

Alternative Poverty Measures and the Geographic Distribution of Poverty in the United States

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Executive Summary

Measuring the poverty status of individuals and families is in the policy spotlight on the both the national and local levels in the United States. For over four decades the nation has utilized the same absolute measure of poverty based on the approach developed by Orshansky (1963), but there has been concern since its adoption both on how the poverty line is constructed and on how resources are measured (Fisher 1992; Ziliak 2006).

In 1995 the National Academy of Sciences (NAS) released a report that recommended wholesale changes to both the resource and threshold definitions used in constructing the poverty rate (Citro and Michael 1995). In July of 2008, New York City adopted a measure akin to the NAS proposal, and around the same time Representative Jim McDermott (D., WA) and Senator Christopher Dodd (D., CT) introduced the Measuring American Poverty (MAP) Act (HR. 6941/S. 3636) proposing the adoption of the NAS measure at the federal level. In his 2011 budget, President Obama has requested funding for the U.S. Census Bureau to create a Supplemental Poverty Measure that is to be released at the same time as the official measure. The stakes are substantial as the poverty rate influences the scale and scope of redistributive tax and transfer programs, including over 80 programs at the federal level (Blank and Greenberg 2008).

The official poverty rate defines resources as gross money income available to the family, while the threshold is defined as three times the 'economy' food plan for a given family size. The NAS measure as proposed in the MAP Act augments the official resource definition by including the cash value of in-kind benefits such as food and housing assistance as well as refundable tax credits like the EITC, and subtracts away tax payments, out-of-pocket medical expenses, and work expenses. The threshold in the MAP Act, on the other hand, eschews the current definition in favor one based on current consumption levels on food, clothing, shelter, utilities plus 'a little bit extra' for miscellaneous expenditures. The proposed threshold will be set at the 33rd percentile of spending on these items for a four-person family, and then adjusted for different family sizes based on equivalence scales as well as for regional differences in basic costs.

At the state level, poverty rates are highest in the South under the current, official definition of poverty. If there are state and regional differences in take-up of in-kind transfers, or in the amount of work and out-of-pocket medical expenses, then these differences can result in a possible shifting of poverty to other regions of the country under the NAS-type measure. The likelihood of such a shift of poverty away from southern states and toward coastal states is greatest if thresholds are adjusted to reflect cost-of-living differences owing to housing costs. If at some future date the allocation of federal grants to states is tied to a new measure of poverty then significant redistribution of resources across states is likely to ensue.

The purpose of this report is to identify the extent to which re-ranking of states and regions in terms of poverty status occurs under alternative poverty measures. Specifically we document how poverty rates at the national, regional, and state levels vary across various definitions of resources and thresholds in order to gauge how the geographical distribution of poverty in the

U.S. is likely to change with the adoption of an NAS-type measure. In total we examine seven different poverty measures based on three definitions of the poverty line and four definitions of resources. For this preliminary report none of the measures adjusts the thresholds for cost-of-living differences and none deducts work expenses from resources. The primary data for our analysis draws from the 2000-2009 Annual Social and Economic Supplement to the Current Population Survey, supplemented by data from the Consumer Expenditure Survey.

We find that

- In general poverty based on the NAS-type measures are higher compared to official rates, especially if out-of-pocket medical expenses are deducted and/or mortgage principal payments are included in the threshold. For example the official poverty rate of 13.2 percent in 2008 is estimated to be 19.8 percent, or 50 percent higher, in the broadest alternative measure considered.
- The alternative measures leave poverty rankings across the four Census regions largely unchanged; namely, after the South, poverty is higher in the West, followed by the Midwest, and then the Northeast.
- Trends in regional poverty potentially mask important heterogeneity across states within regions, reflecting possible state differences in take-up of social benefits, earnings, and out-of-pocket medical spending. The South has the highest regional poverty, but also contains two states, Maryland and Virginia, with relatively low poverty.
- Even in the presence of within-region heterogeneity, state poverty rankings are fairly robust under the NAS-type measures compared to the official rate, suggesting that the measures are in general “rank preserving.” For example, across all measures 8 out of the top 10 poorest states (plus DC) are located in the South.
- Child (under age 18) poverty and adult (age 18-64) poverty is most sensitive to inclusion of mortgage principal in the threshold. Senior poverty, however, is most dramatically affected by the NAS-type poverty measures that include out-of-pocket medical spending. Since 2003 senior poverty is 2.5 times higher than the official rate with MOOP subtracted from resources. In a marked departure from official trends, senior poverty exceeds child poverty in each year with MOOP included in the poverty measure.
- State rankings for child, adult, and senior poverty are fairly robust across the NAS-type measures, at least with respect to the regional concentration of poverty in the South. Kentucky fares worst across the board in moving from the official rate to the NAS-type measures in 2008—falling from 8th highest child poverty rate to the top 5; falling from 3rd highest adult poverty rate to the highest rate; and falling from 21st highest senior poverty rate to 5th highest.
- As with age groups, state poverty rankings based on race of the individual are relatively stable across alternative poverty measures.

I. Measuring Poverty

The poverty rate represents the percentage of the population that is poor. Given a poverty line z , and income level y , a person is poor if $y < z$ and not poor if $y \geq z$. In this case poverty is a discrete state reflecting the fraction of persons who have not yet attained a minimally adequate level of income to meet basic needs. While this definition is intuitive, it is fraught with controversy because of differing notions of ‘need’ necessary to construct the threshold z , and differing notions of what does and does not constitute a resource for the person to meet the needs established in the threshold. In the sections below we describe the alternative measures of thresholds and resources utilized in this report.

I.1 Defining the Threshold

The poverty threshold in the United States was established in the 1960s using a method devised by Mollie Orshansky (1963), who worked in the Social Security Administration. Based on the Household Food Consumption Survey conducted by the U.S. Department of Agriculture in 1955, Orshansky deduced that the average family of three or more persons spent about one-third of their after-tax money income on food spending. This implies that after establishing the appropriate food budget one could use a multiplier of 3 to establish an income cutoff for minimally adequate needs. The food plan adopted was the least costly of four nutritionally adequate food diets specified by the U.S. Department of Agriculture known as the ‘economy’ food plan.

Orshansky derived 62 separate food plans for nonfarm families and unrelated individuals depending on family size, age, gender, and number of related children and also had a separate category for farm families (Fisher 1992). The poverty thresholds were drawn by multiplying the

food plans for families of three or more by 3, for 2-person families by 3.7, and for unrelated individuals the line is set at 80% of the 2-person line. Each year since 1963 the thresholds have been updated for changes in inflation as measured by the Consumer Price Index (specifically the CPI-U since 1980). In 1981 the farm/nonfarm distinction was dropped, as was the female householder distinction, which leaves 48 separate thresholds today. The thresholds apply uniformly across the entire country, making no distinctions for geographic variation in the cost of living. The first column of Table 1 presents the official poverty threshold for a two-adult, two child family for the years 1999 to 2008. In 2008 the line for the 4-person family was \$21,834.

Since its inception there have been concerns levied against the Orshansky threshold (Fisher 1992). Rose Friedman (1965) thought that the thresholds were too high because the poor spent more than one-third of their budgets on food and thus the multiplier should have been set below 3. The problem with Friedman's argument is that the level of food spending of the poor was likely an endogenous response to their poverty status, and that Orshansky was attempting to establish a threshold against a benchmark reflecting the needs of the typical family. Others like Michael Harrington (1962) criticized the Orshansky threshold for being too low both because a BLS consumption survey in 1960 indicated that the multiplier should be larger than 3 and because the official thresholds are based on the economy food plan which was designed for emergency food need and not long-term food consumption needs.

Because the thresholds are only adjusted for changes in the CPI-U it is widely believed that it is a weak approximation to minimally adequate needs. For example, median income for 4-person families in 2004 was \$66,111, which suggests that the 2004 threshold is only 29 percent of 2004 median income. In 1980 the same threshold was 34 percent of median income, which suggests that the relative-to-median-income position of the poor has fallen about 15 percent over

the past 25 years (and by 40 percent since the original Orshansky threshold, which was set at about 50 percent of median income in 1963). Moreover, current estimates from the Consumer Expenditure Survey suggest that food expenditures only account for about one-seventh of the typical consumer's after-tax money income, suggesting that the multiplier should be more than doubled from 3 to 7.

Table 1: Poverty Thresholds for Two-Adult, Two-Child Family

Year	Official	FCSU-1	FCSU-2
1999	16,895	17,036	18,196
2000	17,463	17,884	19,097
2001	17,960	18,709	19,935
2002	18,244	19,329	20,757
2003	18,660	19,778	21,218
2004	19,157	19,984	21,895
2005	19,806	20,708	22,769
2006	20,444	21,818	24,026
2007	21,027	23,465	25,680
2008	21,834	24,755	27,043

Source: http://www.census.gov/hhes/www/povmeas/web_tab5_povertythres2008.xls

Notes: FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities from the Consumer Expenditure Survey (CE) and does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU.

The National Academy of Sciences Panel on Poverty and Family Assistance (NAS) recommended that a new threshold be established for a reference family of four (two adults and two children) based on median expenditures on food, clothing, shelter, and utilities, plus a little extra for personal care, non-work transportation, and household supplies (Citro and Michael 1995). In the benchmark year of 1992 they proposed that the threshold be set at anywhere

between 1.15 of the 30th percentile of spending on this market basket for the representative 4-person family, to 1.25 of the 35th percentile. The multipliers of 1.15 and 1.25 are designed to account for the “little bit extra” over the core goods of food, clothing, and shelter. This range would make the threshold between 14 and 33 percent higher than the official threshold in 1992. The NAS panel recommended that the threshold be adjusted for geographic differences in the cost of living. However, such indexing was only to be made with respect to the housing component of the threshold because of lack of reliable data for other consumption components. They recommended that the threshold be updated annually to reflect changing consumption patterns, and to smooth out statistical noise they suggested using a moving average of the three most recent years of CPI adjusted consumption spending. The benchmarking and annual updating was to be implemented with the Consumer Expenditure Survey (CE), along with data from the decennial Census and HUD’s methodology for estimating rents for comparable apartments in different locales for adjusting for housing cost differences.

In October 2009 the Bureau of Labor Statistics, under the direction of Thesia Garner, released an alternative set of poverty thresholds based on NAS recommendations utilizing CE data spanning calendar years 1999 to 2008.¹ The final two columns of Table 1 present the representative threshold for the two-adult, two-child family unit. The first threshold, FCSU-1, accounts for food, clothing, shelter, and utility costs, with a multiplier of 20 percent for miscellaneous expenses. This does not incorporate repayment of mortgage principal for owned housing, but FCSU-2 does include mortgage principal.² The latter is controversial because mortgage principal payments are a form of saving and not current consumption in the same vein as other outlays. Table 1 shows that in all years the alternative thresholds exceed the original

¹ http://www.census.gov/hhes/www/povmeas/web_tab5_povertythres2008.xls

² FCSU-1 in this report corresponds to FCSU-CE in the 2009 BLS threshold table, while FCSU-2 corresponds to FCSU in the BLS table.

threshold, and in fact the differences between them widened over time, most likely reflecting the housing bubble in the middle of the decade. In 1999 FCSU-1 was 0.8 percent greater than the official threshold, but that rose to 13 percent in 2008; likewise the gap between FCSU-2 and the official poverty line rose from 7.7 percent to 23 percent.

In order to adjust the thresholds in Table 1 for different family structures the NAS recommended that the benchmark line be adjusted by so-called equivalence scales. Equivalence scales are used to scale-up and/or scale down the thresholds based on the age composition of the family, that is, the number of adults versus the number of children. Specifically they suggested the following scale

$$(1) \quad \text{Scale} = (A + PK)^F,$$

where A is the number of adults and K is the number of children under age 18, and P and F are scale adjustment factors lying between 0 and 1. The NAS panel recommended that P be set at 0.70, which means that a child is 70 percent of an adult in terms of their consumption need, and that F be set anywhere between 0.65 and 0.75.

For our purposes here we adopt a variant of the NAS scale proposed in Blank and Greenberg (2008) whereby

$$(2) \quad \begin{aligned} \text{Scale} &= A^{0.5} && \text{for childless adult families} \\ &= \{A + 0.8 + \sum_{k=2}^K (0.5 * (k))\}^{0.7} && \text{for single parent families} \\ &= \{A + \sum_{k=1}^K (0.5 * (k))\}^{0.7} && \text{for other family types} \end{aligned}$$

The equivalence scale in equation (2) takes the square root of the number of adults in families with no dependent children; in single parent families a weight of 80 percent of an adult equivalent applies for the first child, and then 50 percent of an adult equivalent for each child afterwards; and in families with two or more adults and at least one dependent child each child in

assigned a weight of 0.5 an adult equivalent. In families with dependent children a higher scale factor of 0.7 is used relative to 0.5 for childless families. So for the reference family of two adults and two children the equivalence scale based on equation (2) is 2.158. In Table 2 we present the equivalence scales used in this report for alternative family structures relative to the reference two adult-two child family. That is, a single adult has a scale of 1, but that is 0.463 of the reference scale of 2.158. Likewise, a three adult-three child family has a scale of 2.867, which is 1.328 times the reference group scale. We thus adjust the FCSU-1 and FCSU-2 thresholds in Table 1 with the factors in Table 2 in constructing our alternative poverty estimates. In this preliminary draft no adjustment is made for regional differences in cost-of-living.

Table 2. Equivalence Scales for Alternative Family Structures Relative to the Two Adult-Two Child Reference Group

Equivalence Scale for Two Adult-Two Child Family = 2.158							
Number of Children	Number of Adults in Family						
	1	2	3	4	5	6	7 or more
0	0.463	0.655	0.803	0.927	1.036	1.135	1.226
1	0.699	0.880	1.114	1.328	1.529	1.718	1.899
2	0.830	1.000	1.223	1.430	1.625	1.809	1.989
3	0.953	1.114	1.328	1.529	1.718	1.899	2.073
4	1.069	1.223	1.430	1.626	1.809	1.989	2.158
5	1.180	1.328	1.529	1.718	1.899	2.073	2.241
6	1.287	1.430	1.625	1.809	1.989	2.158	2.323
7 or More	1.390	1.529	1.718	1.899	2.073	2.241	2.404

I.2 Defining Resources

Economic resources for the purposes of poverty measurement in the U.S. entail highly liquid forms of money income. This includes earnings, Social Security (retirement, disability,

and survivors benefits), Supplemental Security Income, Unemployment Insurance, workers' compensation, TANF and other forms of public cash welfare, veterans' payments, pension income, rent/interest/dividend income, royalties, income from estates, trusts, educational assistance, alimony, child support, assistance from outside the household, and other income sources. This information is collected on an annual basis as part of a supplement to the monthly Current Population Survey (CPS) called the Annual Social and Economic Study. The survey is fielded in March and the income information refers to the previous year. The family is the basic unit of analysis for poverty measurement, where family means two or more persons residing together and related by marriage, birth, or adoption. The income of all family members is summed to yield total family income for the year, and members of related subfamilies are assigned the family income of the primary family unit. All members of the same family share the same poverty status.

As currently implemented, the definition of income used in constructing the U.S. poverty rate excludes many income sources—both cash and in-kind. Omitted income sources include capital gains and losses, the imputed rental value of owner-occupied housing, the dollar value of food stamps, subsidized and public housing, Medicaid, Medicare, tax payments, and tax credits. Some additional income sources, such as food stamps, school lunch and breakfast, tax payments, and tax credits, are readily measured and thus the reason for their omission from official statistics is not obvious. Possible explanations for their exclusion include the fact that some programs did not exist (the EITC) or were in their infancy when the modern poverty rate was established in the 1960s (Medicaid, Medicare, food stamps, public housing), other income sources were not collected in the CPS until a later date (capital gains and losses did not surface in the CPS until

1980), and still others such as in-kind transfers like Medicaid, Medicare, and the imputed rental value of owner-occupied housing are notoriously difficult to measure.

The NAS panel recommended that the income measure include the current components plus near-money in-kind transfers less taxes plus refundable credits. In addition, the NAS recommended that medical out-of-pocket expenses (MOOP), insurance premiums, child care costs, child support payments, and a flat amount per week worked to cover transportation and other miscellaneous work expenses be deducted. The NAS believed strongly that the income definition be consistent with the poverty threshold definition, which it currently is not because as described above the thresholds were established relative to after-tax income whereas resources are measured on a before-tax basis. The NAS did not recommend inclusion of the value of Medicaid and Medicare, nor private health insurance, because of the wide variation in health care needs across the population.

For our purpose here we construct four definitions of income: (i) the current resource definition used in the official poverty statistics; (ii) an NAS-type measure that adds the dollar value of near-cash in-kind transfers like food stamps, school lunch, and housing subsidies, plus the EITC, less federal, state, and payroll tax payments; (iii) a variant of resource definition (ii) that also subtracts away MOOP from after-tax and transfer income; and (iv) a variant of definition (iii) that drops observations in the top 1 percent of MOOP spending. The March CPS currently provides estimates for the in-kind transfers, tax payments, and tax credits needed to construct the alternative resource definitions in (ii)-(iv). Missing, however, is data on MOOP, child care expenses, and other work-related expenses. We impute MOOP spending into our alternative resource definitions, but do not include the other items covering work expenses, child care, and employer-provided premiums.

Medical out-of-pocket expenditures are imputed using the Consumer Expenditure Survey (CE). Conducted by the Census Bureau for the Bureau of Labor Statistics the CE collects extensive information on the buying habits of American households since 1980. The Census Bureau currently uses the CE to impute out-of-pocket medical expenditures in the Current Population Survey for its experimental poverty measure (Betson 2001; O'Donnell and Beard 2009).³ The CE consists of two components, the weekly Diary Survey and the quarterly Interview Survey. Ed Harris and John Sabelhaus of the Congressional Budget Office maintain CE extract files of the Interview Survey through the National Bureau of Economic Research.⁴ Harris and Sabelhaus provide “family-level” extract files that aggregate four quarterly records into an annual record for each family and collapse the hundreds of spending, income, and wealth categories into a consistent set of categories across all years (Harris and Sabelhaus 2000). Their out-of-pocket medical expenditure category sums six medical spending categories: (1) drug preparations; (2) ophthalmic products and orthopedic appliances; (3) physicians, dentists, and other medical professionals; (4) hospitals; (5) nursing homes; and (6) health insurance.

The CE Interview Survey sample, which is representative of the US population, is selected on a rotating panel basis each quarter (U.S. Bureau of Labor Statistics 2008). Because of the rotating panel design of the Interview Survey, each family's annual record covers the spending for the first quarter the family entered the sample and the following three quarters. For example, a family entering the survey the first quarter of 1997 reports expenditures for the 1997 calendar year, January 1997 through December 1997. A family entering the survey the second

³ The Census Bureau's two part model separately imputes MOOP for individuals with zero medical expenditures and individuals with positive medical expenditures. The model draws on data from the 1996-1997 CE and “ages” the imputed data using the Consumer Price Index. The variables in the imputation include age, income as a percent of poverty, health insurance coverage, and family size (O'Donnell and Beard 2009).

⁴ Available at http://www.nber.org/data/ces_cbo.html.

quarter of 1997 reports expenditures for April 1997 through March 1998. To match the calendar year timing of the CPS, only the quarter one CE extract files are used.

Harris and Sabelhaus (2000) recommend selecting a usable CE sample that meets several criteria. First, the respondent must meet the BLS “complete income reporter” requirement. Second, the household must have completed four quarterly interviews. Third, the household should not be a student household. Additionally, the CE sample is limited head of households.

The imputation procedure involves estimating the following annual regression on CE variables that are also available in the CPS:

$$(3) \quad medical_i = \beta_0 + \beta_1 age_i + \beta_2 famsize_i + \beta_3 highschool_i + \beta_4 scollege_i + \beta_5 mtcollege_i + \beta_6 income_i + \beta_7 northeast_i + \beta_8 midwest_i + \beta_9 south_i + \beta_{10} white_i + \epsilon_i$$

where $medical_i$ is the sum of six medical spending categories; age_i is the age of the individual; $famsize_i$ is family size; $highschool_i$, $scollege_i$ and $mtcollege_i$ are education variables for high school, some college, and college degree or more; $income_i$ is a broad family income measure that includes (1) wages and salaries; (2) self-employment income; (3) rent, interest, and dividends; (4) government transfers; and (5) rent received as pay; $northeast_i$, $midwest_i$, and $south_i$ are region dummy variables; and $white_i$ is a dummy variable for race.

The imputation regressions use two MOOP definitions, a measure including all medical expenditures (called MOOP) and a measure omitting the top one percent of total medical expenditures to mitigate the effect of outliers (called MOOP-1). After estimating the regression (3) on CE data for each year covering 1999-2003, the annual coefficients are applied to head of households in the CPS to predict family out-of-pocket medical expenditures. All other members in the household are assigned the same predicted medical expenditures as the head of the household. The CE is not available through the NBER for 2004-2008, so medical expenditures

for these years are imputed with 2003 CE data and adjusted using the medical component of the Consumer Price Index.

Figures 1 and 2 compare the actual medical expenditures in the CE to the imputed medical expenditures in the CPS for the United States. The top panel in each figure shows the average of the actual data exceeds the average of the imputed data while the bottom panel shows the variance of the imputed data is smaller. Both the average and the standard deviation series exhibit similar upward trends over time. Omitting the top one percent of total medical expenditures in the CE before imputing narrows the difference in the variance of both series.

Figure 1: US Average and Standard Deviation of MOOP, CPS and CE

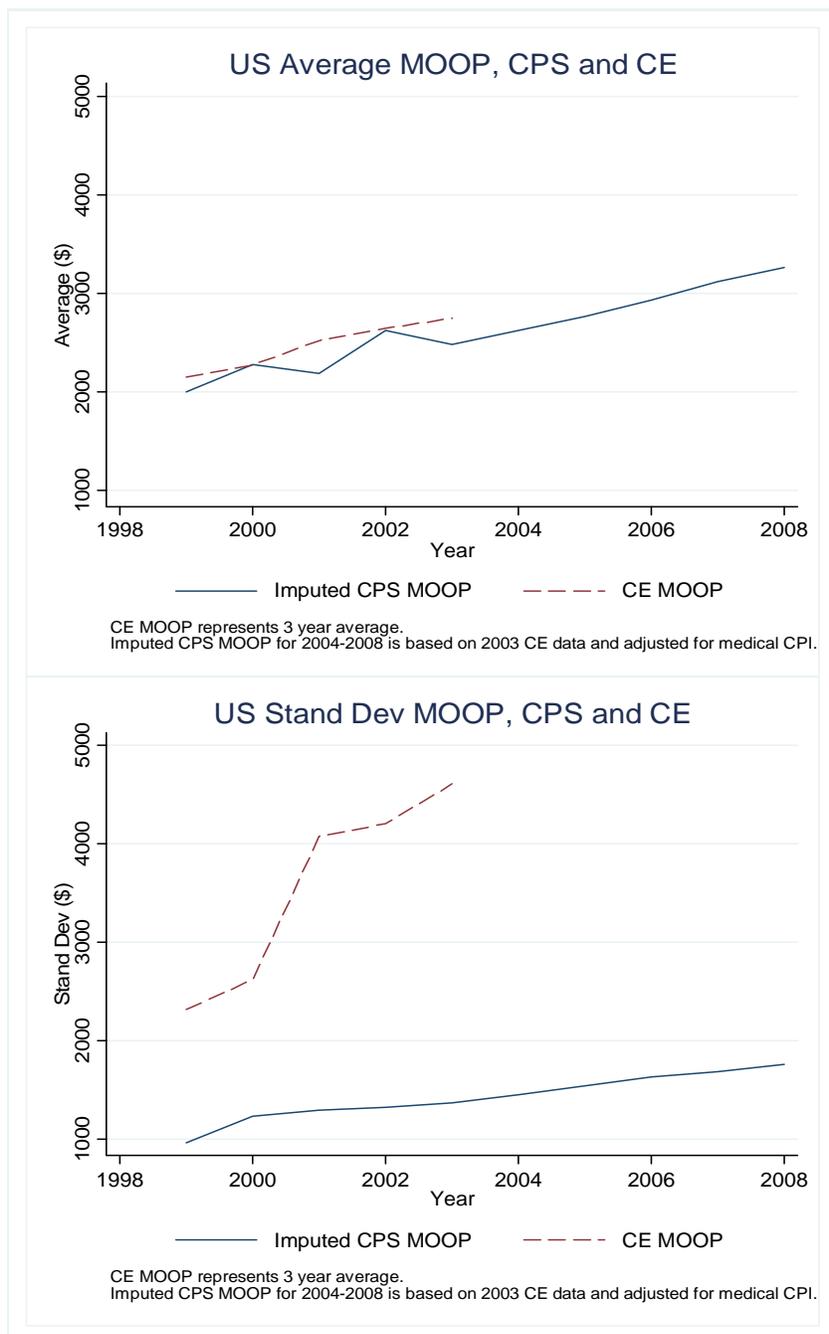
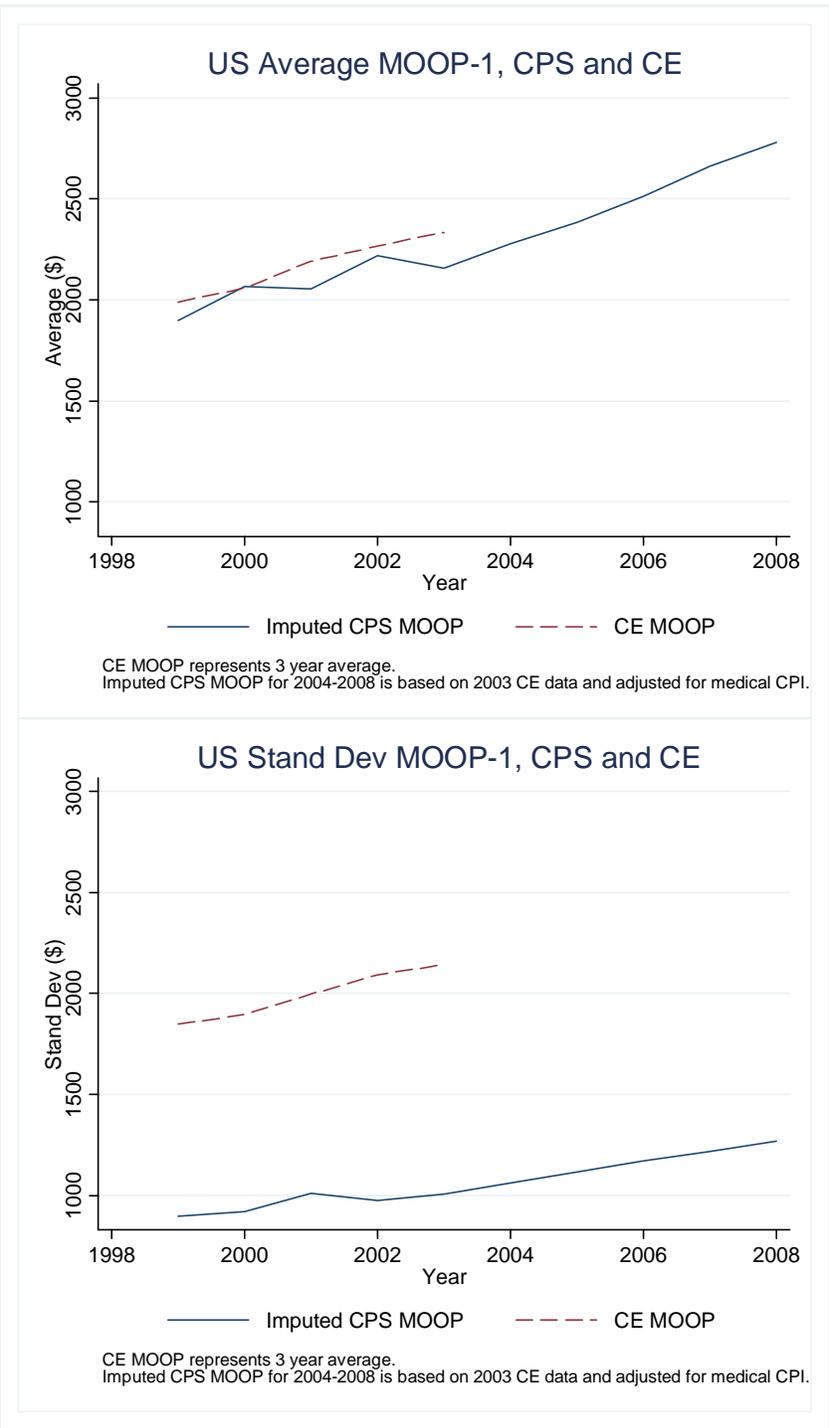


Figure 2: US Average and Standard Deviation of MOOP-1, CPS and CE



II. Trends in National Poverty Rates

We begin with trends in national and regional poverty rates based on alternative poverty definitions between 1999 and 2008. The data employed are from the Annual Social and Economic Study (March) of the Current Population Survey. The March CPS is the data source used in constructing official poverty statistics in the U.S., and we follow the same method. Specifically the unit of analysis is families (including related subfamilies) and unrelated individuals. Income, as defined above, is summed up across all income-earning family members and the total is compared to the poverty threshold for that family's size. All individuals in the family are assigned the same poverty status, related subfamilies are assigned the poverty status of the prime family, and unrelated individuals are assigned the poverty status based on their own income and relevant threshold. There are several groups of individuals not accounted for in this definition including unrelated individuals under age 15 (such as foster children), and those individuals who are institutionalized, living in college dorms, military barracks, or the homeless living outside of shelters. All estimates are weighted using the individual weight supplied by the Census Bureau. The focus here is on poverty rates of people, but in the appendix we provide a complete set of poverty estimates for families.

Table 3 contains the time series of U.S. poverty rates under the current definition plus six alternatives, three based on FCSU-1 and three based on FCSU-2, and each of the latter with and without MOOP. In 2008 the official poverty rate was 13.2 percent, and the alternative rates ranged from 14.1 to 19.8 percent, or 50 percent higher than the official rate when MOOP is deducted from resources and mortgage principal is included in the threshold (FCSU-2). In general poverty based on the NAS-type measures are higher compared to official rates, especially if out-of-pocket medical expenses are deducted and/or mortgage principal payments

Table 3: U.S. Poverty Rates (Persons) by Alternative Resource and Threshold Definitions

Year	Official Census Definition	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-1 Threshold; Resources with MOOP-1	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources with MOOP-1
1999	11.9	10.2	12.6	12.3	11.5	14.0	13.8
2000	11.3	10.4	12.6	12.7	11.7	14.1	14.2
2001	11.7	11.2	13.3	13.2	12.5	14.8	14.7
2002	12.1	11.6	14.6	14.1	13.3	16.3	15.9
2003	12.5	12.1	14.5	14.5	13.6	16.2	16.2
2004	12.7	11.7	14.3	14.3	13.8	16.5	16.5
2005	12.6	11.6	14.2	14.2	13.8	16.5	16.5
2006	12.3	12.2	14.7	14.7	14.5	17.2	17.2
2007	12.5	13.4	16.3	16.2	15.7	18.7	18.7
2008	13.2	14.1	17.1	17.1	16.5	19.8	19.7

Notes: FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses. MOOP-1 excludes the top 1% of out-of-pocket medical expenses in the CE prior to imputation in the CPS.

are included in the threshold. The exception is the measure based on FCSU-1 without MOOP deducted. From 1999 to 2006 the official rate exceeded this alternative rate, which at first blush this seems surprising.

Although the lower rates are no doubt due in part to the inclusion of in-kind transfers and EITC payments, Table 4 reveals that it is also related to the family composition of the poor population and how the alternative thresholds compare to the official thresholds. From 1999 to 2006, between 24 and 37 percent of individuals has FCSU-1 thresholds less than the official poverty line. By 2007 only 4 percent had lower alternative poverty lines. This reflects the fact that housing consumed an increasingly larger share of the budget by 2007. Indeed as the first decade of the 21st Century came to a close the gap between the official poverty rate and alternative poverty rates widened during the housing boom and subsequent deep recession, reflecting both real growth in the alternative poverty thresholds and declining personal incomes.

Table 4: Fraction of Persons for Whom Alternative Threshold is Less than the Official Threshold

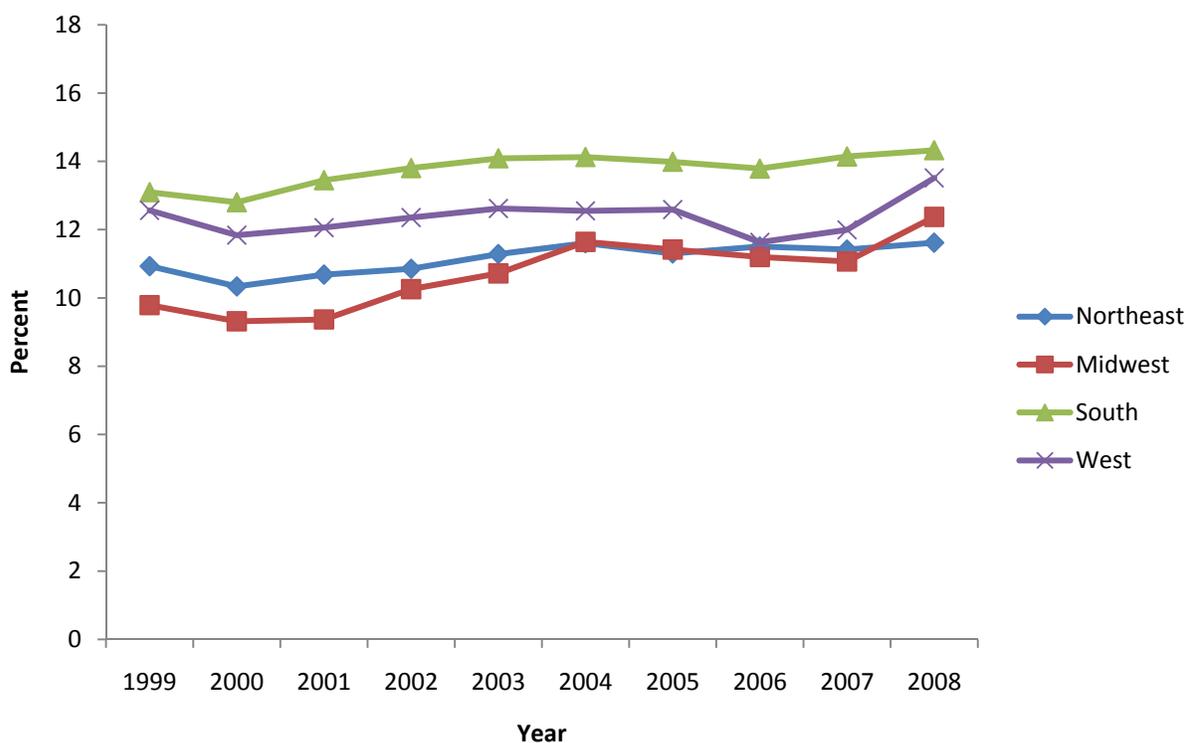
	Percent FCSU-1 < Official Threshold	Percent FCSU-2 < Official Threshold
1999	36.8	23.3
2000	31.9	20.4
2001	31.3	5.1
2002	23.5	3.5
2003	23.8	3.6
2004	32.0	3.7
2005	31.7	3.5
2006	24.2	3.1
2007	4.1	1.9
2008	4.4	1.7

Notes: See notes to Table 1 for definitions of FCSU-1 and FCSU-2

III. Variation in Poverty across Regions and States

In Figures 3-9 we present trends in poverty rates for the four broad regions of the United States for each of the seven different poverty measures. Figure 3 shows that under the current definition poverty in the South exceeds that of the other regions over the past decade, though the acceleration of poverty in the West and Midwest in recent years has narrowed the gap.

Figure 3: Persons in Poverty by Region, Measured Using Official Census Definition of Threshold and Resources



Figures 4-9 show that like the official poverty rate poverty in the South is higher in each year relative to the other regions under the alternative NAS-type poverty measures, the difference being that poverty increased in the South after 2005 under the alternatives compared to the official rate. The alternative measures also leave poverty rankings across the four Census regions largely unchanged; namely, after the South, poverty is higher in the West, followed by

the Midwest, and then the Northeast. Recall that these measures do not adjust for differences in cost of living. In a later section we explore regional variation in FCSU spending in the CE to assess likely implications for regional poverty rankings with geographic adjustments.

Figure 4: Persons in Poverty by Region, Measured Using FCSU-1 as Threshold and not Deducting Medical Expenses from Resources

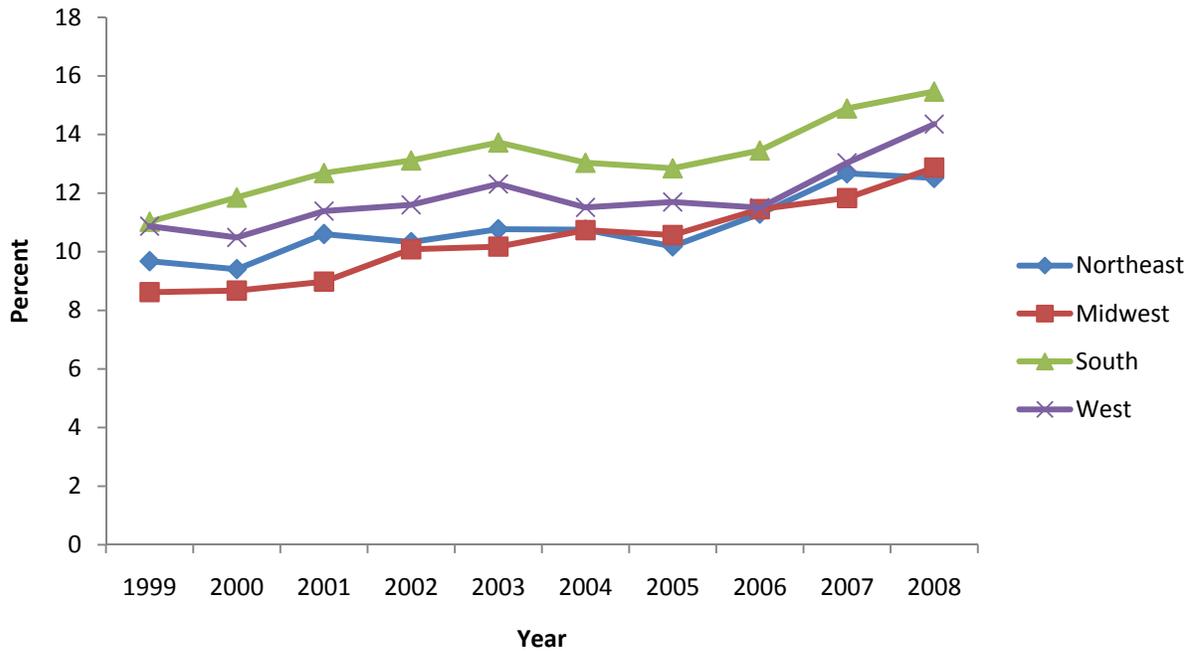


Figure 5: Persons in Poverty by Region, Measured using FCSU-1 as Threshold and Deducting Medical Expenses from Resources

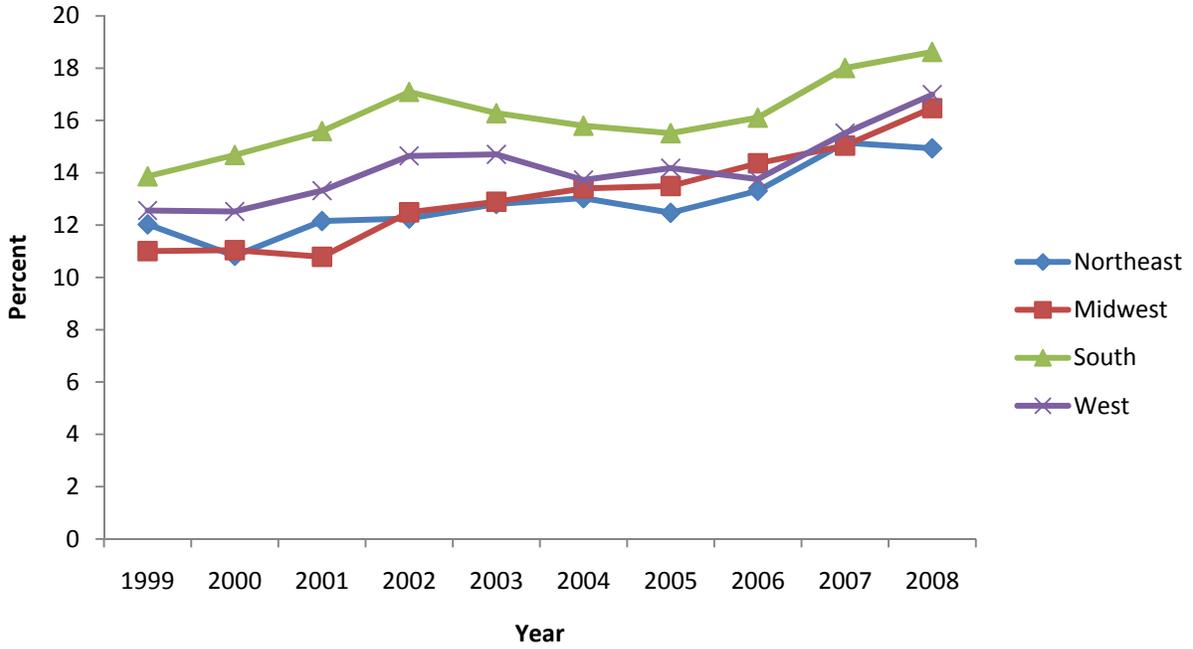


Figure 6: Persons in Poverty by Region, Measured using FCSU-1 as Threshold and Deducting Medical Expenses (less top 1%) from Resources

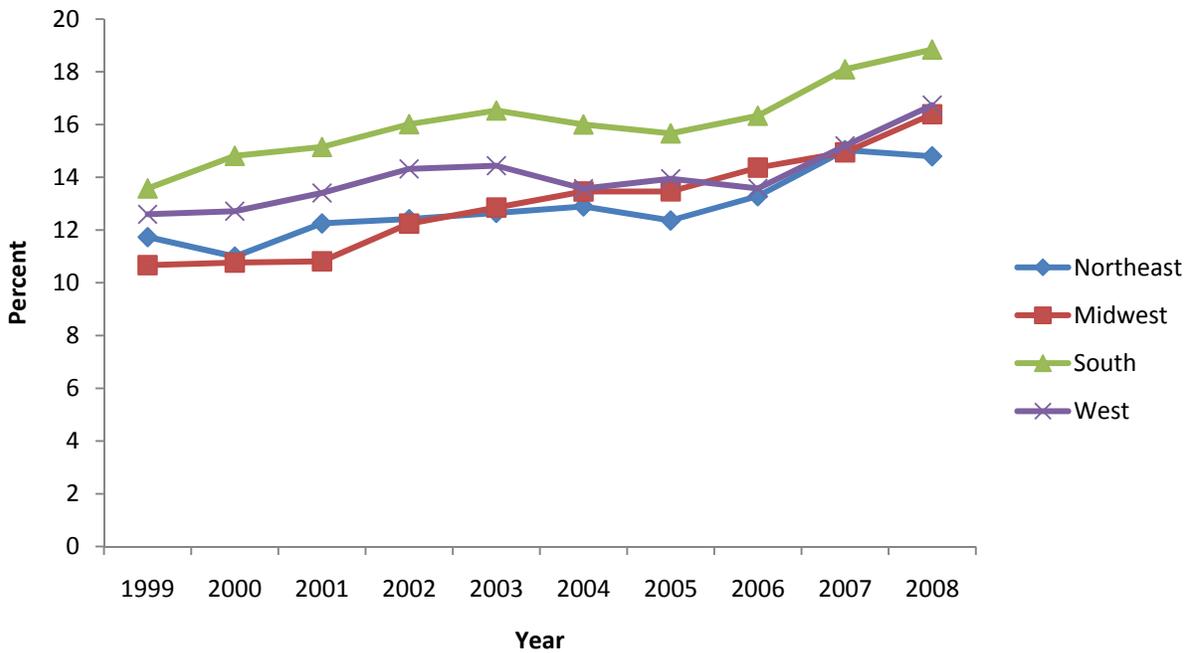


Figure 7: Persons in Poverty by Region, Measured using FCSU-2 as Threshold and not Deducting Medical Expenses from Resources

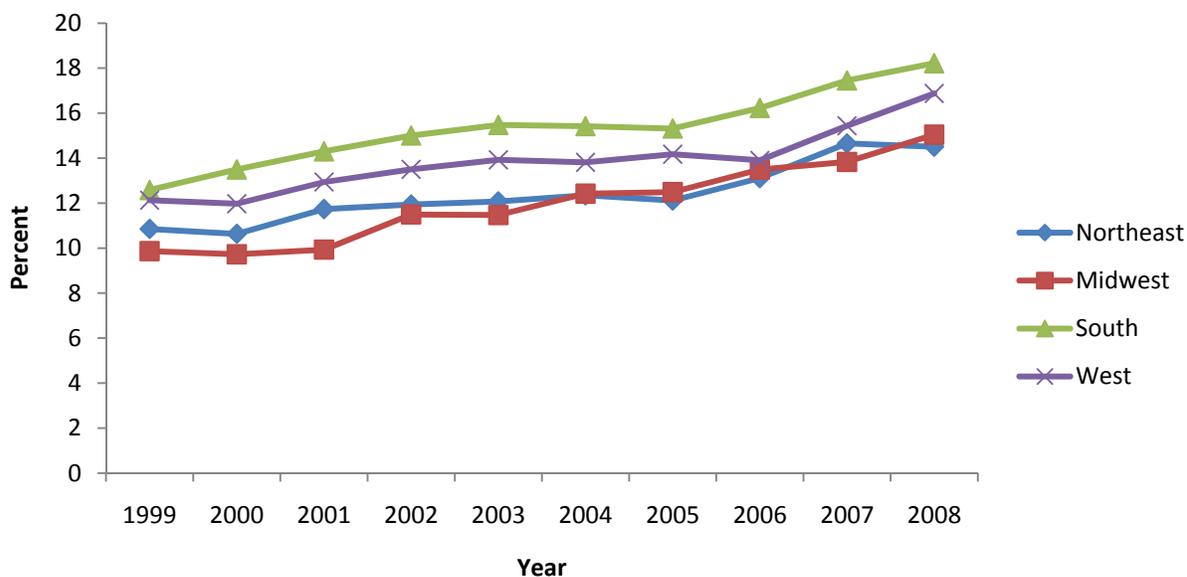


Figure 8: Persons in Poverty by Region, Measured using FCSU-2 as Threshold and Deducting Medical Expenses from Resources

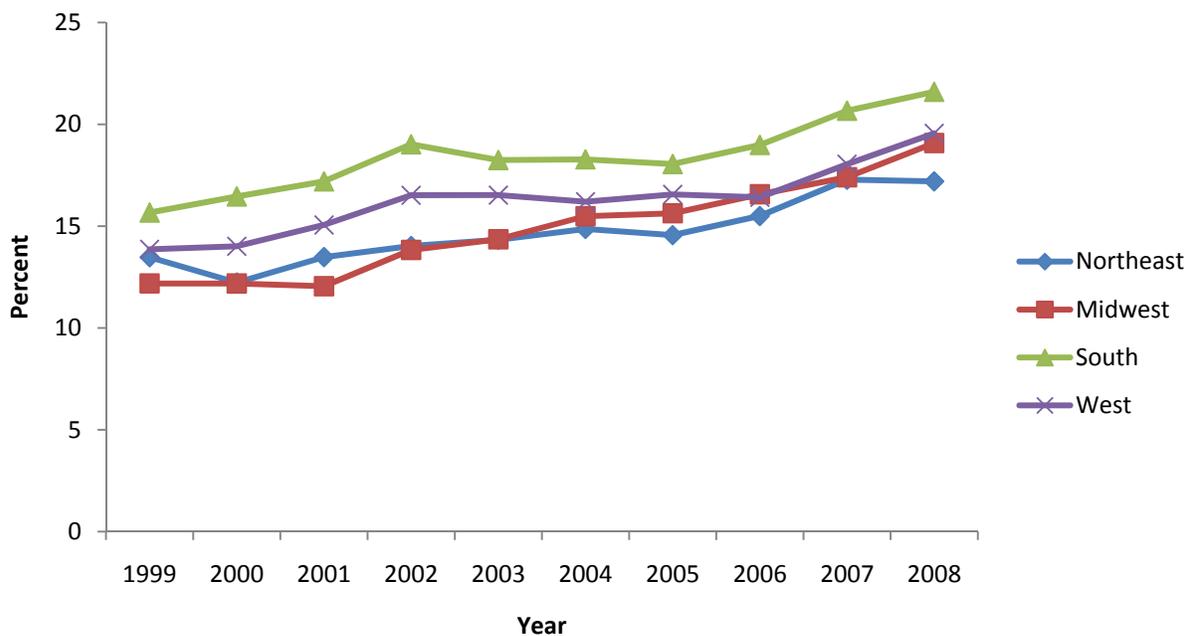
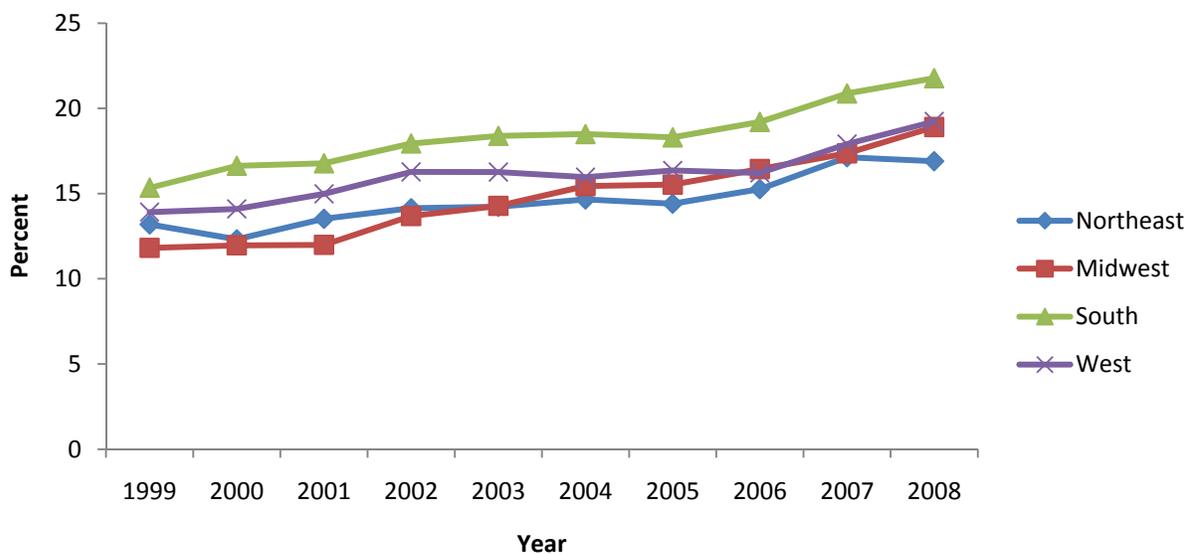


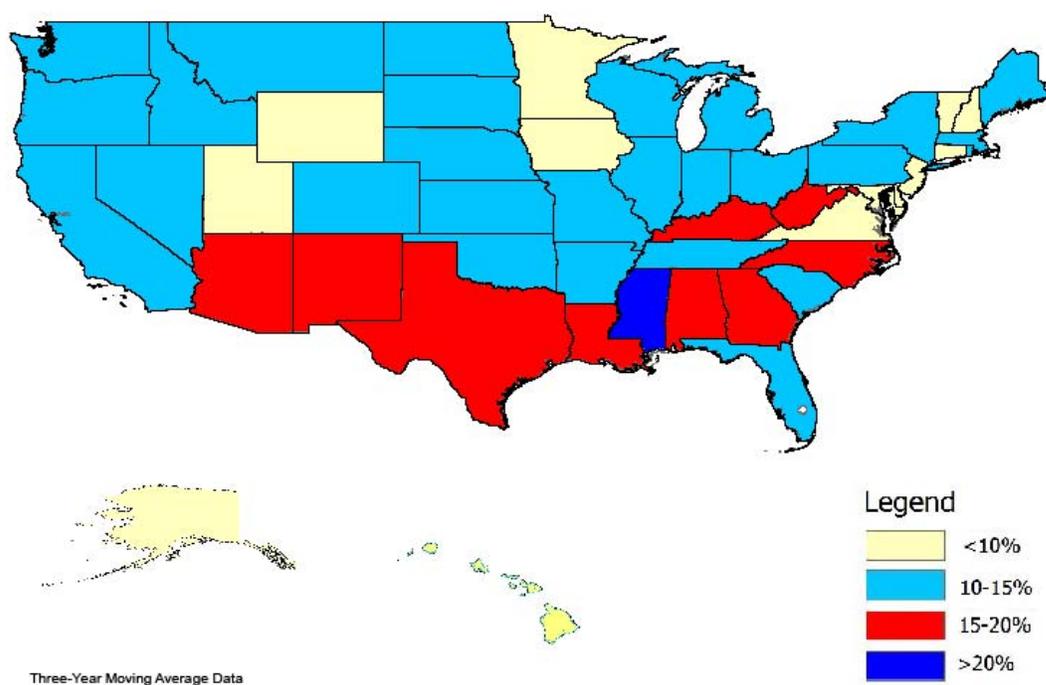
Figure 9: Persons in Poverty by Region, Measured using FCSU-2 as Threshold and Deducting Medical Expenses (less top 1%) from Resources



The trends in regional poverty potentially mask important heterogeneity across states within regions, reflecting possible state differences in take-up of social benefits, earnings, and out-of-pocket medical spending. In Figures 10-14 we present state-level maps of poverty in 2008 for the official measure and four NAS-type measures. Given the similarity in results including (MOOP) and excluding (MOOP-1) the top 1 percent of medical spending in the CE for our imputations we drop the MOOP-1 model for the state-level analyses. In Table 5 we present the actual estimated poverty rates for each state, and in Table 6 we present the subsequent ranking of states based on the alternative measures. How the alternative poverty measure affects state rankings of poverty incidence will likely be an important point of discussion and potential dissention among policy makers. To reduce possible measurement error owing to smaller sample sizes in the CPS at the state level, our state estimates for poverty are based on a three-year moving average (only last two years are used for 2008).

Although eight of the ten highest poverty states (inclusive of DC) are located in the South, Figure 10 and the attendant Tables 5 and 6 reveal the wide disparity in official poverty rates in the South. At the low end, Maryland and Virginia each have poverty rates below 10 percent, and state rankings of 46 and 41, respectively, while at the high end Mississippi has an official rate in excess of 20 percent and the top ranking in the nation.

Figure 10: Persons in Poverty in 2008, Official Census Definition



Figures 11-14 show that poverty increases across the nation under the alternative measures such that poverty in the Midwest, North East, and West looks more “southern” in its intensity with the NAS measures. With the broadest measure of the alternative poverty measures (FCSU-2 as threshold and including MOOP in resources) Figure 14 shows that only eight states inclusive of DC have poverty rates less than 15 percent, and the only state with a poverty rate of 10 percent or less regardless of measure is New Hampshire.

Figure 11: Persons in Poverty in 2008, Measured Using FCSU-1 as Threshold Without Deducting Medical Expenses from Resources

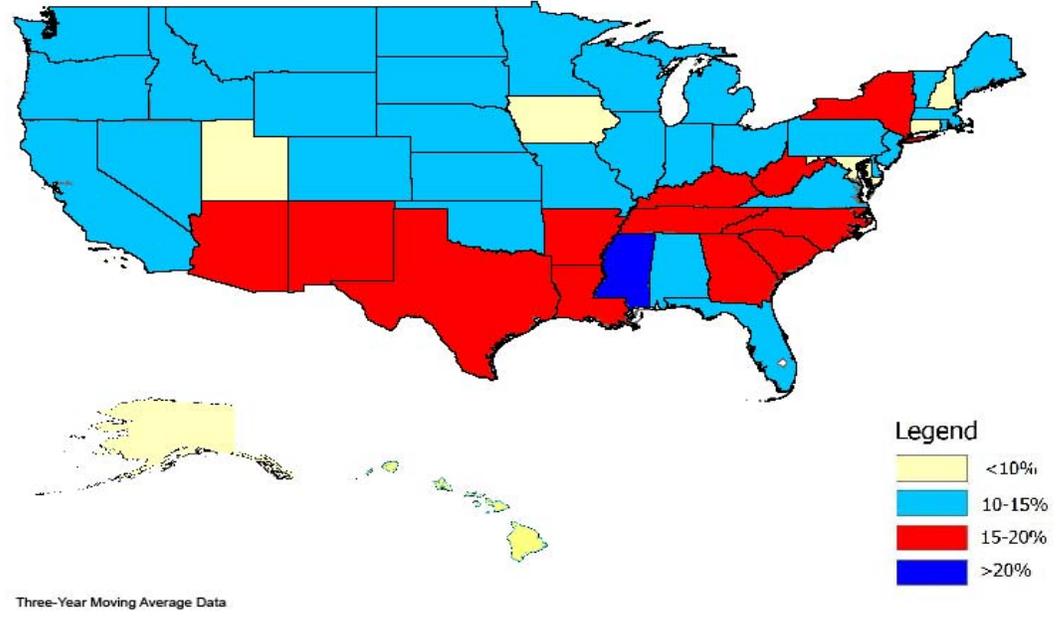


Figure 12: Families in Poverty in 2008, Measured Using FCSU-1 as Threshold After Deducting Medical Expenses from Resources

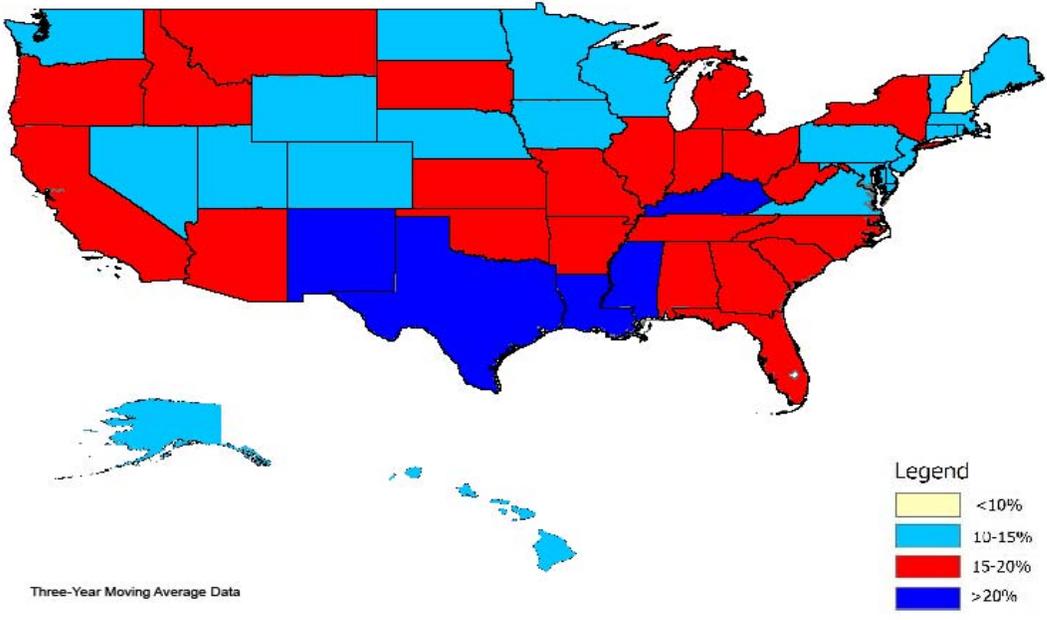


Figure 13: Persons in Poverty in 2008, Measured Using FCSU-2 as Threshold Without Deducting Medical Expenses from Resources

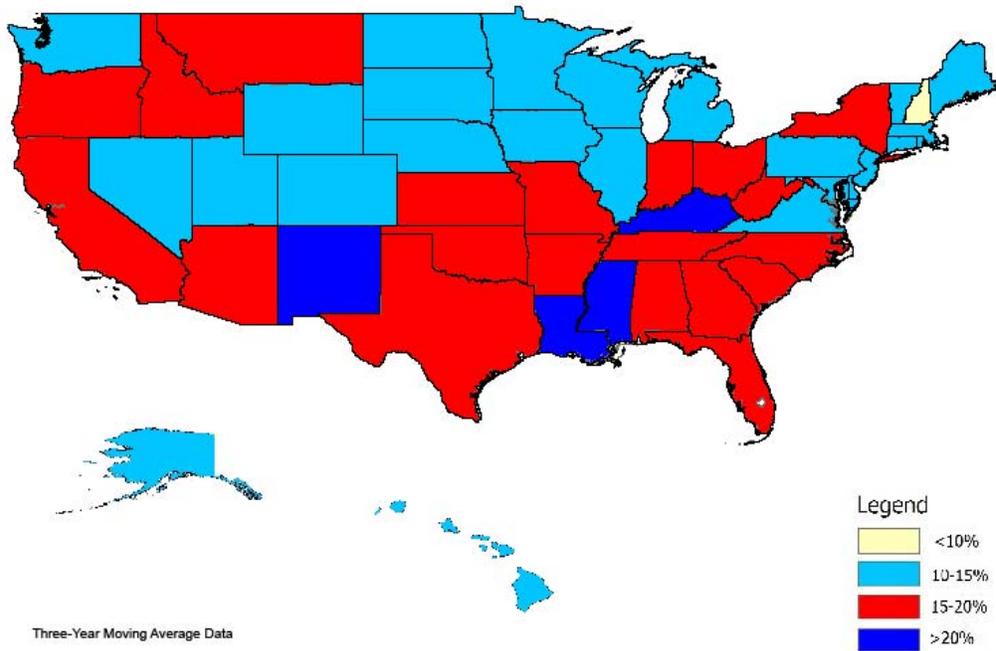
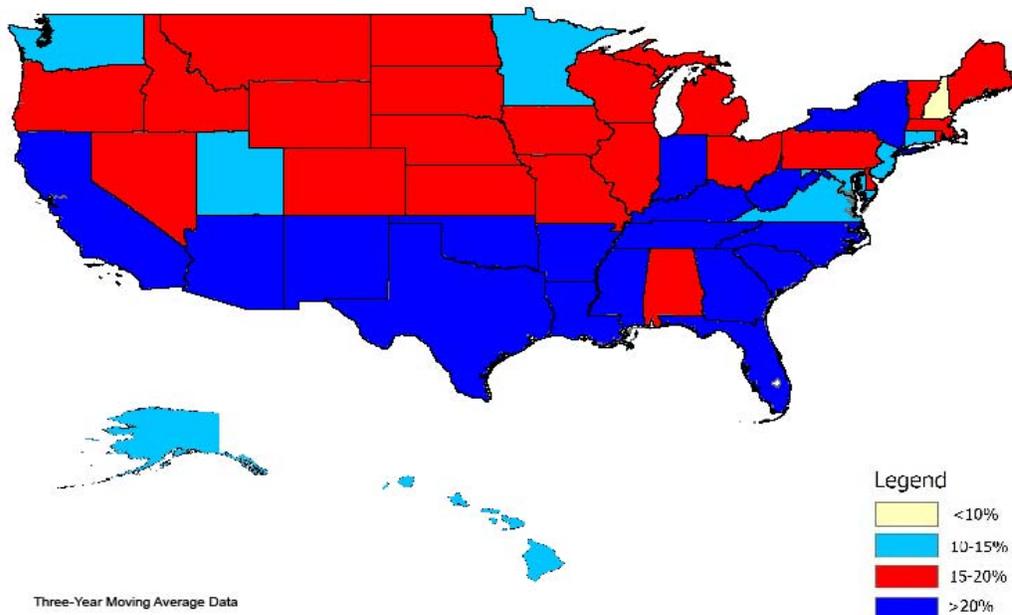


Figure 14: Persons in Poverty in 2008, Measured Using FCSU-2 as Threshold After Deducting Medical Expenses from Resources



All in all, Table 6 reveals that state poverty rankings are fairly robust under the NAS-type measures compared to the official rate, suggesting that the measures are in general “rank preserving.” For example, across all measures 8 out of the top 10 poorest states (plus DC) are located in the South. There are, however, some interesting deviations worth mentioning that the maps obscure. For example, Alabama’s poverty ranking goes from 13th highest to 19th or 20th when including MOOP in resources, likely owing to relatively lower out-of-pocket medical expenses. On the other hand, West Virginia’s poverty ranking worsens by several positions with the inclusion of MOOP, suggesting that out of pocket medical costs are a sizable burden for residents of that state. California’s ranking rises from 21st highest to 17th highest when moving from FCSU-1 to FCSU-2, likely reflecting the higher housing costs captured with the inclusion of mortgage principal in FCSU-2.

Collectively, in the absence of adjusting for geographic differences in cost of living, and for any substantial cross-state differences in out-of-pocket work expenses, the results of Table 5 and 6 suggest that neither the poverty measure proposed in the MAP Act nor the Supplemental Poverty Measure proposed by the Obama Administration are likely to lead to substantive “reshuffling” of poverty across state boundaries or regions.

Table 5: State Poverty Rates (Persons) Based on Alternative Poverty Measures, 2008

State	Official Rate	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP
Alabama	14.4	16.1	18.0	17.6	19.7
Alaska	7.9	9.8	10.9	11.0	12.5
Arizona	16.1	18.3	20.1	19.5	22.2
Arkansas	14.5	16.9	20.3	19.0	22.4
California	13.6	15.5	17.8	18.0	20.2
Colorado	10.4	12.0	13.8	13.3	15.1
Connecticut	8.5	9.7	11.9	11.0	13.0
Delaware	9.4	11.6	14.4	13.5	16.4
District of Columbia	17.3	19.3	20.6	20.4	21.8
Florida	12.8	14.6	18.0	16.9	19.9
Georgia	14.6	16.3	18.2	18.4	20.3
Hawaii	8.7	10.2	11.2	11.5	12.4
Idaho	11.1	13.2	15.8	15.7	18.4
Illinois	11.1	12.4	15.0	14.2	17.1
Indiana	13.1	14.9	18.0	16.5	19.6
Iowa	9.2	10.3	13.8	12.1	15.3
Kansas	12.2	14.4	17.4	16.2	19.7
Kentucky	16.3	18.4	22.3	21.1	24.6
Louisiana	17.1	19.8	22.6	21.7	24.8
Maine	11.3	13.0	15.5	14.6	17.4
Maryland	8.8	10.0	11.1	10.9	12.5
Massachusetts	11.2	12.4	14.8	13.9	16.3
Michigan	11.9	13.7	16.3	15.3	18.0
Minnesota	9.6	10.8	12.9	12.0	14.3
Mississippi	20.4	23.0	26.2	25.8	29.3
Missouri	13.0	15.1	18.2	16.8	20.4

Montana	12.8	14.7	17.6	17.1	19.8
Nebraska	10.3	12.3	15.3	14.0	17.0
Nevada	10.3	11.7	13.7	13.5	15.4
New Hampshire	6.4	7.2	9.0	8.5	10.4
New Jersey	9.0	10.7	12.5	12.2	14.0
New Mexico	16.6	18.5	20.9	21.3	23.4
New York	14.3	16.6	18.9	18.7	20.8
North Carolina	14.7	16.9	19.8	19.2	22.3
North Dakota	10.5	12.3	15.3	13.8	17.8
Ohio	13.2	15.0	18.3	16.6	19.7
Oklahoma	13.5	16.0	19.4	18.4	21.4
Oregon	11.7	13.6	15.9	15.4	17.8
Pennsylvania	10.6	12.3	14.8	13.9	16.2
Rhode Island	11.1	12.5	14.3	14.1	15.6
South Carolina	14.0	16.2	19.2	18.7	21.6
South Dakota	11.2	12.9	15.4	14.6	17.3
Tennessee	14.9	17.4	20.7	19.9	23.3
Texas	16.2	18.8	21.3	21.0	23.4
Utah	8.6	10.0	11.5	11.8	13.9
Vermont	9.4	10.6	13.5	12.6	15.6
Virginia	9.5	11.2	13.3	12.7	14.6
Washington	10.3	11.5	13.5	13.0	15.1
West Virginia	14.6	16.7	20.3	18.5	22.6
Wisconsin	10.4	12.1	14.7	13.5	16.7
Wyoming	10.5	11.9	14.5	13.4	16.0

NOTES: Poverty rates based on 3-year moving average. Rankings denote decreasing poverty by state from 1-51. FCSU-1 and FCSU-2 thresholds are based on definitions and data from the Consumer Expenditures Survey and include out-of-pocket expenditures on food, clothing, shelter, and utilities. FCSU-2 adds in repayment of mortgage principal for owned housing. MOOP denotes out-of-pocket medical expenses.

Table 6: State Poverty Ranking (Persons) Based on Alternative Poverty Measures, 2008

State	Official Rate	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP
Alabama	13	15	19	17	20
Alaska	50	49	50	49	49
Arizona	7	7	10	8	10
Arkansas	12	9	9	10	8
California	16	17	21	16	17
Colorado	35	36	39	39	41
Connecticut	49	50	46	48	47
Delaware	42	39	36	36	33
District of Columbia	2	3	7	6	11
Florida	22	22	20	19	18
Georgia	11	13	16	14	16
Hawaii	47	46	48	47	50
Idaho	31	26	26	24	24
Illinois	29	31	31	29	30
Indiana	19	20	18	22	23
Iowa	44	45	38	44	40
Kansas	23	23	23	23	22
Kentucky	5	6	3	4	3
Louisiana	3	2	2	2	2
Maine	26	27	27	27	28
Maryland	46	48	49	50	48
Massachusetts	28	30	32	32	34
Michigan	24	24	24	26	25
Minnesota	40	42	44	45	44
Mississippi	1	1	1	1	1
Missouri	20	18	17	20	15

Montana	21	21	22	18	19
Nebraska	39	33	29	31	31
Nevada	38	38	40	37	39
New Hampshire	51	51	51	51	51
New Jersey	45	43	45	43	45
New Mexico	4	5	5	3	5
New York	14	12	14	11	14
North Carolina	9	10	11	9	9
North Dakota	33	34	30	34	27
Ohio	18	19	15	21	21
Oklahoma	17	16	12	15	13
Oregon	25	25	25	25	26
Pennsylvania	32	32	33	33	35
Rhode Island	30	29	37	30	38
South Carolina	15	14	13	12	12
South Dakota	27	28	28	28	29
Tennessee	8	8	6	7	6
Texas	6	4	4	5	4
Utah	48	47	47	46	46
Vermont	43	44	41	42	37
Virginia	41	41	43	41	43
Washington	37	40	42	40	42
West Virginia	10	11	8	13	7
Wisconsin	36	35	34	35	32
Wyoming	34	37	35	38	36

NOTES: Poverty rates based on 3-year moving average. Rankings denote decreasing poverty by state from 1-51. FCSU-1 and FCSU-2 thresholds are based on definitions and data from the Consumer Expenditures Survey and include out-of-pocket expenditures on food, clothing, shelter, and utilities. FCSU-2 adds in repayment of mortgage principal for owned housing. MOOP denotes out-of-pocket medical expenses.

IV. Variation in Poverty across Demographic Groups

In this section we examine the implications of alternative poverty measures on the poverty status of selected demographic groups based on age and race. Specifically we estimate poverty rates for the entire U.S. and by state for children under age 18, for adults between the ages of 18 and 64, and for seniors age 65 and older. We then construct a parallel set of estimates for two racial groups, white and African American.

In Tables 7-9 we present estimates of poverty rates for age-based demographic groups. Child poverty over the past decade based on the official rate fell to a low of 16.2 percent in 2000 and then rose nearly 3 percentage points by 2008. In none of the alternatives is there a similar drop in child poverty in the early part of the decade. However, with FCSU-1 as the threshold child poverty is lower in each year under the alternative unless MOOP is subtracted from resources. It is the same or higher under FCSU-2 with or without MOOP over most of the decade, and is 3-5 percentage points higher than the official rate in 2008, meaning nearly 1 in 4 children are in poverty with FCSU-2 and MOOP. Trends in adult poverty in Table 8 are most affected by the use of FCSU-2 as the threshold. Indeed, adult poverty after 2003 under FCSU-2 without MOOP is at least as high as poverty under FCSU-1 with MOOP, highlighting the importance of home mortgage in the prime income-earning years. Senior poverty in Table 9 is most dramatically affected by the NAS-type poverty measures; since 2003 senior poverty is 30 to 60 percent higher without MOOP than the official rate, and 2.5 times higher with MOOP subtracted from resources. In a marked departure from past trends, senior poverty exceeds child poverty in each year with MOOP included in the poverty measure.

In Tables 10-15 we present state poverty rates and rankings for each of the three age

Table 7 : U.S. Child Poverty Rates (Persons under Age 18) by Alternative Resource and Threshold Definitions

Year	Official Census Definition	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-1 Threshold; Resources with MOOP-1	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources with MOOP-1
1999	17.1	13.3	15.2	15.1	15.0	17.2	17.0
2000	16.2	13.4	15.2	15.4	15.3	17.0	17.2
2001	16.3	14.3	15.7	16.0	16.0	17.5	17.6
2002	16.7	14.4	16.5	16.5	16.7	18.8	18.7
2003	17.6	15.6	17.1	17.3	17.4	19.1	19.3
2004	17.8	14.7	16.6	16.8	17.5	19.4	19.5
2005	17.6	14.7	16.4	16.5	17.5	19.4	19.6
2006	17.4	15.1	16.9	17.1	18.2	20.3	20.4
2007	18.0	16.9	19.3	19.4	20.2	22.6	22.8
2008	19.0	18.4	20.8	20.9	21.8	24.4	24.4

Notes: FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses. MOOP-1 excludes the top 1% of out-of-pocket medical expenses in the CE prior to imputation in the CPS.

Table 8 : U.S. Adult Poverty Rates (Persons Age 18-64) by Alternative Resource and Threshold Definitions

Year	Official Census Definition	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-1 Threshold; Resources with MOOP-1	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources with MOOP-1
1999	10.1	9.0	10.4	10.3	10.0	11.6	11.5
2000	9.6	9.0	10.3	10.5	10.2	11.5	11.6
2001	10.1	9.9	11.1	11.1	11.0	12.3	12.3
2002	10.6	10.3	12.2	11.9	11.7	13.6	13.3
2003	10.8	10.7	12.1	12.2	12.0	13.4	13.5
2004	11.3	10.7	12.1	12.2	12.3	13.9	14.0
2005	11.1	10.4	12.0	12.0	12.3	13.8	13.9
2006	10.8	11.0	12.5	12.6	12.9	14.5	14.6
2007	10.9	12.0	13.7	13.7	13.8	15.7	15.8
2008	11.7	12.7	14.5	14.6	14.6	16.7	16.7

Notes: FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses. MOOP-1 excludes the top 1% of out-of-pocket medical expenses in the CE prior to imputation in the CPS.

Table 9: U.S. Senior Poverty Rates (Persons Age 65 and Older) by Alternative Resource and Threshold Definitions

Year	Official Census Definition	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-1 Threshold; Resources with MOOP-1	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources with MOOP-1
1999	9.7	9.7	17.7	16.7	11.5	19.7	18.7
2000	9.9	10.6	19.2	18.5	12.4	21.5	20.9
2001	10.1	11.0	20.0	18.3	12.9	22.5	20.7
2002	10.4	11.9	22.5	20.4	14.2	25.1	23.1
2003	10.2	11.6	21.8	20.7	14.0	24.8	23.8
2004	9.8	11.0	20.8	20.0	13.7	24.3	23.4
2005	10.1	11.2	21.2	20.3	14.5	24.5	23.6
2006	9.4	12.0	21.4	20.7	15.1	24.8	23.9
2007	9.7	13.4	23.3	22.5	16.3	26.5	25.7
2008	9.7	13.0	22.9	22.1	16.0	26.2	25.2

Notes: FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses. MOOP-1 excludes the top 1% of out-of-pocket medical expenses in the CE prior to imputation in the CPS.

groups. We focus the discussion on Tables 11, 13, and 15 which contain the state poverty rankings as of 2008. Recall that across all measures in Table 6 that 8 of the top 10 states (plus DC) in terms of highest poverty rates were located in the South. Under the official poverty definition 7 of the top 10 states for child poverty are in the South, 8 of the top 10 for adult poverty are in the South, and 7 of the top 10 states for senior poverty are in the South. This relative ranking remains largely unchanged across the alternative measures, with poverty remaining most heavily concentrated in the South across age groups.

There are, however, some notable shifts in state rankings, and in particular several states that perform consistently worse under the alternative measures across age groups while others perform consistently better. Kentucky fares worst across the board in moving from the official rate to the NAS-type measures in 2008—falling from 8th highest child poverty rate to 3rd to 5th highest; falling from 3rd highest adult poverty rate to the highest rate; and falling from 21st highest senior poverty rate to 5th highest under most alternatives. This suggests that many families have incomes near the official poverty line in 2008, but lower than the revised measures, as the worse poverty ranking occurs even without MOOP. Likewise, Delaware tends to have a worse poverty rank for all age groups under the alternative measure. On the other hand, Alabama, Maine, and Washington have improved poverty rankings under the alternatives. New York improves in terms of adult and senior poverty state rank, but child poverty rank falls under the NAS measures.

Table 10: State Child Poverty Rates (Persons under Age 18) Based on Alternative Poverty Measures, 2008

State	Official Rate	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP
Alabama	23.1	21.6	22.9	24.5	26.0
Alaska	9.1	11.6	12.1	13.0	13.6
Arizona	23.1	21.3	23.9	25.6	28.8
Arkansas	20.0	19.5	21.3	21.7	24.9
California	19.0	18.7	21.4	22.6	25.0
Colorado	13.5	13.5	15.2	16.2	18.0
Connecticut	12.0	11.6	12.0	12.9	14.6
Delaware	13.4	14.8	17.6	18.6	20.2
District of Columbia	29.1	29.6	31.0	32.4	34.3
Florida	18.1	17.2	20.3	20.8	23.5
Georgia	21.0	19.6	21.2	23.0	25.3
Hawaii	12.8	12.9	14.4	14.9	15.5
Idaho	14.9	15.6	17.5	19.1	23.7
Illinois	16.8	16.1	18.6	19.0	22.3
Indiana	21.0	19.9	22.1	22.8	26.1
Iowa	13.6	11.8	14.9	14.6	17.9
Kansas	17.3	16.8	21.0	20.9	24.3
Kentucky	22.7	22.5	25.2	26.2	28.7
Louisiana	23.0	19.2	22.7	26.0	27.5
Maine	15.5	14.4	15.8	16.6	17.9
Maryland	10.8	9.7	11.1	11.9	13.8
Massachusetts	17.1	16.8	17.6	18.4	19.8
Michigan	17.5	16.0	18.0	18.5	21.7
Minnesota	14.6	14.1	15.8	16.3	17.7
Mississippi	28.2	25.4	27.9	30.7	32.3
Missouri	20.3	17.8	21.4	21.5	25.6

Montana	17.3	15.6	18.2	19.5	21.9
Nebraska	14.7	13.7	17.3	17.6	20.6
Nevada	15.3	14.9	16.7	18.7	20.3
New Hampshire	7.5	7.1	7.9	8.5	9.6
New Jersey	12.2	12.9	14.3	15.1	16.8
New Mexico	22.0	21.1	22.5	23.8	27.2
New York	20.3	20.9	22.5	24.0	26.3
North Carolina	20.1	19.2	21.9	23.5	26.2
North Dakota	14.9	13.1	15.7	15.7	18.8
Ohio	20.1	18.4	20.7	20.9	24.2
Oklahoma	20.4	19.7	23.4	24.4	26.0
Oregon	14.8	16.1	18.4	19.3	20.8
Pennsylvania	15.0	15.1	16.7	17.8	19.7
Rhode Island	17.5	16.8	18.5	19.9	20.4
South Carolina	20.4	18.4	21.0	22.4	25.1
South Dakota	17.2	14.6	18.7	19.2	22.0
Tennessee	20.9	19.4	22.6	22.6	25.7
Texas	24.0	22.4	25.5	26.7	29.5
Utah	10.7	10.7	12.4	12.9	15.3
Vermont	10.4	10.9	12.0	13.1	14.4
Virginia	14.0	13.6	15.9	16.5	18.4
Washington	12.4	11.5	13.3	13.9	15.5
West Virginia	22.9	21.7	23.7	24.6	27.9
Wisconsin	14.4	13.2	16.4	16.4	19.2
Wyoming	12.8	11.6	13.5	13.6	15.1

NOTES: Poverty rates based on 3-year moving average. Rankings denote decreasing poverty by state from 1-51. FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses.

Table 11: State Child Poverty Ranking (Persons under Age 18) Based on Alternative Poverty Measures, 2008

State	Official Rate	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP
Alabama	5	6	8	8	13
Alaska	50	45	47	47	50
Arizona	4	7	5	6	4
Arkansas	19	13	17	18	19
California	20	17	16	15	18
Colorado	40	38	40	39	38
Connecticut	46	44	48	48	47
Delaware	41	32	30	30	32
District of Columbia	1	1	1	1	1
Florida	21	21	22	22	23
Georgia	11	12	18	13	16
Hawaii	42	41	42	42	43
Idaho	32	29	31	27	22
Illinois	28	26	24	28	24
Indiana	10	10	13	14	11
Iowa	39	43	41	43	39
Kansas	25	22	19	20	20
Kentucky	8	3	4	4	5
Louisiana	6	15	9	5	7
Maine	29	34	38	35	40
Maryland	47	50	50	50	49
Massachusetts	27	23	29	32	33
Michigan	23	27	28	31	27
Minnesota	36	35	37	38	41
Mississippi	2	2	2	2	2
Missouri	15	20	15	19	15

Montana	24	28	27	24	26
Nebraska	35	36	32	34	29
Nevada	30	31	34	29	31
New Hampshire	51	51	51	51	51
New Jersey	45	42	43	41	42
New Mexico	9	8	11	11	8
New York	16	9	12	10	9
North Carolina	18	16	14	12	10
North Dakota	33	40	39	40	36
Ohio	17	18	21	21	21
Oklahoma	14	11	7	9	12
Oregon	34	25	26	25	28
Pennsylvania	31	30	33	33	34
Rhode Island	22	24	25	23	30
South Carolina	13	19	20	17	17
South Dakota	26	33	23	26	25
Tennessee	12	14	10	16	14
Texas	3	4	3	3	3
Utah	48	49	46	49	45
Vermont	49	48	49	46	48
Virginia	38	37	36	36	37
Washington	44	47	45	44	44
West Virginia	7	5	6	7	6
Wisconsin	37	39	35	37	35
Wyoming	43	46	44	45	46

NOTES: Poverty rates based on 3-year moving average. Rankings denote decreasing poverty by state from 1-51. FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses.

Table 12: State Adult Poverty Rates (Persons Age 18 to 64) Based on Alternative Poverty Measures, 2008

State	Official Rate	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP
Alabama	11.8	12.5	14.1	14.4	16.8
Alaska	7.7	8.7	9.5	9.9	10.8
Arizona	14.3	14.4	16.1	16.4	18.6
Arkansas	12.9	13.5	15.2	15.3	17.4
California	12.2	13.5	15.2	15.8	17.5
Colorado	9.2	10.6	11.8	12.2	13.4
Connecticut	7.6	9.0	9.6	10.0	11.3
Delaware	8.7	10.4	12.3	12.3	14.2
District of Columbia	14.5	16.0	17.0	17.6	18.7
Florida	11.6	12.7	14.8	14.9	17.2
Georgia	12.5	13.8	15.0	15.9	17.8
Hawaii	7.5	8.5	9.2	9.4	10.3
Idaho	10.0	11.3	12.8	13.2	15.5
Illinois	9.5	10.8	12.8	12.4	15.0
Indiana	10.7	13.4	15.9	15.1	18.2
Iowa	8.2	8.8	11.1	10.5	12.7
Kansas	11.2	12.1	15.0	14.3	16.9
Kentucky	15.2	19.2	21.9	21.2	25.1
Louisiana	15.3	15.9	17.7	18.8	21.0
Maine	10.7	10.8	12.5	12.3	14.4
Maryland	7.7	8.5	9.8	9.8	11.1
Massachusetts	9.5	10.2	11.3	11.1	12.7
Michigan	10.6	11.2	13.3	12.9	15.4
Minnesota	8.3	9.0	10.5	10.4	11.8
Mississippi	17.6	18.6	20.9	21.3	23.7
Missouri	11.5	11.5	14.3	13.7	16.4

Montana	12.8	14.0	15.7	15.9	17.5
Nebraska	9.0	9.8	12.5	11.8	14.1
Nevada	8.7	9.5	10.7	11.3	12.4
New Hampshire	6.0	6.6	7.3	7.5	8.2
New Jersey	7.7	8.7	9.8	10.0	11.1
New Mexico	15.2	16.2	18.5	18.5	21.5
New York	12.6	13.7	15.1	15.5	17.2
North Carolina	13.4	14.3	16.1	16.3	19.0
North Dakota	9.3	10.2	11.5	11.5	13.4
Ohio	11.6	12.3	14.4	13.6	16.5
Oklahoma	11.5	12.6	15.0	15.3	16.7
Oregon	11.2	13.0	14.6	15.1	16.4
Pennsylvania	9.4	10.3	11.7	11.9	13.2
Rhode Island	9.5	9.7	11.4	11.8	12.7
South Carolina	12.1	13.7	15.5	16.2	17.8
South Dakota	9.9	10.2	12.8	12.5	15.0
Tennessee	13.5	14.7	17.0	16.8	19.0
Texas	13.2	14.5	16.6	16.8	18.8
Utah	7.9	9.2	10.3	10.5	12.1
Vermont	8.8	9.4	11.1	11.0	13.1
Virginia	7.6	8.4	10.2	9.6	11.9
Washington	9.9	10.1	11.3	11.5	12.7
West Virginia	13.4	14.6	17.0	16.6	19.4
Wisconsin	9.3	9.9	12.0	11.5	13.8
Wyoming	9.8	10.5	12.4	11.9	13.6

NOTES: Poverty rates based on 3-year moving average. Rankings denote decreasing poverty by state from 1-51. FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses.

Table 13: State Adult Poverty Ranking (Persons Age 18 to 64) Based on Alternative Poverty Measures, 2008

State	Official Rate	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP
Alabama	17	21	24	21	20
Alaska	45	47	49	47	49
Arizona	6	9	10	9	10
Arkansas	11	16	14	17	16
California	15	15	15	14	14
Colorado	37	29	34	31	34
Connecticut	49	44	48	46	46
Delaware	41	31	32	29	30
District of Columbia	5	4	7	5	9
Florida	18	19	20	20	18
Georgia	14	12	17	12	13
Hawaii	50	49	50	50	50
Idaho	27	25	28	25	25
Illinois	32	28	26	28	28
Indiana	24	17	11	18	11
Iowa	43	45	40	43	40
Kansas	23	23	18	22	19
Kentucky	3	1	1	2	1
Louisiana	2	5	4	3	4
Maine	25	27	29	30	29
Maryland	46	48	46	48	47
Massachusetts	33	35	38	40	39
Michigan	26	26	25	26	26
Minnesota	42	43	43	44	45
Mississippi	1	2	2	1	2
Missouri	20	24	23	23	23

Montana	12	11	12	13	15
Nebraska	38	38	30	34	31
Nevada	40	40	42	39	42
New Hampshire	51	51	51	51	51
New Jersey	47	46	47	45	48
New Mexico	4	3	3	4	3
New York	13	13	16	15	17
North Carolina	9	10	9	10	6
North Dakota	36	33	36	36	35
Ohio	19	22	22	24	22
Oklahoma	21	20	19	16	21
Oregon	22	18	21	19	24
Pennsylvania	34	32	35	32	36
Rhode Island	31	39	37	35	38
South Carolina	16	14	13	11	12
South Dakota	29	34	27	27	27
Tennessee	7	6	6	6	7
Texas	10	8	8	7	8
Utah	44	42	44	42	43
Vermont	39	41	41	41	37
Virginia	48	50	45	49	44
Washington	28	36	39	37	41
West Virginia	8	7	5	8	5
Wisconsin	35	37	33	38	32
Wyoming	30	30	31	33	33

NOTES: Poverty rates based on 3-year moving average. Rankings denote decreasing poverty by state from 1-51. FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses.

Table 14: State Senior Poverty Rates (Persons Age 65 and Older) Based on Alternative Poverty Measures, 2008

State	Official Rate	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP
Alabama	10.9	13.7	21.9	15.9	23.8
Alaska	5.0	6.4	10.9	7.1	12.5
Arizona	10.0	12.5	21.0	13.6	23.9
Arkansas	11.6	16.6	31.5	19.1	35.8
California	9.0	12.8	22.1	15.9	25.0
Colorado	10.8	14.0	21.1	16.0	23.9
Connecticut	6.5	10.7	19.3	12.7	21.4
Delaware	5.9	9.2	22.3	13.9	24.9
District of Columbia	14.7	19.4	26.6	22.4	29.2
Florida	10.1	13.8	23.4	16.8	26.7
Georgia	10.7	15.7	24.1	17.8	29.5
Hawaii	7.1	9.0	13.4	11.5	15.7
Idaho	7.9	12.7	22.3	16.7	24.9
Illinois	7.7	10.7	22.1	12.4	25.2
Indiana	8.7	12.1	24.9	15.7	28.3
Iowa	5.9	8.7	23.2	12.7	24.7
Kansas	6.9	9.3	21.9	13.5	25.1
Kentucky	9.6	15.7	28.0	20.6	31.9
Louisiana	14.2	23.6	35.7	27.6	39.2
Maine	8.4	10.5	19.9	13.8	23.4
Maryland	10.2	13.1	19.3	15.2	21.3
Massachusetts	9.8	13.6	23.3	15.6	26.6
Michigan	7.7	10.4	18.3	12.7	21.7
Minnesota	6.5	8.4	16.3	10.5	19.1
Mississippi	17.1	22.5	31.9	25.4	36.2
Missouri	6.8	9.9	21.8	13.4	25.2

Montana	6.1	11.0	23.5	15.4	26.0
Nebraska	7.3	10.2	21.8	11.9	25.2
Nevada	7.2	8.7	15.7	10.6	18.5
New Hampshire	6.4	8.0	16.7	10.4	19.1
New Jersey	9.1	12.4	20.0	14.6	23.6
New Mexico	12.6	16.7	25.4	20.9	27.4
New York	12.4	15.1	25.2	19.5	28.5
North Carolina	10.5	14.6	26.4	17.3	30.7
North Dakota	9.1	13.8	30.2	16.7	35.5
Ohio	8.4	11.6	23.9	13.7	25.7
Oklahoma	9.8	13.2	25.2	16.7	28.2
Oregon	8.7	11.6	20.0	15.1	23.7
Pennsylvania	9.4	12.2	22.8	15.7	26.3
Rhode Island	7.5	9.5	18.1	12.3	20.6
South Carolina	11.8	16.2	23.4	18.3	28.1
South Dakota	6.6	12.4	22.4	16.0	25.0
Tennessee	10.8	14.9	26.6	18.7	30.0
Texas	12.3	16.5	27.2	20.2	30.3
Utah	6.1	11.4	18.9	16.1	23.7
Vermont	11.1	13.0	26.1	17.3	28.4
Virginia	10.5	13.8	20.3	15.3	23.2
Washington	7.9	9.5	17.7	11.3	21.3
West Virginia	8.1	11.7	24.3	15.5	28.5
Wisconsin	8.4	12.2	23.2	14.8	28.5
Wyoming	9.4	13.2	26.1	16.2	30.4

NOTES: Poverty rates based on 3-year moving average. Rankings denote decreasing poverty by state from 1-51. FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses.

Table 15: State Senior Poverty Ranking (Persons) Based on Alternative Poverty Measures, 2008

State	Official Rate	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP
Alabama	10	17	31	23	36
Alaska	51	51	51	51	51
Arizona	18	25	36	37	35
Arkansas	8	5	3	8	3
California	26	23	29	22	30
Colorado	11	13	35	20	34
Connecticut	45	36	42	41	43
Delaware	50	45	27	34	31
District of Columbia	2	3	7	3	11
Florida	17	14	21	14	20
Georgia	13	9	17	11	10
Hawaii	40	46	50	46	50
Idaho	33	24	28	17	32
Illinois	35	37	30	43	25
Indiana	27	30	15	24	16
Iowa	49	48	24	40	33
Kansas	41	44	32	38	28
Kentucky	21	8	5	5	5
Louisiana	3	1	1	1	1
Maine	30	38	40	35	40
Maryland	16	21	41	30	45
Massachusetts	19	18	22	26	21
Michigan	36	39	44	42	42
Minnesota	44	49	48	49	48
Mississippi	1	2	2	2	2
Missouri	42	41	34	39	26

Montana	48	35	19	28	23
Nebraska	38	40	33	45	27
Nevada	39	47	49	48	49
New Hampshire	46	50	47	50	47
New Jersey	24	26	39	33	39
New Mexico	4	4	12	4	19
New York	5	10	14	7	14
North Carolina	14	12	9	13	6
North Dakota	25	15	4	16	4
Ohio	31	33	18	36	24
Oklahoma	20	19	13	15	17
Oregon	28	32	38	31	38
Pennsylvania	23	28	25	25	22
Rhode Island	37	42	45	44	46
South Carolina	7	7	20	10	18
South Dakota	43	27	26	21	29
Tennessee	12	11	8	9	9
Texas	6	6	6	6	8
Utah	47	34	43	19	37
Vermont	9	22	11	12	15
Virginia	15	16	37	29	41
Washington	34	43	46	47	44
West Virginia	32	31	16	27	12
Wisconsin	29	29	23	32	13
Wyoming	22	20	10	18	7

NOTES: Poverty rates based on 3-year moving average. Rankings denote decreasing poverty by state from 1-51. FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses.

In Tables 16-17 we present national trends from 1999 to 2008 for white and black persons, respectively, and in Tables 18-21 we present corresponding state rates and rankings based on race of the individual for 2008. Comparing Tables 16 and 17 suggests that white poverty rates are more sensitive to the NAS-type measures, increasing by 50 percent or more when MOOP is subtracted from resources in recent years. In Tables 18-21 the state poverty rates and rankings for white and blacks indicate that as with the age groups there is relative stability in ranking across the five poverty measures. For example, five of the top 10 poorest states in terms of white poverty are located in the South across all measures, and roughly 3 of the poorest states for black poverty are in the South. There is considerable variation in annual black poverty rates in smaller, rural states such as Maine, but even with this variation there are not wild swings across the NAS-type measures, suggesting that the choice of poverty measure does not substantially ‘redistribute’ poor racial groups across states.

V. Next Steps

In this preliminary report we did not address the important issue of adjusting thresholds for geographic differences in cost-of-living. In Figure 15 we present the time series of the 33rd percentile of nominal FCSU for a family of four for each of the four broad geographic regions constructed in the CE. The left panel imputes the rental equivalent of owner occupied housing to homeowners while the right panel measures shelter as principal plus interest. The figure makes clear that at the 33rd percentile spending on FCSU in the Northeast and West are consistently higher than in the South. Future drafts will examine the sensitivity of the poverty rankings presented here to alternative methods of adjusting for geographical differences in cost of living.

Table 16: U.S. White Poverty Rates (Persons) by Alternative Resource and Threshold Definitions

Year	Official Census Definition	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-1 Threshold; Resources with MOOP-1	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources with MOOP-1
1999	9.8	8.5	10.9	10.6	9.7	12.2	11.9
2000	9.5	8.8	11.2	11.2	10.0	12.5	12.5
2001	9.9	9.6	11.9	11.7	10.8	13.3	13.0
2002	10.2	9.9	13.2	12.5	11.5	14.8	14.2
2003	10.5	10.2	13.0	12.8	11.7	14.6	14.5
2004	10.8	10.1	12.8	12.8	12.0	15.0	14.9
2005	10.6	9.8	12.6	12.5	11.9	14.8	14.7
2006	10.3	10.4	13.1	13.0	12.5	15.5	15.4
2007	10.5	11.7	14.8	14.6	13.8	17.1	17.0
2008	11.2	12.3	15.6	15.4	14.5	18.0	17.8

Notes: FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses. MOOP-1 excludes the top 1% of out-of-pocket medical expenses in the CE prior to imputation in the CPS.

Table 17: U.S. Black Poverty Rates (Persons) by Alternative Resource and Threshold Definitions

Year	Official Census Definition	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-1 Threshold; Resources with MOOP-1	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources with MOOP-1
1999	23.6	19.8	22.3	22.2	22.0	25.0	24.9
2000	22.5	19.9	22.0	22.3	22.3	24.4	24.8
2001	22.7	20.6	22.5	22.7	22.8	24.7	24.9
2002	24.1	21.9	24.0	24.2	24.6	26.7	26.7
2003	24.4	22.9	24.2	24.8	25.0	26.7	27.2
2004	24.7	22.0	24.2	24.7	25.0	27.2	27.6
2005	24.9	22.1	24.2	24.6	25.6	27.5	28.1
2006	24.3	22.3	24.4	25.1	26.3	28.2	28.7
2007	24.5	23.9	26.2	26.7	27.6	29.7	30.5
2008	24.7	24.7	26.9	27.6	28.4	31.0	31.5

Notes: FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses. MOOP-1 excludes the top 1% of out-of-pocket medical expenses in the CE prior to imputation in the CPS.

Table 18: State White Poverty Rates (Persons) Based on Alternative Poverty Measures, 2008

State	Official Rate	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP
Alabama	9.8	10.5	13.2	12.2	15.6
Alaska	6.2	7.9	9.1	8.7	9.9
Arizona	14.8	14.8	17.8	17.1	20.8
Arkansas	10.3	11.8	15.5	13.6	17.9
California	13.6	14.9	18.1	17.7	20.8
Colorado	9.6	10.8	12.8	12.6	14.8
Connecticut	7.4	8.9	10.8	9.9	12.5
Delaware	8.3	10.7	14.6	13.2	16.7
District of Columbia	8.4	9.9	11.0	11.0	12.7
Florida	10.5	12.0	15.8	14.4	18.4
Georgia	10.3	11.8	14.3	13.8	17.2
Hawaii	6.9	8.5	10.7	10.0	11.3
Idaho	10.8	12.3	14.9	14.9	18.7
Illinois	8.8	10.3	13.7	12.0	16.2
Indiana	10.9	13.2	16.9	15.2	19.4
Iowa	8.4	8.8	12.9	10.9	14.8
Kansas	11.3	12.2	17.1	15.3	19.3
Kentucky	14.5	18.0	22.1	20.5	25.3
Louisiana	9.9	11.7	15.1	13.8	17.5
Maine	10.6	10.8	13.8	12.8	16.0
Maryland	6.3	7.0	8.9	8.1	10.5
Massachusetts	9.9	10.8	13.4	11.9	15.2
Michigan	8.3	9.5	12.5	11.1	14.5
Minnesota	8.2	9.0	11.5	10.6	13.0
Mississippi	12.6	13.8	17.7	16.0	20.1
Missouri	10.7	10.7	15.2	13.4	17.9

Montana	11.1	12.3	16.1	14.6	18.0
Nebraska	8.9	9.3	13.5	11.7	15.6
Nevada	10.1	10.9	13.2	13.0	15.4
New Hampshire	6.1	6.6	8.3	7.7	9.6
New Jersey	7.4	8.6	10.7	10.1	12.5
New Mexico	16.0	17.3	20.2	19.8	23.4
New York	11.4	12.5	15.2	14.5	17.5
North Carolina	10.9	11.9	15.7	14.3	18.8
North Dakota	8.2	9.0	12.7	10.6	15.2
Ohio	9.7	10.7	14.3	12.1	16.3
Oklahoma	10.7	12.0	16.1	15.2	18.2
Oregon	10.9	12.7	15.7	15.1	17.7
Pennsylvania	9.0	10.1	13.2	12.1	15.1
Rhode Island	9.6	9.7	12.6	12.0	14.0
South Carolina	9.8	10.9	13.8	13.2	16.8
South Dakota	7.7	8.7	12.5	11.2	14.7
Tennessee	12.6	13.8	18.1	16.6	20.3
Texas	15.3	16.0	19.5	19.0	22.4
Utah	8.2	9.5	11.3	11.2	13.7
Vermont	9.4	10.1	13.3	12.3	15.4
Virginia	7.7	8.9	11.7	10.5	13.6
Washington	9.5	9.3	11.7	11.0	13.6
West Virginia	14.2	15.3	19.3	17.8	22.4
Wisconsin	8.7	9.1	12.7	11.0	14.8
Wyoming	10.1	10.7	14.1	12.4	15.8

NOTES: Poverty rates based on 3-year moving average. Rankings denote decreasing poverty by state from 1-51. FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses.

Table 19: State White Poverty Ranking (Persons) Based on Alternative Poverty Measures, 2008

State	Official Rate	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP
Alabama	27	30	33	29	29
Alaska	50	49	49	49	50
Arizona	3	6	7	6	6
Arkansas	21	18	16	20	16
California	6	5	6	5	5
Colorado	29	24	35	26	37
Connecticut	47	44	46	48	47
Delaware	39	28	21	22	23
District of Columbia	37	34	45	41	45
Florida	19	15	13	16	13
Georgia	20	19	22	18	21
Hawaii	48	48	47	47	48
Idaho	15	13	20	13	12
Illinois	35	31	27	32	25
Indiana	13	9	10	10	9
Iowa	38	45	34	42	35
Kansas	10	14	9	9	10
Kentucky	4	1	1	1	1
Louisiana	24	20	19	19	20
Maine	18	23	26	25	26
Maryland	49	50	50	50	49
Massachusetts	25	25	29	34	33
Michigan	40	36	40	38	39
Minnesota	41	42	43	44	44
Mississippi	7	7	8	8	8
Missouri	16	29	17	21	17

Montana	11	12	12	14	15
Nebraska	34	39	28	35	28
Nevada	23	21	31	24	31
New Hampshire	51	51	51	51	51
New Jersey	46	47	48	46	46
New Mexico	1	2	2	2	2
New York	9	11	18	15	19
North Carolina	12	17	15	17	11
North Dakota	43	41	36	43	32
Ohio	28	27	23	30	24
Oklahoma	17	16	11	11	14
Oregon	14	10	14	12	18
Pennsylvania	33	32	32	31	34
Rhode Island	30	35	38	33	40
South Carolina	26	22	25	23	22
South Dakota	45	46	39	37	38
Tennessee	8	8	5	7	7
Texas	2	3	3	3	4
Utah	42	37	44	36	41
Vermont	32	33	30	28	30
Virginia	44	43	41	45	42
Washington	31	38	42	40	43
West Virginia	5	4	4	4	3
Wisconsin	36	40	37	39	36
Wyoming	22	26	24	27	27

NOTES: Poverty rates based on 3-year moving average. Rankings denote decreasing poverty by state from 1-51. FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses.

Table 20: State Black Poverty Rates (Persons) Based on Alternative Poverty Measures, 2008

State	Official Rate	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP
Alabama	26.6	26.0	28.4	29.9	31.9
Alaska	7.7	8.1	7.7	9.5	8.4
Arizona	20.3	25.2	25.2	28.4	28.0
Arkansas	38.0	34.9	37.8	38.4	43.5
California	18.8	19.7	21.5	22.8	24.0
Colorado	22.9	24.0	25.3	26.7	28.4
Connecticut	17.7	17.6	17.4	20.8	21.5
Delaware	12.7	13.3	16.5	17.0	19.2
District of Columbia	24.4	26.4	28.7	29.0	31.0
Florida	25.2	23.5	26.6	28.1	30.3
Georgia	25.0	24.4	25.5	28.0	29.7
Hawaii	9.2	7.2	9.4	10.9	10.9
Idaho	26.4	26.4	26.4	26.4	32.5
Illinois	23.8	22.4	24.8	25.6	28.7
Indiana	33.3	30.3	34.3	35.9	41.0
Iowa	30.2	24.5	30.2	30.2	31.7
Kansas	18.9	17.2	18.3	20.5	22.8
Kentucky	35.0	34.0	36.4	39.4	41.6
Louisiana	31.9	30.4	34.1	37.9	40.5
Maine	50.5	50.5	50.5	50.5	50.5
Maryland	14.5	14.9	17.1	17.6	19.2
Massachusetts	25.2	25.4	25.9	28.8	28.8
Michigan	33.5	28.9	32.1	33.8	38.4
Minnesota	33.5	34.1	34.9	35.9	37.0
Mississippi	32.7	32.1	34.3	37.6	39.8
Missouri	28.0	27.5	29.0	29.6	32.8

Montana	11.0	15.0	18.4	18.4	18.4
Nebraska	31.0	34.6	35.4	35.8	37.0
Nevada	17.5	14.7	14.2	19.3	19.6
New Hampshire	10.6	10.6	11.5	10.6	11.5
New Jersey	18.1	18.9	20.8	21.6	24.0
New Mexico	8.4	8.4	9.4	9.5	9.4
New York	24.7	26.1	28.4	30.8	32.6
North Carolina	26.4	26.6	28.9	30.1	33.4
North Dakota	35.7	27.8	31.7	39.6	41.4
Ohio	33.8	30.7	34.3	34.1	38.5
Oklahoma	28.0	25.6	29.2	30.8	33.0
Oregon	21.7	21.7	22.5	24.5	25.3
Pennsylvania	21.1	21.3	23.2	25.1	27.0
Rhode Island	22.5	22.4	21.4	25.2	26.8
South Carolina	23.6	24.5	27.1	28.5	30.2
South Dakota	39.4	33.1	39.4	45.1	48.1
Tennessee	24.1	24.1	26.5	25.8	29.9
Texas	23.2	23.6	26.4	26.8	29.3
Utah	8.0	9.9	8.6	9.9	9.9
Vermont	8.8	7.1	8.5	10.3	8.5
Virginia	16.5	15.8	17.0	17.5	19.5
Washington	22.4	25.1	25.5	25.9	28.1
West Virginia	27.5	28.3	29.3	30.0	31.4
Wisconsin	28.2	33.9	37.2	37.9	40.3
Wyoming	3.7	3.7	8.8	6.5	8.8

NOTES: Poverty rates based on 3-year moving average. Rankings denote decreasing poverty by state from 1-51. FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses.

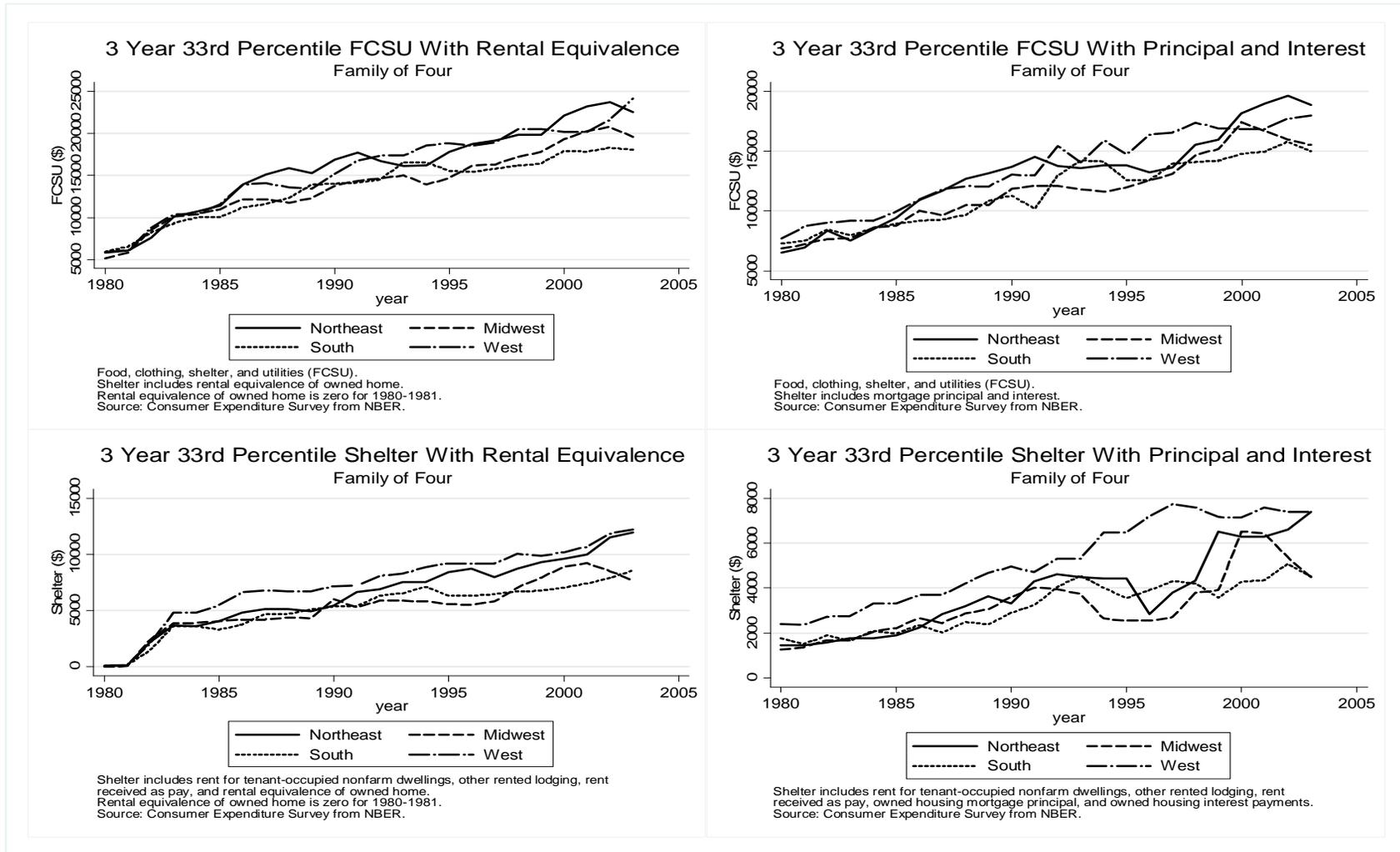
Table 21: State Black Poverty Ranking (Persons) Based on Alternative Poverty Measures, 2008

State	Official Rate	FCSU-1 Threshold; Resources without MOOP	FCSU-1 Threshold; Resources with MOOP	FCSU-2 Threshold; Resources without MOOP	FCSU-2 Threshold; Resources with MOOP
Alabama	18	20	21	19	19
Alaska	50	48	51	49	51
Arizona	35	23	31	24	32
Arkansas	3	2	3	5	3
California	37	36	35	36	37
Colorado	30	29	30	28	30
Connecticut	39	38	40	38	39
Delaware	43	44	43	44	43
District of Columbia	25	17	19	21	22
Florida	22	31	23	25	23
Georgia	23	27	28	26	26
Hawaii	46	49	47	45	46
Idaho	20	18	26	29	18
Illinois	27	33	32	32	29
Indiana	9	11	9	10	6
Iowa	13	26	14	16	20
Kansas	36	39	39	39	38
Kentucky	5	5	5	4	4
Louisiana	11	10	11	7	7
Maine	1	1	1	1	1
Maryland	42	42	41	42	42
Massachusetts	21	22	27	22	28
Michigan	8	12	12	13	11
Minnesota	7	4	7	9	13
Mississippi	10	8	8	8	9
Missouri	16	15	17	20	16

Montana	44	41	38	41	44
Nebraska	12	3	6	11	12
Nevada	40	43	44	40	40
New Hampshire	45	45	45	46	45
New Jersey	38	37	37	37	36
New Mexico	48	47	46	50	48
New York	24	19	20	14	17
North Carolina	19	16	18	17	14
North Dakota	4	14	13	3	5
Ohio	6	9	10	12	10
Oklahoma	15	21	16	15	15
Oregon	33	34	34	35	35
Pennsylvania	34	35	33	34	33
Rhode Island	31	32	36	33	34
South Carolina	28	25	22	23	24
South Dakota	2	7	2	2	2
Tennessee	26	28	24	31	25
Texas	29	30	25	27	27
Utah	49	46	49	48	47
Vermont	47	50	50	47	50
Virginia	41	40	42	43	41
Washington	32	24	29	30	31
West Virginia	17	13	15	18	21
Wisconsin	14	6	4	6	8
Wyoming	51	51	48	51	49

NOTES: Poverty rates based on 3-year moving average. Rankings denote decreasing poverty by state from 1-51. FCSU-1 includes out-of-pocket expenditures on food, clothing, shelter, and utilities, plus 20% for miscellaneous expenses. It does not include repayment of mortgage principal for owned housing. FCSU-2 adds repayment of mortgage principal for owned housing to FCSU-1. The data used in constructing the thresholds is from the Consumer Expenditure Survey (CE). In the original source FCSU-1 is labeled FCSU-CE and FCSU-2 is labeled FCSU. MOOP and MOOP-1 denote out-of-pocket medical expenses.

Figure 15: Regional Variation in Nominal FCSU Expenditures at the 33rd Percentile for a Family of Four, 1980-2003



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