necessary expenses using the SPM alone as the measure of economic well-being. The previous section characterized the poverty population using the SPM in comparison with the current official measure. This section examines that SPM poverty population in more detail.

The official poverty measure takes account of cash benefits from the government, such as Social Security and Unemployment Insurance (UI) benefits, Supplemental Security Income (SSI), public assistance benefits, such as TANF, and workers compensation benefits, but does not take account of taxes or of in-kind benefits aimed at improving the economic situation of the poor. Besides taking account of cash benefits and necessary expenses, such as medical out-of-pocket expenses (MOOP) and expenses related to work, the SPM includes taxes and in-kind transfers. The important contribution that the SPM provides is allowing us to gauge the effectiveness of tax credits and transfers in alleviating poverty. We can also examine the effects of the nondiscretionary expenses such as work expenses and MOOP.

Table 5a shows the effect that various additions and subtractions had on the SPM rate in 2011, holding all else the same and assuming no behavioral changes. Additions and subtractions are shown for the total population and by three age groups. Additions shown in the table include cash benefits, also accounted for in the official measure, as well as noncash benefits, only in the SPM. This allows us to examine the effects of government transfers on poverty estimates.

Table 5a.

Effect of Excluding Individual Elements on SPM Rates: 2011

(Numbers in thousands, confidence intervals [C.I.] in thousands or percentage points as appropriate. People as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www.census.gov/apsd/techdoc/cps/cpsmar12.pdf*)

Elements	All persons		Children		Adults aged 18–64		65 years and older	
	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)
Research SPM	**16.1**	**0.3**	**18.1**	**0.5**	**15.5**	**0.3**	**15.1**	**0.5**
Social Security	24.4	0.3	20.3	0.5	19.7	0.3	54.1	0.8
Refundable tax credits	18.9	0.3	24.4	0.6	17.7	0.3	15.2	0.5
SNAP	17.6	0.3	21.0	0.5	16.8	0.3	15.8	0.6
Unemployment insurance	17.2	0.3	19.4	0.5	16.8	0.3	15.5	0.5
SSI	17.2	0.3	18.9	0.5	16.7	0.3	16.3	0.6
Housing subsidies	17.0	0.3	19.5	0.5	16.3	0.3	16.3	0.6
Child support received	16.5	0.3	19.1	0.5	15.8	0.3	15.1	0.5
School lunch	16.4	0.3	19.0	0.5	15.8	0.3	15.1	0.5
TANF/General Assistance	16.4	0.3	18.7	0.5	15.7	0.3	15.1	0.5
WIC	16.2	0.3	18.4	0.5	15.6	0.3	15.1	0.5
LIHEAP	16.2	0.3	18.2	0.5	15.6	0.3	15.1	0.5
Workers compensation	16.2	0.3	18.2	0.5	15.7	0.3	15.1	0.5
Child support paid	16.0	0.3	18.0	0.5	15.4	0.3	15.0	0.5
Federal income tax	15.6	0.3	17.8	0.5	15.0	0.3	14.8	0.5
FICA	14.8	0.3	16.4	0.5	14.2	0.3	14.8	0.5
Work expense	14.4	0.3	15.9	0.5	13.8	0.3	14.7	0.5
MOOP	12.7	0.3	15.4	0.5	12.7	0.3	8.0	0.4

† A 90 percent confidence interval is a measure of an estimate's variability. The larger the confidence interval in relation to the size of the estimate, the less reliable the estimate. Confidence intervals shown in this table are based on standard errors calculated using replicate weights instead of the generalized variance function used in the past. For more information see "Standard Errors and Their Use" at <www.census.gov/hhes/www/p60_243sa.pdf>.

Source: U.S. Census Bureau, Current Population Survey, 2012 Annual Social and Economic Supplement.

Table 5b.

Effect of Excluding Individual Elements on SPM Rates: 2010[1]

(Numbers in thousands, confidence intervals [C.I.] in thousands or percentage points as appropriate. People as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www.census.gov/apsd/techdoc/cps/cpsmar11.pdf*)

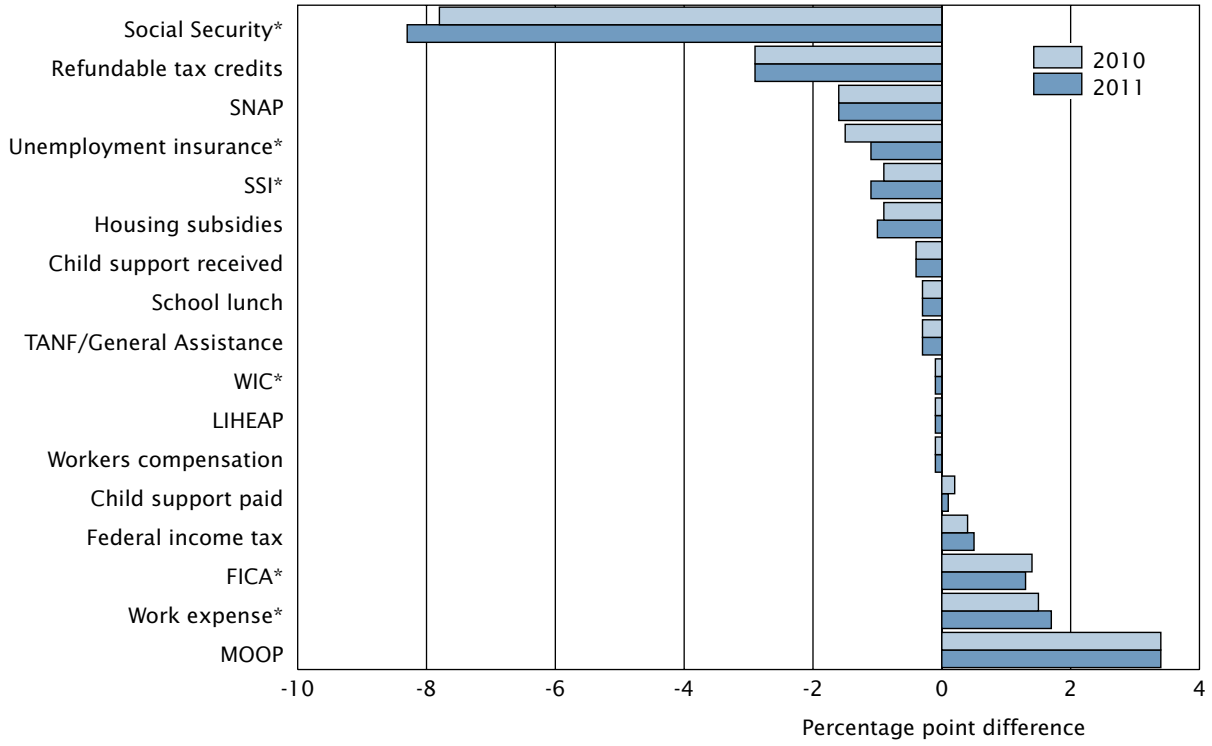
Elements	All persons		Children		Adults aged 18–64		65 years and older	
	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)
Research SPM	**16.0**	**0.3**	**18.0**	**0.5**	**15.2**	**0.3**	**15.8**	**0.6**
Social Security	23.8	0.4	19.9	0.5	18.9	0.4	54.5	0.8
Refundable tax credits	18.9	0.3	24.3	0.5	17.4	0.3	16.0	0.6
SNAP	17.6	0.3	21.0	0.5	16.5	0.3	16.7	0.6
Unemployment insurance	17.5	0.3	19.7	0.5	16.9	0.3	16.3	0.6
SSI	16.9	0.3	18.8	0.5	16.2	0.3	16.9	0.6
Housing subsidies	16.9	0.3	19.3	0.5	15.9	0.3	17.0	0.6
Child support received	16.4	0.3	19.0	0.5	15.5	0.3	15.9	0.6
School lunch	16.3	0.3	18.8	0.5	15.5	0.3	15.9	0.6
TANF/General Assistance	16.3	0.3	18.7	0.5	15.4	0.3	15.9	0.6
WIC	16.0	0.3	18.1	0.5	15.3	0.3	15.8	0.6
LIHEAP	16.1	0.3	18.1	0.5	15.3	0.3	15.9	0.5
Workers compensation	16.1	0.3	18.1	0.5	15.4	0.3	15.9	0.5
Child support paid	15.8	0.3	17.9	0.5	15.1	0.3	15.8	0.6
Federal income tax	15.6	0.3	17.7	0.5	14.7	0.3	15.6	0.6
FICA	14.5	0.3	16.1	0.5	13.7	0.3	15.5	0.6
Work expense	14.5	0.3	16.0	0.5	13.7	0.3	15.5	0.6
MOOP	12.6	0.3	15.2	0.5	12.4	0.3	8.6	0.4

† A 90 percent confidence interval is a measure of an estimate's variability. The larger the confidence interval in relation to the size of the estimate, the less reliable the estimate. Confidence intervals shown in this table are based on standard errors calculated using replicate weights instead of the generalized variance function used in the past. For more information see "Standard Errors and Their Use" at <www.census.gov/hhes/www/p60_239sa.pdf>.

[1] Consistent with 2011 data through implementation of Census 2010 based population controls. Estimates for calendar year 2010 differ from previously published estimates due to weighting adjustments to the 2010 Census and improvements to the tax calculations, see Webster, 2012.

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

Figure 5.
Difference in SPM Rates After Including Each Element: 2010 and 2011



*Statistically significant change between 2010 and 2011.
Source: U.S. Census Bureau, Current Population Survey, 2011 and 2012 Annual Social and Economic Supplements.

Because child support paid is subtracted from income in the SPM, we also examine the effect of child support received on alleviating poverty. Child support payments received are counted as income in both the official and the SPM.

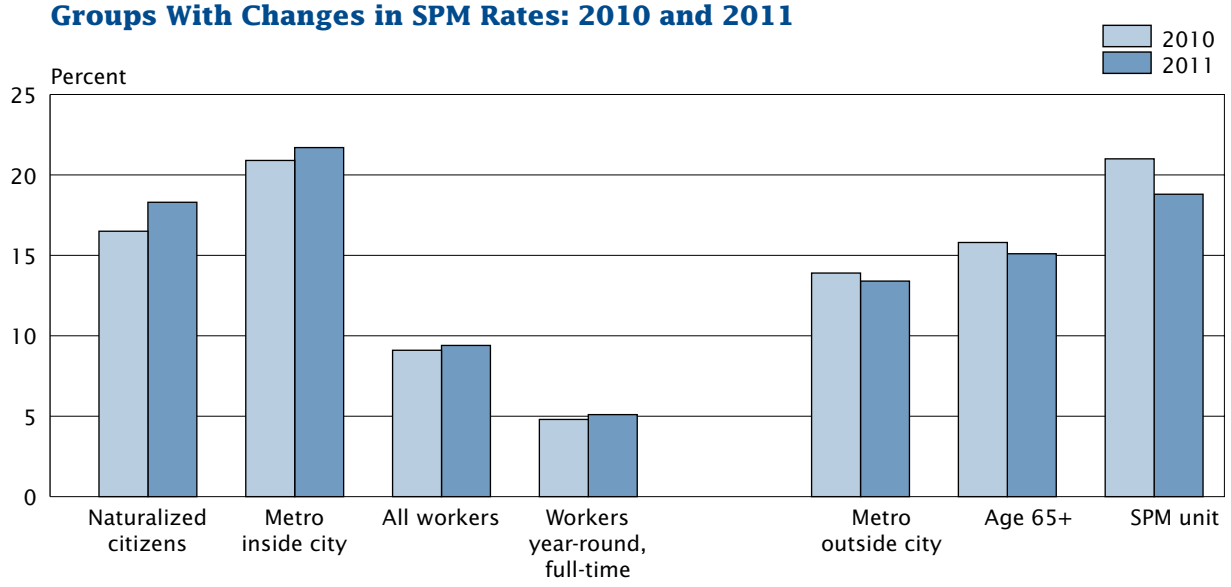
Removing one item from the calculation of family resources and recalculating poverty rates shows, for example, that without Social Security benefits, the SPM rate would have been 24.4 percent rather than 16.1 percent. Not including refundable tax credits (the EITC and the refundable portion of the child tax credit) in resources, the poverty rate for all people would have been 18.9 percent rather than 16.1 percent, all else constant. On the other hand, removing amounts paid for child support, income and payroll taxes, work-related expenses, and medical out-of-pocket expenses from the calculation resulted in lower poverty rates. Without subtracting MOOP from income, the SPM rate for 2011 would have been 12.7 percent rather than 16.1 percent. Table 5b shows the same calculations for the year 2010.[19]

In 2011, not accounting for refundable tax credits would have resulted in a poverty rate of 24.4 percent for children, rather than 18.1 percent. Not subtracting MOOP from the income of families with children would have resulted in a poverty rate of 15.4 percent. Findings are similar for the other two age groups shown. For the 65 years of age and older group, however, WIC had no statistically significant effect while SPM rates increased by about 7.0 percentage points with the subtraction of MOOP from income. Clearly, the subtraction of MOOP had an important effect on SPM rates for this group. On the other hand, Social Security benefits lowered poverty rates by 39.1 percentage points for the 65 and over group.

Tables 5a and 5b also show the same calculations for three age groups for 2011 and for 2010. Figure 5 shows the percentage point difference in the SPM rate for each item for the two years 2010 and 2011 and allows us to compare the effect of transfers, both cash and noncash, and nondiscretionary

[19] Estimates for calendar year 2010 differ from previously published estimates due to weighting adjustments to the 2010 Census and improvements to the tax calculations; see Webster, 2012.

Figure 6.
Groups With Changes in SPM Rates: 2010 and 2011



Source: U.S. Census Bureau, Current Population Survey, 2011 and 2012 Annual Social and Economic Supplements.

expenses on SPM rates. For most elements the effect of additions and subtractions between the two years was not statistically different, however, some items had small differences in their effect on poverty rates. Social Security benefits, WIC, and Supplementary Security Income (SSI) were more effective at reducing poverty rates in 2011 than they were in 2010. Unemployment insurance had a smaller effect in 2011 than in 2010. Payroll taxes (FICA) increased poverty rates less in 2011 than in 2010, while work expenses, such as commuting and child care costs, increased poverty rates more. Federal income taxes shown here exclude refundable tax credits, the earned income tax credit, and the advance child tax credit, but include the nonrefundable child tax credit.

Notable among the differences in the effects of benefits and expenses was the increased effectiveness of Social Security benefits. While benefit amounts did not increase in 2011, the number of individuals over age 64 did increase between the two years. The number of elderly individuals grew 4.3 percent from 39.8 million in 2010 to 41.5 million in 2011. The percent of people reporting Social Security benefits increased from 22.3 percent to 22.9 percent. Likewise, the percent reporting receipt of SSI benefits increased slightly. The increased effect of work expenses likely reflected increased commuting costs caused by slight increases in work effort and a rise in the price of gasoline as measured by the CPI-U.[20, 21] Declines in the effect of unemployment benefits in moving people out of poverty reflect a decline in the number of workers receiving benefits between 2010 and 2011. The percent reporting receiving unemployment benefits fell from 11.0 percent in 2010 to 9.0 percent in 2011. Declines in the effect of payroll taxes in pulling people below the poverty line reflect the payroll tax holiday enacted as part of the Tax Relief Act of 2010.

CHANGES IN SPM RATES BETWEEN 2010 AND 2011: SPM

As has been documented (De Navas et al., 2012), real median household gross cash income declined by 1.5 percent between 2010 and 2011. Despite increased thresholds and falling median income, this change resulted in no change in the official poverty rate. Median total SPM resources fell from $36,939 for 2010 (in 2011 dollars) to $36,382 in 2011, a decline of 1.5 percent, not different from the change in median household gross cash income and reflecting only small changes between 2010 and 2011 in the effect of in-kind benefits received and nondiscretionary expenses subtracted. Table 6 shows SPM rates

[20] De Navas et al., 2012.

[21] "Consumer Expenditures—2011," BLS (2012) and as reflected in IRS mileage allowances between 2010 and 2011 used to calculate commuting costs in the SPM. All work-related expenses per week as estimated from the Survey of Income and Program Participation were $27.16 for each worker. This compares to the amount of $25.50 per week for 2010.

Table 6.

Percent of People in Poverty Using the Supplemental Poverty Measure: 2010–2011

(Numbers in thousands, confidence intervals [C.I.] in thousands or percentage points as appropriate. People as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www.census.gov/apsd/techdoc/cps/cpsmar12.pdf*)

Characteristic	Below Poverty Level								Difference	
	SPM 2010[1]				SPM 2011					
	Number		Percent		Number		Percent			
	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Number	Percent
All people	**48,984**	**921**	**16.0**	**0.3**	**49,695**	**905**	**16.1**	**0.3**	**712**	**0.1**
Sex										
Male	22,842	494	15.2	0.3	23,112	474	15.3	0.3	270	0.1
Female	26,142	517	16.7	0.3	26,583	503	16.9	0.3	441	0.2
Age										
Under 18 years	13,376	375	18.0	0.5	13,429	381	18.1	0.5	53	0.1
18 to 64 years	29,316	611	15.2	0.3	30,020	577	15.5	0.3	704	0.3
65 years and older	6,292	221	15.8	0.6	6,247	229	15.1	0.5	–45	*–0.8
Type of Unit										
In married couple unit	18,205	632	9.8	0.3	18,576	632	10.0	0.3	372	0.2
In female householder unit	18,049	547	29.0	0.8	18,996	515	30.0	0.7	*948	1.0
In male householder unit	7,220	311	22.5	0.8	7,071	313	21.9	0.9	–150	–0.6
In new SPM unit	5,510	340	21.0	1.2	5,052	302	18.8	1	*–458	*–2.2
Race[2] and Hispanic Origin										
White	33,929	725	14.1	0.3	34,427	729	14.3	0.3	498	0.1
White, not Hispanic	21,461	595	11.0	0.3	21,427	587	11.0	0.3	–34	0.0
Black	10,005	383	25.4	1.0	10,214	410	25.7	1.0	210	0.3
Asian	2,592	210	16.6	1.3	2,719	215	16.9	1.3	126	0.3
Hispanic (any race)	14,170	473	27.7	0.9	14,670	504	28.0	1.0	500	0.3
Nativity										
Native born	39,073	849	14.6	0.3	39,368	756	14.6	0.3	296	0.0
Foreign born	9,911	340	25.1	0.8	10,327	385	25.8	0.9	416	0.7
Naturalized citizen	2,862	159	16.5	0.8	3,286	184	18.3	0.9	*424	*1.8
Not a citizen	7,049	301	31.9	1.2	7,041	329	31.9	1.3	–8	0.0
Tenure										
Owner	20,096	669	9.7	0.3	19,978	616	9.7	0.3	–118	0.0
Owner/Mortgage	11,296	473	8.2	0.3	11,138	480	8.1	0.3	–158	0.0
Owner/No mortgage/rent free	9,578	439	13.2	0.6	9,592	400	13.1	0.5	14	–0.1
Renter	28,110	746	29.4	0.6	28,966	740	29.3	0.6	856	0.0
Residence										
Inside metropolitan statistical areas	42,867	886	16.6	0.3	43,322	898	16.6	0.3	455	0.0
Inside principal cities	20,694	603	20.9	0.5	21,748	721	21.7	0.6	*1054	*0.8
Outside principal cities	22,173	745	13.9	0.4	21,574	700	13.4	0.4	–599	*–0.5
Outside metropolitan statistical areas[3]	6,117	447	12.8	0.7	6,373	492	13.5	0.7	256	0.7
Region										
Northeast	7,964	346	14.5	0.6	8,262	337	15.0	0.6	299	0.5
Midwest	8,650	356	13.1	0.5	8,454	349	12.8	0.5	–196	–0.3
South	18,501	533	16.3	0.5	18,432	650	16.0	0.6	–69	–0.2
West	13,869	517	19.3	0.7	14,547	512	20.0	0.7	*678	0.7
Health Insurance Coverage										
With private insurance	14,643	466	7.5	0.2	15,010	475	7.6	0.2	367	0.1
With public, no private insurance	19,067	558	31.5	0.8	19,677	490	31.3	0.7	610	–0.3
Not insured	15,274	469	30.6	0.8	15,008	451	30.9	0.8	–265	0.3

See footnotes at end of table.

Table 6.

Percent of People in Poverty Using the Supplemental Poverty Measure: 2010–2011—Con.

(Numbers in thousands, confidence intervals [C.I.] in thousands or percentage points as appropriate. People as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www.census.gov/apsd/techdoc/cps/cpsmar12.pdf*)

Characteristic	Below Poverty Level								Difference	
	SPM 2010[1]				SPM 2011					
	Number		Percent		Number		Percent			
	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Estimate	90 percent C.I.† (±)	Number	Percent
Work Experience										
Total, 18 to 64 years	29,316	611	15.2	0.3	30,020	577	15.5	0.3	704	0.3
All workers	13,071	329	9.1	0.2	13,611	350	9.4	0.2	*540	*0.3
Worked full-time, year-round	4,550	167	4.8	0.2	4,983	177	5.1	0.2	*433	*0.4
Less than full-time, year-round	8,522	260	17.8	0.5	8,628	279	18.5	0.6	106	0.7
Did not work at least 1 week	16,244	424	33.3	0.7	16,409	400	33.5	0.7	164	0.2
Disability Status[4]										
Total, 18 to 64 years	29,316	611	15.2	0.3	30,020	577	15.5	0.3	704	0.3
With a disability	4,139	188	27.6	1.0	4,133	186	27.6	1.1	–6	0.0
With no disability	25,094	562	14.2	0.3	25,795	526	14.5	0.3	*702	0.3

* Statistically different from zero at the 90 percent confidence level.

† A 90 percent confidence interval is a measure of an estimate's variability. The larger the confidence interval in relation to the size of the estimate, the less reliable the estimate. Confidence intervals shown in this table are based on standard errors calculated using replicate weights instead of the generalized variance function used in the past. For more information see "Standard Errors and Their Use" at <www.census.gov/hhes/www/p60_243sa.pdf>.

[1] Consistent with 2011 data through implementation of Census 2010 based population controls. Estimates for calendar year 2010 differ from previously published estimates due to weighting adjustments to the 2010 Census and improvements to the tax calculations, see Webster, 2012.

[2] Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White ***and*** American Indian and Alaska Native or Asian ***and*** Black or African American, is available from Census 2010 through American FactFinder. About 2.9 percent of people reported more than one race in Census 2010. Data for American Indians and Alaska Natives, Native Hawaiians and Other Pacific Islanders, and those reporting two or more races are not shown separately.

[3] The "Outside metropolitan statistical areas" category includes both micropolitan statistical areas and territory outside of metropolitan and micropolitan statistical areas. For more information, see "About Metropolitan and Micropolitan Statistical Areas" at <www.census.gov/population/www/estimates/aboutmetro.html>.

[4] The sum of those with and without a disability does not equal the total because disability status is not defined for individuals in the Armed Forces.

Source: U.S. Census Bureau, Current Population Survey, 2011 and 2012 Annual Social and Economic Supplements.

for 2010 and 2011, calculated in a comparable way.

In 2010, the percent poor using the SPM was 16.0 percent and in 2011 that rate was 16.1 percent, not statistically different. While for most groups there were no changes in SPM rates across the two years, there were small increases for naturalized citizens, those residing inside principal cities, and for workers including year-round, full-time workers. On the other hand, SPM rates for the elderly, those in metropolitan areas but outside principal cities, and those in new SPM-defined units declined.

To gain insight into changes in poverty rates between 2010 and 2011, it is useful to return to comparisons with the official poverty measure (see De Navas et al., 2012). While changes in the poverty rates for the two measures were not statistically different from each other, changes in the rates for some subgroups are of interest. Two of the six SPM groups with statistically significant changes between the two years also were statistically significant using the official poverty measure; naturalized citizens had an increase in poverty rates for both measures while those residing inside metropolitan areas but outside principal cities declined in poverty rates for both measures. In both groups, the net changes in poverty rates were not statistically significant between the two measures.

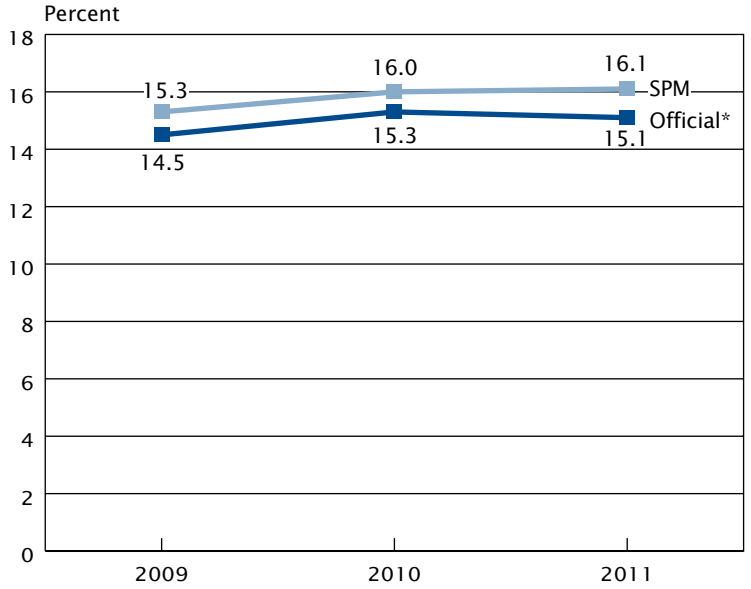
Two other groups had net changes that were not statistically significant between the two measures: the elderly and those in principal cities. Those 65 years of age and over experienced a significant decline in the SPM rate across the two years and those residing inside the principal cities increased in the SPM rate, while the official poverty rates were not statistically significant. However, for both these

groups, like those above, the net changes in poverty rates were not statistically different between the two measures.

More interesting are those groups with differences in the net change between the two measures. The SPM measure indicates that there is a statistically significant increase in the poverty rate for all workers and those working year-round, full-time, while the official measure indicated no statistically significant differences. For Hispanics, males, noncitizens, and those living in the south, the SPM measure indicated that there is not a statistically significant difference in poverty rate, but the official poverty measure indicated that these groups had a decrease in their poverty rate. For all of these groups, the net changes in poverty rates were statistically different between the two measures.

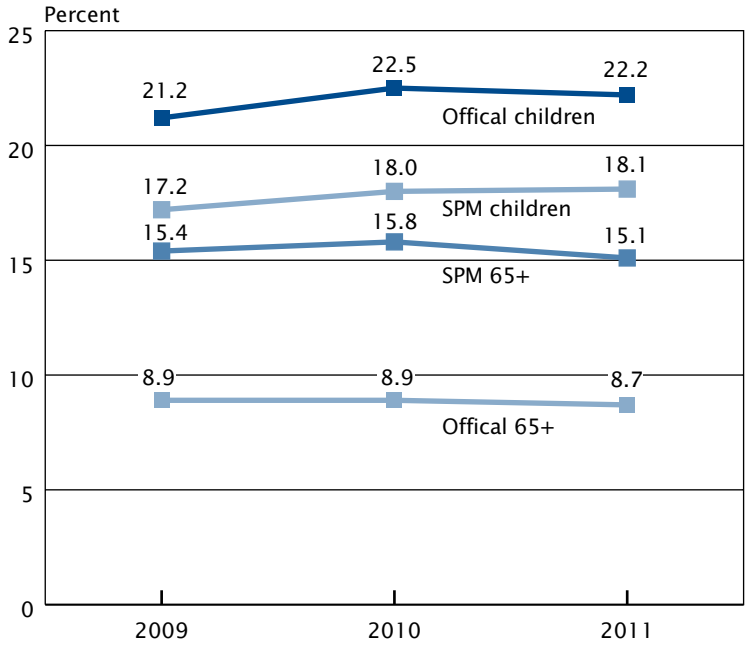
Finally, we show the official measure and the SPM over the three years for which we have estimates. As noted earlier, the estimates differ from those previously published due to implementation of Census 2010 based population controls and other changes to the tax calculator. Figure 7 shows the official measure and the SPM across the three years, and Figure 8 shows the rate using both measures for children and for those over 64 years of age.

Figure 7.
Poverty Rates Using the Official Measure and the SPM: 2009 to 2011



*Includes unrelated individuals under age 15.
Source: U.S. Census Bureau Current Population Survey, 2010–2012 Annual Social and Economic Supplements.

Figure 8.
Poverty Rates Using the Official Measure and the SPM for Two Age Groups: 2009 to 2011



Source: U.S. Census Bureau, Current Population Survey, 2010–2012 Annual Social and Economic Supplements.

SUMMARY

This report provides a third year of estimates of a new Supplemental Poverty Measure (SPM) for the United States. Estimates presented were based on data from the 2005 to 2012 CE and the 2010 to 2012 CPS ASEC and they refer to calendar years 2009 to 2011. The results illustrate differences between the official measure of poverty and a poverty measure that takes account of in-kind benefits received by families and nondiscretionary expenses that they must pay. The SPM also employs a new poverty threshold that is updated with information on expenses for food, clothing, shelter, and utilities. Results showed higher poverty rates using the SPM than the official measure for most groups.

In addition, the distribution of people in the total population and the distribution of people classified as in poverty using the two measures were examined. Results showed a higher proportion of several groups were poor using the SPM. The share of people 65 years of age and over in poverty is higher when the SPM is used, 12.6 percent compared with 7.8 percent with the official measure. Use of the SPM also results in a higher share of the poor for: men, those who are 18 to 64 years of age, people in married-couple families, people in households with male householders, Whites, Asians, Hispanics, the foreign born, homeowners with mortgages, individuals with private health insurance, the uninsured, all workers, and individuals without a disability. The shares are also higher with the SPM for those residing in metropolitan areas but outside principal cities and in the Northeast and West regions.

The SPM allows us to examine the effects of taxes and in-kind transfers on the poor and on important groups within the poverty population. As such, there are lower percentages of the SPM poverty populations in the very high and very low resource categories than we find using the official measure. Since in-kind benefits help those in extreme poverty, there were lower percentages of individuals with resources below half the SPM threshold for most groups.

The effect of benefits received from each program and taxes and other nondiscretionary expenses on SPM rates were examined. It was shown that medical out-of-pocket expenses had an important effect on SPM rates and on the well-being of those 65 years of age and over, in particular.

These findings are similar to those reported in earlier work using a variety of experimental poverty measures that followed recommendations of the National Academy of Sciences (NAS) poverty panel (Short et al., 1999 and Short, 2001). Experimental poverty rates based on the NAS panel's recommendations have been calculated every year since 1999. While SPM rates are available only from 2009, estimates are available for earlier years for a variety of experimental poverty measures, including the most recent for 2011.[22] They include poverty rates that employ CE based thresholds, as well as thresholds that increase each year from 1999 based on changes in the Consumer Price Index (similar to the official thresholds) and estimates that do not adjust thresholds for geographic differences in housing costs. However, the methods used for many of the elements in the experimental measures differ markedly from those in the SPM and, therefore, they are not considered to be comparable measures.

[22] These estimates are available on the Census Bureau Web site.

FUTURE RESEARCH AND PLANS FOR THE SPM

The ITWG was charged with developing a set of initial starting points to permit the Census Bureau, in cooperation with the BLS, to produce the SPM that would be released along with the official measure each year. In addition to specifying the nature and use of the SPM, the ITWG laid out a research agenda for many of the elements of this new measure. They stated:

> *As with any statistic regularly published by a Federal statistical agency, the Working Group expects that changes in this measure over time will be decided upon in a process led by research methodologists and statisticians within the Census Bureau in consultation with BLS and with other appropriate data agencies and outside experts, and will be based on solid analytical evidence.*

Among the elements designated by the ITWG for further development were methods to include in-kind benefits in the thresholds, improving geographic adjustments for price differences across areas, improving methods to estimate work-related expenses (commuting costs), and evaluating methods for subtracting medical out-of-pocket expenses having to do with the uninsured. This section summarizes ongoing research on these and other related topics discussed in more detail in Short and Garner (2012).

Including in-kind benefits in thresholds

The Census Bureau has a long history of valuing in-kind benefits in income measures (U.S. Census Bureau, 1982). For consistency in measurement with the resource measure, the thresholds should include the value of in-kind benefits

(ITWG, 2010). Since the value of SNAP benefits is collected in the CE as food expenditures, it is included in the SPM thresholds used here. The CE collects data on whether or not a consumer unit lives in subsidized housing or participates in another government program that results in reduced rent but does not collect data on the receipt of other in-kind benefits. As per the ITWG suggestions, methods to impute the value of school lunch, WIC, and rent subsidies are the subject of ongoing research. See Garner and Hokayem (2012).

Necessary expenses subtracted from SPM resources: *Work-related expenses*

The ITWG suggested that further research on this topic and a refinement of methods would be valuable. Going to work and earning a wage often entails incurring expenses, such as travel to work and purchase of uniforms or tools. Another aspect of transportation expenses in the SPM has also been raised. There is concern that transportation costs vary with different geographical areas, including urban/rural and transit-rich/non-transit-rich areas, as do commuting expenses for mass transit/personal vehicle usage, access to public transportation, and/or vehicle availability. Rapino et al. (2011) addressed this topic. This research examined the appropriateness of applying a flat amount—the federal mileage reimbursement rate—for work-related expenses by investigating geographic variation in average commuting expenses for automobile commuters across 100 urban areas, regions, and divisions. Ongoing work at the Census Bureau on transportation expenses takes advantage of information derived from several ACS questions related to the work commute and work schedule. This work will shed light on the appropriateness of the current method used here to value work-related expenses as well as the geographic adjustment that account only for differences in housing costs. See Appendix for a description.

Necessary expenses subtracted from SPM resources: *Medical out-of-pocket expenses (MOOP)*

The Interagency Technical Working Group (ITWG) recommended subtracting medical out-of-pocket expenses from income, following the NAS panel. However, because the uninsured have lower medical services utilization and MOOP spending, their spending may reflect unmet needs relative to the insured's spending. Recognizing this aspect of the SPM, the ITWG recommended investigating the pros and cons of implementing an "adjustment" for the uninsured that accounts for such differential spending and its effect on poverty measurement. Caswell and Short (2011) conducted a study in response to the ITWG suggestions. Results showed that the poverty rates using uninsured adjustments increased compared with the "base" SPM, which incorporates only observed MOOP spending.

Necessary expenses subtracted from SPM resources: *Taxes*

The SPM subtracts federal, state, and local income taxes and Social Security payroll taxes (FICA) before assessing the ability of a family to obtain basic necessities such as food, clothing, and shelter. Taking account of taxes allows us to account for receipt of the federal or state earned income credit (EITC) and other tax credits. The CPS ASEC does not collect information on taxes paid but relies on a tax calculator to simulate taxes paid. These simulations include federal and state income taxes and social security payroll taxes. The Census Bureau is conducting research to improve tax simulations. Webster (2012) discusses estimates of federal and state taxes, including estimates of several tax credits. One further study takes advantage of the CPS/IRS exact match study to examine the performance of the tax simulator described above in assigning EITC benefits based on ethnicity. This research suggests that misassignment of these benefits is greater for Hispanic than non-Hispanic tax units (Short et al., 2012).

Extending the SPM to other surveys: *Survey of Income and Program Participation (SIPP)*

NAS recommendations to improve the official measure of poverty included using SIPP as the basis of a revised measure of poverty. This recommendation (5.1) stated that the SIPP should become the basis of official U.S. income and poverty statistics as it collects most of the elements of information required to fully estimate the recommended poverty measure (Citro and Michael, 1995). Short (2003) described the challenge of measuring poverty in the CPS relative to the SIPP, where most SPM elements are collected. Questions in the SIPP that collect items such as MOOP, child care, and child support paid were used as a starting point for including new questions in the CPS ASEC in 2010.

Beyond examining measurement differences from using different surveys, there are additional reasons to reproduce the SPM in the SIPP. Information about assets and liabilities and an array of measures of material hardship would allow an examination of poverty measures that incorporate wealth and an analysis of correlations with other measures of economic well-being such as material hardship or levels of household debt (see Short, 2005,

and Short and Ruggles, 2005, for earlier work using experimental poverty measures in SIPP.) Funded research will provide poverty estimates from the 2004 panel of the SIPP using 2004 calendar year data. The SIPP is a longitudinal survey and this research will provide a framework for future researchers measuring poverty spells and transitions into and out of poverty using the SPM. This study will also serve as guidance to the Census Bureau to estimate the SPM in a redesigned SIPP set for production in 2014.

Extending the SPM to other surveys: *American Community Survey*

While state level estimates of the SPM are provided in this report, the Census Bureau recommends the use of the American Community Survey for official poverty estimates for state and sub-state geographic units. For this reason, and others detailed below, the Census Bureau is endeavoring to implement an SPM measure using the ACS. The ACS lacks a number of key data elements required to produce SPM estimates. Despite limitations, researchers have been actively involved in exploring ways in which the ACS data can be used to produce NAS-based and/or SPM poverty estimates. The New York City Center for Economic Opportunity has produced NAS-based estimates for 2005 through 2010 (New York City Center for Economic Opportunity, 2012). New York State's Office of Temporary and Disability Assistance has presented estimates for the state of New York. The Urban Institute has created a NAS-style measure for Minnesota, Connecticut, Georgia, Massachusetts, and Illinois and the Institute for Research on Poverty at the University of Wisconsin has implemented NAS-based measure for the state of Wisconsin.[23] Renwick et al. (2012) lay out a proposal for how these data limitations might be overcome to produce SPM estimates using ACS data. Another paper explored alternative methods of forming resource units, specifically those that rely on the relationship imputations provided by the IPUMS project (Heggeness et al., 2012).

SPM topics being examined within the BLS

Garner and Gudrais (2012) test the sensitivity of assumptions underlying the production of the thresholds. Examples include testing the impact of increasing the years of CE Interview data used for the threshold estimation: the NAS used 3 years of data while the SPM uses 5 years. This change reduces the impact of changes in the economy or improvements in CE methodology on the measure. Improvements in CE methodology in 2007 were mitigated by moving to an SPM based on 5 years of CE interview data versus one based on 3 years of data.[24] Another test changed from the NAS estimation sample of two-adult-two-child families to a sample of consumer units with two children. This change was made to reflect the increasing diversity in household structure. In the SPM, medical expenditures are subtracted from resources. However, there is a growing interest in SPM thresholds that include medical care expenditures. SPM thresholds that include medical expenditures appear in the Garner and Gudrais study. These SPM FCSUM thresholds have been used by Zedlewski et al. (2010) and Isaacs et al. (2011) in ACS SPM estimates.

In addition to the work just mentioned, several events have been held to collect information about key issues related to the redesign of the CE: a Survey Redesign Panel Discussion (January 2010), a Data Capture Technology Forum in March 2010, and a Data Users' Needs Forum in June 2010. In December 2010, CE and the Council of Professional Associations on Federal Statistics held a CE Methods Workshop where five key topics central to the redesign were discussed: global questions, interview structure, proxy reporting, recall period, and split questionnaire designs. Under the Gemini Project, a CNSTAT committee is also working on a report focused on redesigning the CE to improve data quality, while reducing respondent burden and maintaining response rates. The desire to improve data quality and the need to cope with expected budget constraints are likely to reduce the number of survey questions asked of respondents. With a reduction in survey questions asked, it is assumed the quality of CE data will improve. The impact on the SPM is unknown; however, changes in the SPM thresholds would be expected.

The Census Bureau and the BLS will continue their research efforts on this important topic and will improve the measures presented here as resources allow. With additional funding, this work will move from a research operation to full-fledged production. At that time, the Census Bureau would be prepared to release estimates of the SPM at the same time as the release of the official poverty statistics, and the BLS could move forward in its efforts to add important questions to the CE and formalize the threshold production effort.

[23] For a comparison of the methods used by each of these groups, see David Betson, Linda Giannarelli, and Sheila Zedlewski, "Workshop on State Poverty Measurement Using the American Community Survey," Urban Institute, July 18, 2011, <www.urban.org/publications/412396.html>, accessed September 2012.

[24] To see the impact of improvements in CE methods on SPM thresholds, go to <www.brookings.edu/~/media/events/2011/11/07%20supplemental%20poverty%20measure/1107_spm_garner_presentation.pdf>.

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APPENDIX—SPM METHODOLOGY

Poverty Thresholds

Consistent with the NAS panel recommendations and the suggestions of the ITWG, the SPM thresholds are based on out-of-pocket spending on food, clothing, shelter, and utilities (FCSU). Five years of CE data for consumer units with exactly two children (regardless of relationship to the family) are used to create the estimation sample. Unmarried partners and those who share expenses with others in the household are included in the consumer unit. FCSU expenditures are converted to adult equivalent values using a three-parameter equivalence scale (see below for description). The average of the FCSU expenditures defining the 30th and 36th percentile of this distribution is multiplied by 1.2 to account for additional basic needs. The three-parameter equivalence scale is applied to this amount to produce an overall threshold for a unit composed of two adults and two children.

To account for differences in housing costs, a base threshold for all consumer units with two children was calculated, and then the overall shelter and utilities portion was replaced by what consumer units with different housing statuses spend on shelter and utilities. Three housing status groups were determined and their expenditures on shelter and utilities produced within the 30th–36th percentiles of FCSU expenditures. The three groups are: owners with mortgages, owners without mortgages, and renters.

Equivalence Scales

The ITWG guidelines state that the "three-parameter equivalence scale" is to be used to adjust reference thresholds for the number of adults and children. The three-parameter scale allows for a different adjustment for single parents (Betson, 1996). This scale has been used in several BLS and Census Bureau studies (Short et al., 1999; Short, 2001). The three-parameter scale is calculated in the following way:

One and two adults:
$scale = (adults)^{0.5}$

Single parents:
$scale = (adults + 0.8 * first\ child + 0.5 * other\ children)^{0.7}$

All other families:
$scale = (adults + 0.5 * children)^{0.7}$

In the calculation used to produce thresholds for two adults, the scale is set to 1.41. The economy of scale factor is set at 0.70 for other family types. The NAS Panel recommended a range of 0.65 to 0.75.

Geographic Adjustments

The American Community Survey (ACS) is used to adjust the FCSU thresholds for differences in prices across geographic areas. The geographic adjustments are based on 5-year ACS estimates of median gross rents for two-bedroom apartments with complete kitchen and plumbing facilities. Separate medians were estimated for each of the 264 metropolitan statistical areas (MSAs) large enough to be identified on the public-use version of the CPS ASEC file. This results in 358 adjustment factors. For each state, a median is estimated for all nonmetro areas (48), for each MSA with a population above the CPS ASEC limit (264), and for a combination of all other metro areas within a state (46).

Unit of Analysis

The ITWG suggested that the "family unit" include all related individuals who live at the same address, any coresident unrelated children who are cared for by the family (such as foster children[25]), and any cohabitors and their children. This definition corresponds broadly with the unit of data collection (the consumer unit) that is employed for the CE data that are used to calculate poverty thresholds. They are referred to as *SPM Resource Units* and include units that added a cohabitor, an unrelated individual under 15 years, foster child aged 15 to 21, or an unmarried parent of a child in the family. Note that some units change for more than one of these reasons. Further, sample weights differ due to forming these units of analysis. For all new family units that have a set of male/female partners, the female partner's weight is used as the SPM family weight. For all other new units there is no change.[26]

In-Kind Benefits

Supplemental Nutrition Assistance Program (SNAP)

SNAP benefits (formerly known as food stamps) are designed to allow eligible low-income households to afford a nutritionally adequate diet. Households who participate in the SNAP program are assumed to devote 30 percent of their countable monthly cash income to the purchase of food, and SNAP benefits make up the remaining cost of an adequate low-cost diet. This amount is set at the level of the U.S. Department of Agriculture's Thrifty Food Plan. In the CPS, respondents report if anyone in the household ever received SNAP benefits in the previous calendar year and if so, the face value of those benefits. The annual household amount is prorated to

[25] Foster children up to the age of 22 are included in the new unit.

[26] Appropriate weighting of these new units is an area of additional research at the Census Bureau.

SPM Resource Units within each household.

In 2008, as a part of the Food, Conservation, and Energy Act of 2008, the name of the program changed from food stamps to the supplemental nutrition assistance program. With the change in the name of the federal program and state-by-state differences in the program name, the quality of CPS ASEC responses may deteriorate if respondents are uncertain of the name of the program from which they receive benefits. Most states have changed the name of the state program to SNAP but a number of states have adopted their own program name. The CPS questionnaire can use the specific state name of the state of residence of the respondent.

The 2011 CPS ASEC changed the questions asking about the receipt of food stamps:

2009 and 2010 CPS ASEC:

Did (you/ anyone in this household) get food stamps or a food stamp benefit card at any time during 2009?

1 Yes
2 No

At any time during 2009, even for one month, did (you/ anyone in this household) receive any food assistance from (State Program name)?

1 Yes
2 No

Which of the people now living here were covered by that food assistance during 2009?

2011 CPS ASEC:

At any time during 2010, even for one month, did (you/ anyone in this household) receive any food assistance from (State Program name) or a food assistance benefit card (such as State EBT card name)?

1 Yes
2 No

Which of the people now living here were covered by that food assistance during 2010?

This change in the question resulted in a noticeable decline in the number of households reporting food stamp receipt during a time when administrative data showed an increase. As a result, a Monte Carlo method was used to assign food stamps to households reporting none. Assignment was based on reported receipt during the previous year (for sample households interviewed both years), participation in other public assistance programs (TANF, SSI, Medicaid, energy assistance, or rental assistance) and household total money income. Imputation flags were set for cases where food stamp receipt was changed as a result of this adjustment.

The 2012 ASEC reverts back to a series of questions similar to the ones used in 2010 and earlier:

Did (you/ anyone in this household) get food stamps or a food stamp benefit card at any time during 2011?

1 Yes
2 No

At any time during 2011, even for one month, did (you/ anyone in this household) receive any food assistance from (State Program name) or a food assistance benefit card (such as State EBT card name)? Do not include WIC benefits.

1 Yes
2 No

National School Lunch Program

This program offers children free meals if family income is below 130 percent of federal poverty guidelines, reduced-price meals if family income is between 130 and 185 percent of the federal poverty guidelines, and a subsidized meal for all other children. In the CPS, the reference person is asked how many children 'usually' ate a complete lunch at school, and if it was a free or reduce-priced school lunch. Since we have no further information, the value of school meals is based on the assumption that the children received the lunches every day during the last school year. Note that this method may overestimate the benefits received by each family. To value benefits, we obtain amounts on the cost per lunch from the Department of Agriculture Food and Nutrition Service that administers the school lunch program. There is no value included for school breakfast.[27]

[27] In the SIPP, respondents report the number of breakfasts eaten by the children per week, similar to the report of school lunches. Calculating a value for this subsidy in the same way as was done for the school lunch program yielded an amount of approximately $2.8 billion for all families in the SIPP for the year 2004. For information on confidentiality protection, sampling error, nonsampling error, and definitions, for the 2004 Survey of Income and Program Participation, see <www.census.gov/apsd/techdoc/sipp/sipp.html>, accessed September 2012.

Supplementary Nutrition Program for Women, Infants, and Children (WIC)

This program is designed to provide food assistance and nutritional screening to low-income pregnant and postpartum women and their infants, and to low-income children up to age 5. Incomes must be at or below 185 percent of the poverty guidelines and participants must be nutritionally at-risk (having abnormal nutritional conditions, nutrition-related medical conditions, or dietary deficiencies). Benefits include supplemental foods in the form of food items or vouchers for purchases of specific food items. There are questions on current receipt of WIC in the CPS. Lacking additional information, we assume 12 months of participation and value the benefit using program information obtained from the Department of Agriculture. As with school lunch, assuming year-long participation may overestimate the value of WIC benefits received by a given SPM family.

Low-Income Home Energy Assistance Program (LIHEAP)

This program provides three types of energy assistance. Under this program, states may help pay heating or cooling bills, provide allotments for low-cost weatherization, or provide assistance during energy-related emergencies. States determine eligibility and can provide assistance in various ways, including cash payments, vendor payments, two-party checks, vouchers/coupons, and payments directly to landlords. The 2010 CPS ASEC asked if, since October 1 of the previous year, the reference person received help with heating costs and, if yes, the amount received. In ASEC 2011, the question on energy assistance asked for information about the entire year and captures assistance for cooling paid in the summer months or emergency benefits paid after the February/March/April survey date. Many households receive both a "regular" benefit and one or more crisis or emergency benefits. Additionally, since LIHEAP payments are often made directly to a utility company or fuel oil vendor, many households may have difficulty reporting the precise amount of the LIHEAP payment made on their behalf.

Housing Assistance

Households can receive housing assistance from a plethora of federal, state, and local programs. Federal housing assistance consists of a number of programs administered primarily by the Department of Housing and Urban Development (HUD). These programs traditionally take the form of rental subsidies and mortgage-interest subsidies targeted to very-low-income renters and are either project-based (public housing) or tenant-based (vouchers). The value of housing subsidies is estimated as the difference between the "market rent" for the housing unit and the total tenant payment. The "market rent" for the household is estimated using a statistical match with United States Housing and Urban Development (HUD) administrative data from the Public and Indian Housing Information Center (PIC) and the Tenant Rental Assistance Certification System (TRACS). For each household identified in the CPS ASEC as receiving help with rent or living in public housing, an attempt was made to match on state, CBSA (Core Based Statistical Area), and household size.[28] The total tenant payment is estimated using the total income reported by the household on the CPS ASEC and HUD program rules. Generally, participants in either public housing or tenant-based subsidy programs administered by HUD are expected to contribute towards housing costs the greater of one-third of their "adjusted" income or 10 percent of their gross income.[29] See Johnson et al. (2010) for more details on this method. Initially, subsidies are estimated at the household level. If there is more than one SPM family in a household, then the value of the subsidy is prorated based on the number of people in the SPM family relative to the total number of people in the household.

Housing subsidies help families pay their rent and as such are added to income for the SPM. However, there is general agreement that, while the value of a housing subsidy can free up a family's income to purchase food and other basic items, it will do so only to the extent that

[28] HUD operates two major housing assistance programs: public housing and tenant-based or voucher programs. Since the HUD administrative data only include estimates of gross or contract rent for tenant-based housing assistance programs, the contract rents assigned to CPS ASEC households living in public housing are adjusted by a factor of 767/971. This adjustment factor was derived from data published in the "Picture of Subsidized Households: 2008" which estimates the average tenant payment and the average subsidy by type of assistance. The average contract rent would be the sum of these two estimates: $324+647=971 for tenant-based and $255+512=767 for public housing, <www.huduser.org/portal/picture2008/index.html>, accessed September 2012.

[29] HUD regulations define "adjusted household income" as cash income excluding income from certain sources minus numerous deductions. Three of the income exclusions can be identified from the CPS ASEC: income from the employment of children, student financial assistance, and earnings in excess of $480 for each full-time student 18 years or older. Deductions which can be modeled from the CPS ASEC include: $480 for each dependent, $400 for any elderly or disabled family member, child care, and medical expenses.

it meets the need for shelter. Thus, the values for housing subsidies included as income are limited to the proportion of the threshold that is allocated to housing costs. The subsidy is capped at the housing portion of the appropriate threshold MINUS the total tenant payment.

Necessary expenses subtracted from resources

Taxes

The NAS panel and the ITWG recommended that the calculation of family resources for poverty measurement should subtract necessary expenses that must be paid by the family. The measure subtracts federal, state, and local income taxes and Social Security payroll taxes (FICA) before assessing the ability of a family to obtain basic necessities such as food, clothing, and shelter. Taking account of taxes allows us to account for receipt of the federal or state earned income credit (EITC) and other tax credits. The CPS ASEC does not collect information on taxes paid but relies on a tax calculator to simulate taxes paid. These simulations include federal and state income taxes and Social Security payroll taxes. These simulations also use a statistical match to the Statistics of Income (SOI) microdata file of tax returns. The Census Bureau is conducting research to improve tax simulations. Webster (2012) describes these new methods.

Work-Related Expenses

Going to work and earning a wage often entails incurring expenses, such as travel to work and purchase of uniforms or tools. For work-related expenses (other than child care), the NAS panel recommended subtracting a fixed amount for each earner 18 years of age or older. Their calculation was based on 1987 Survey of Income and Program Participation (SIPP) data that collected information on work expenses in a set of supplementary questions. They calculated 85 percent of median weekly expenses—$14.42 per week worked for anyone over 18 in the family in 1992. Total expenses were obtained by multiplying this fixed amount by the number of weeks respondents reported working in the year. Since the 1996 panel of SIPP, the work-related expenses topical module has been repeated every year.[30] Each person in the SIPP reports their own expenditures on work-related items in a given week. The most recent available data are used to calculate median weekly expenses. The number of weeks worked, reported in the CPS ASEC, is multiplied by the 85 percent of median weekly work-related expenses for each person to arrive at annual work-related expenses.

Child Care Expenses

Another important part of work-related expenses is paying someone to care for children while parents work. These expenses have become important for families with young children in which both parents (or a single parent) work. To account for child care expenses while parents worked, in the CPS, parents are asked whether or not they pay for child care and, starting in 2010, how much they spent. The amounts paid for any type of child care while parents are at work are summed over all children. The NAS report recommended capping the amount subtracted from income, when combined with other work-related expenses, so that these do not exceed reported earnings of the lowest earner in the family. The ITWG also made this recommendation. This capping procedure is applied before determining poverty status.[31]

Child Support Paid

The NAS panel recommended that, since child support received from other households is counted as income, child support paid out to those households should be deducted from those households that paid it. Without this subtraction, all child support is double counted in overall income statistics. New questions ascertaining amounts paid in child support have been included in the 2010 CPS ASEC, and these reported amounts are subtracted in the estimates presented here.

Medical Out-of-Pocket Expenses (MOOP)

The ITWG recommended subtracting medical out-of-pocket expenses from income, following the NAS panel. The NAS panel was aware that expenditures for health care are a significant portion of a family budget and have become an increasingly larger budget item since the 1960s. These expenses include the payment of health insurance premiums plus other medically necessary items such as prescription drugs and doctor copayments that are not paid for by insurance. Subtracting these "actual" amounts from income, like taxes and work expenses, leaves the amount of income that the family has available to purchase the basic bundle of goods (food, clothing, shelter, and utilities [FCSU] and a "little bit more").

While many individuals and families have health insurance that covers

[30] The 2004 panel, wave 9 topical modules were not collected due to budget considerations.

[31] Some analysts have suggested that this cap may be inappropriate in certain cases, such as if the parent is in school, looking for work, or receiving types of compensation other than earnings.

most of the very large expenses, the typical family pays the costs of health insurance premiums and other small fees out of pocket. In these questions, respondents report expenditures on health insurance premiums that do not include Medicare Part B premiums. Medicare Part B premiums pose a particular problem for these estimates. The CPS ASEC instrument identifies when a respondent reported Social Security Retirement benefits net of Medicare Part B premiums. For these respondents, a Part B premium set at a fixed amount of $96.40 per month is automatically added to income. Corrections for these applied amounts are discussed in Caswell and Short (2011) and applied here. To be consistent with what is added to the SSR income in these cases, the same amount is added to reported premium expenditures.[32] For the remaining respondents that report Medicare status, Medicare Part B premiums are simulated using the rules for income and tax filing status (Medicare.gov).[33] The simplifying assumption is made that married respondents with "spouse present" file married joint returns. For these cases, the combined reported income of both spouses is used to determine the appropriate Part B premium. Finally, it is assumed that the following two groups pay zero Part B premiums: 1) dual-eligible respondents (i.e., Medicare and Medicaid) and 2) those with a family income less than 135 percent of the Federal Poverty Level. The latter assumption is based on a rough estimate of eligibility and participation in at least one of the following programs: Qualified Medicare Beneficiary (QMB), Specified Low-Income Medicare Beneficiary (SLMB), or Qualified Individual–1 (QI–1). We abstract from the possibility of (state-specific) asset requirements.

[32] In these cases, it is important to assign an amount for Medicare Part B premiums that is equal to what is added to the resource side, i.e., SSR income, of the poverty calculation. Note that the instrument calculation is done irrespective of Medicaid status, and therefore dual-enrollees who report "net" SSR income receive an estimate for Medicare Part B that is added to reported premiums.

[33] The CPS ASEC does not collect the number of months that a person was on Medicare; therefore we make the simplifying assumption that respondents were insured for the entire year. Given this data limitation, this assumption is appropriate as few individuals on Medicare transition out of Medicare.

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