Effectiveness of Antipoverty Policies and State Differences in Cost of Living

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Although costs of living vary tremendously across the US, historically our measurement of poverty and our major antipoverty programs have not taken that variation into account. On the measurement side, this is starting to change with the new Supplemental Poverty Measure (SPM), which takes variation in costs of living into account. But on the benefits side, most major federal antipoverty programs do not vary by geographic area. What does this imply for their effectiveness in lower- vs. higher-cost areas? We provide some of the first evidence on this topic here. This is not simply a methodological or technical concern. Many critics of antipoverty policies are increasingly pointing to the high poverty rates in states like California to argue that more progressive social policies have the perverse effect of resulting in higher poverty rates. But such statements are misleading if such states' high poverty rates actually result from higher costs of living that are not sufficiently offset by social policies, even when those policies are more progressive or generous. This brief sheds light on these debates.

The Supplemental Poverty Measure (SPM) is a comprehensive income poverty measure that takes into account a variety of important factors that the official poverty measure (OPM) does not. These factors include counting non-cash social transfers such as those from the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and housing benefits as resources, as well as taxes paid and tax credits families receive that may augment total family incomes. Another critical factor that the SPM accounts for is the geographic differences in living costs. Americans living in different areas of the country face different costs when trying to meet routine expenses, particularly when it comes to housing. Under the SPM, this translates into differences in poverty thresholds that are adjusted for differences in housing costs at the metropolitan level. Variations in SPM poverty thresholds are most obvious when we look at the states with the lowest and highest SPM thresholds. For example, the average SPM threshold for a two-adult, two-child family in West Virginia is 81% of the national average, whereas Hawaii's average poverty threshold is 125% of the national average (see Table 1). The poverty threshold for such a family is thus about $12,000 higher in Hawaii than in West Virginia.

Table 1: States with the highest and lowest SPM thresholds

State	West Virginia	Hawaii
Supplemental poverty rate (SPM)	12.9%	16.7%
Average national SPM threshold (2 Adult 2 Children)	$26,514	
SPM poverty threshold (2 Adults 2 Children)	$21,389	$33,122
Threshold ratio	0.81	1.25
Official poverty rate (OPM)	17.5%	10.9%
OPM threshold (2 Adults 2 Children)	$24,339	

Overall, these differences in cost yield large impacts on state poverty rates. West Virginia's SPM poverty rate is roughly four and a half percentage points lower than its official rate, while Hawaii's SPM poverty rate is roughly six percentage points higher than its official rate. Due to these differences in the thresholds under the SPM, someone whose income is above the poverty line in West Virginia could be well below the poverty line if they lived in Hawaii and took home the same income. In essence, the same income may buy a family less in Hawaii than in West Virginia. The variations in the SPM poverty line also have a substantial effect on the estimated antipoverty impacts of government programs. The generosity of most government programs does not vary with living costs, which should mute the antipoverty impacts of government programs in high-cost states and amplify those impacts in lower-cost states. In this brief, we examine the relationship between government spending and cost of living to better understand how costs moderate the effects of antipoverty policies.

To understand how the impact of spending on social policies is muted by high regional costs, we first determine what the poverty rate would be in high-cost, moderate-cost, and low-cost areas if families did not receive transfers from antipoverty programs in their current form (measured using the SPM).[1] We use three years of data (2014 to 2016, which cover calendar years 2013 to 2015) from the Urban Institute's TRIM model, which corrects the Current Population Survey data for the underreporting of major social transfers. We divide metro areas into three groups—low-cost, moderate-cost, and high-cost—based on the adjustment factors that are applied to each area's poverty line. Table 2 shows that transfer programs account for a larger reduction in poverty in low cost of living areas than in high cost of living areas. Social transfers appear to have the largest effect on poverty rates in low-cost areas, bringing the poverty rate down by 32.2 percent, as compared to just 18.4 percent in high-cost areas—an effect we refer to as the transfers effect.

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1. The transfers we examine are: (a) social security; (b) unemployment insurance; (c) cash welfare; (d) Supplemental Security Income (SSI); (e) the Supplemental Nutrition Assistance Program (SNAP); (f) school meals; (g) Women, Infants, and Children (WIC); (h) federal housing subsidies; (i) the Low-Income Heating and Energy Assistance Program (LIHEAP); and (j) refundable tax credits like the Earned Income Tax Credit (EITC) and Child Tax Credit (CTC).

Table 2: SPM and the effect of transfers by regional cost–of–living

County	SPM threshold in US Dollars (2 adult 2 children)	SPM	SPM without transfers	Transfers effect
Low-Cost	$22,278	13.2%	19.5%	32.2%
Moderate-Cost	$25,092	14.0%	18.9%	26.0%
High-Cost	$30,202	17.6%	21.6%	18.4%

But how effective would government spending be across different areas if the cost of living were the same across the country? To answer this, we calculated what the transfers effect of government programs would be if the SPM thresholds were not adjusted for regional housing costs (see Table 3). Under this scenario, we see that high cost areas appear to have the highest welfare benefit from social transfers. If the cost of living were truly the same across areas, transfers would reduce poverty by 29.4% in high-cost areas, compared to 22.6% in low-cost areas. This is the reverse of the difference we see when cost of living is factored into the poverty threshold and suggests that the main reason that transfers seem to make less of a difference in high-cost areas is simply that the costs in these areas are greater. It takes more to make ends meet in high-cost areas, but government benefits do not generally reflect this fact. This is important to note, as states with high living costs tend to be wealthier and more urban states, sometimes with more liberal or progressive social policies. Some critics thus argue that progressive social policies are in fact linked with elevated poverty rates. But our results suggest that this link is, if anything, spurious, and results not from differences in policy but rather differences in needs (or costs). Results for individual states can be found in Appendix A.

Table 3: SPM and transfers effect without cost–of–living adjustment

County	SPM	SPM without living cost adjustment	SPM without living cost adjustment and transfers	Transfers effect (without living cost adjustment)
Low-Cost	13.2%	17.2%	22.2%	22.6%
Moderate-Cost	14.0%	14.4%	19.2%	25.0%
High-Cost	17.6%	12.9%	18.2%	29.4%

To further illustrate that the impact of spending on social policies is muted by high regional costs, we can also look at what the poverty rate would be if transfer spending was proportionally adjusted to the cost of living in every area (see Table 4). This is done by simply multiplying total transfers received by the same geographic adjustment factor used to adjust the poverty line. Under this adjustment method, residents of low-cost areas receive slightly less in total transfers and tax credits than they do currently, and residents of high-cost counties receive slightly more in total transfers and tax credits, all proportionally adjusted based off the cost of housing in each

metropolitan area. We present these results simply as a thought exercise and not as a policy prescription. The results presented in Table 4 indicate that were transfers and tax credits were adjusted for the cost of living in each county, the transfers effect of antipoverty policies would be virtually the same across areas.

Table 4: SPM and welfare effect with geographically adjusted tax/transfer bundle

County	SPM	SPM poverty with adjusted tax/transfer bundle	SPM poverty without taxes transfers	Transfers effect if taxes/transfers were adjusted
Low Cost	13.2%	14.5%	19.5%	25.5%
Moderate Cost	14.0%	14.1%	18.9%	25.4%
High Cost	17.6%	16.0%	21.6%	25.9%

The analyses presented here illustrate that cost-of-living (in the SPM, through housing costs) are critical in determining state-level poverty rates. And part of how this plays out is through the efficacy of transfer policies in reducing poverty across areas with different costs of living. Since most social transfers do not vary in generosity with living costs, our results show that the effects of transfers are ultimately muted in wealthier, high-cost areas of the country.

Data and Methods
To estimate the various poverty rates, poverty thresholds, and transfer effects calculated in this brief, we used data from the three survey years of the Census Bureau's Current Population Survey Annual Social and Economic Supplement (CPS-ASEC), 2014, 2015, and 2016. The CPS-ASEC is an annual nationally-representative household survey used to calculate poverty rates in the United States. We use data corrected for underreporting by the Urban Institute using its Transfer Income Model (TRIM). For illustrative purposes, we first selected the two states that had the lowest and highest SPM thresholds, West Virginia and Hawaii, respectively. The SPM thresholds, OPM rates, and SPM rates were all calculated from the three-year CPS data while the OPM threshold was extracted directly from the Census website's 2016 poverty thresholds and all the thresholds were constrained to renters in units with exactly 2 adults and 2 children. We then filtered the CPS data into three cost-of-living categories: low, moderate, and high cost. Using these categorizations, we calculated four different SPM rates: the SPM inclusive of transfers and geographic adjustment, the SPM without transfers, the SPM without the geographic adjustment, and the SPM without social transfers and without the geographical adjustment. Additionally, we simulated what poverty would be if the spending in every area was proportionally adjusted based on the cost of living across areas. We calculated this by summing together all of the safety net programs and tax credits into one transfer/tax bundle and multiplying that value by the geographic adjustment used in the SPM poverty thresholds. Finally, we aggregated these various SPM rates and corresponding welfare effects at the state level (see Appendix A).

Appendix A: State-level SPM and transfer effect

State	SPM	SPM without transfers	SPM without adjusted threshold	SPM without transfers and without adjusted threshold	SPM with adjusted safety net	Welfare effect in reality	Welfare effect without adjusted threshold	Welfare effect with adjusted safety net
Alabama	13.9%	19.9%	18.3%	22.1%	14.9%	30.1%	17.2%	25.2%
Alaska	12.5%	16.2%	10.4%	14.9%	11.5%	22.6%	30.0%	29.2%
Arizona	18.8%	24.4%	20.0%	25.0%	19.4%	23.0%	20.0%	20.5%
Arkansas	14.1%	20.8%	19.6%	24.5%	15.4%	31.9%	20.2%	25.8%
California	21.1%	25.8%	15.4%	21.6%	19.3%	18.1%	28.9%	25.1%
Colorado	11.5%	15.5%	11.5%	15.1%	11.7%	25.7%	24.2%	24.6%
Connecticut	11.5%	15.1%	8.8%	13.3%	10.8%	23.4%	33.5%	28.6%
Delaware	11.8%	16.2%	10.7%	15.5%	11.3%	27.2%	31.3%	30.6%
Florida	19.1%	23.6%	17.3%	22.7%	18.5%	19.2%	23.7%	21.7%
Georgia	16.2%	21.8%	17.9%	22.5%	16.7%	25.6%	20.6%	23.2%
Hawaii	16.7%	21.4%	9.7%	16.9%	14.0%	21.7%	42.8%	34.5%
Idaho	10.1%	16.0%	13.0%	18.3%	11.0%	36.7%	28.8%	31.3%
Illinois	13.6%	17.5%	13.6%	17.4%	13.6%	22.3%	21.8%	22.4%
Indiana	12.0%	17.0%	14.6%	18.2%	12.6%	29.8%	19.9%	25.7%
Iowa	8.9%	13.0%	11.3%	14.9%	9.7%	31.9%	24.0%	25.8%
Kansas	10.8%	15.8%	13.1%	17.2%	11.3%	31.8%	23.8%	28.5%
Kentucky	15.4%	22.5%	20.2%	26.2%	17.3%	31.4%	22.6%	23.1%
Louisiana	18.3%	24.0%	21.0%	25.6%	19.4%	23.5%	18.0%	19.1%
Maine	11.0%	16.5%	12.1%	18.0%	11.5%	33.4%	32.7%	30.3%
Maryland	13.8%	17.2%	9.5%	14.0%	12.4%	19.6%	32.3%	28.0%
Massachusetts	14.7%	20.4%	11.5%	17.7%	13.2%	28.0%	35.2%	35.0%
Michigan	12.6%	17.5%	14.3%	18.7%	13.1%	28.4%	23.7%	25.4%
Minnesota	9.5%	13.9%	9.8%	14.0%	9.6%	31.7%	30.2%	31.0%
Mississippi	16.2%	24.4%	21.0%	27.7%	18.0%	33.4%	24.1%	26.3%
Missouri	11.1%	14.6%	13.5%	16.5%	11.6%	23.8%	18.2%	20.1%
Montana	11.1%	16.0%	14.0%	19.2%	11.9%	30.7%	27.4%	25.4%
Nebraska	9.9%	13.5%	12.1%	15.4%	10.5%	26.5%	21.5%	21.9%
Nevada	17.8%	21.7%	16.8%	21.4%	17.7%	18.1%	21.4%	18.4%
New Hampshire	10.0%	13.4%	8.1%	12.4%	9.3%	25.9%	34.9%	30.9%
New Jersey	15.9%	18.6%	11.2%	15.9%	14.1%	14.5%	29.8%	24.0%
New Mexico	15.4%	22.7%	17.8%	25.0%	16.5%	32.1%	28.8%	27.2%
New York	16.7%	22.8%	13.0%	20.3%	15.2%	26.9%	35.9%	33.5%
North Carolina	14.5%	20.2%	17.8%	22.4%	15.6%	28.0%	20.5%	22.9%
North Dakota	10.1%	12.9%	13.1%	14.6%	10.9%	22.0%	10.0%	15.3%
Ohio	11.6%	17.4%	14.0%	19.5%	12.3%	33.2%	28.2%	29.3%

Oklahoma	12.7%	18.6%	16.5%	21.4%	13.6%	31.9%	23.0%	27.0%
Oregon	13.9%	19.7%	14.9%	20.0%	14.2%	29.1%	25.6%	27.9%
Pennsylvania	11.7%	16.5%	12.3%	16.7%	12.0%	28.9%	26.5%	27.0%
Rhode Island	12.3%	17.7%	11.9%	17.4%	12.2%	30.9%	31.5%	31.4%
South Carolina	15.0%	20.0%	18.0%	22.1%	16.1%	25.1%	18.5%	19.8%
South Dakota	9.7%	14.2%	13.6%	17.0%	10.9%	32.0%	20.1%	23.2%
Tennessee	15.6%	21.0%	19.2%	23.3%	16.6%	25.8%	17.6%	21.0%
Texas	14.8%	20.5%	15.6%	21.2%	15.2%	28.1%	26.3%	26.1%
Utah	9.3%	13.4%	10.9%	14.6%	9.7%	30.5%	25.0%	27.5%
Vermont	8.7%	13.8%	8.2%	13.5%	8.4%	36.9%	39.3%	39.3%
Virginia	13.9%	16.6%	12.5%	15.4%	13.8%	16.2%	18.7%	17.3%
Washington	12.1%	17.9%	11.5%	17.6%	11.7%	32.0%	34.7%	34.4%
West Virginia	12.9%	20.3%	19.0%	23.9%	15.0%	36.5%	20.3%	25.8%
Wisconsin	10.9%	15.0%	12.3%	15.8%	11.3%	27.5%	22.4%	24.6%
Wyoming	9.4%	12.8%	11.5%	14.7%	9.9%	26.8%	21.7%	22.6%