A Geographic Comparison of Child Poverty and Adult Poverty from 2006 to 2009

By KaNin Reese and Jasen Taciak

Introduction

The poverty rate for children has historically been higher than the adult poverty rate (DeNavas-Walt, Proctor, and Smith, 2009). The relationship over time has been fairly steady with child poverty generally being between 5 to 10 percentage points higher than adult poverty (Appendix 1). This disparity is highlighted in 2008 as children represented 35.3 percent of the people in poverty, but only 24.6 percent of the population (DeNavas-Walt, Proctor, and Smith, 2009).

Although there has been extensive research on the social causes and implications of child poverty, timely research has been limited for county-level child poverty by geographic location. Historically, a key indicator of poverty is place of residence with rural areas having a disproportionate share of the poverty population in the U.S. (The Annie E. Casey Foundation, 2010; Tickamyer and Duncan, 1990). Since poverty was first measured in the 1960s, poverty rates have been consistently higher for nonmetropolitan areas than metropolitan areas (U.S. Department of Agriculture, 2003)¹. Based on decennial census data, the USDA argues that the U.S. has 386 counties with persistent poverty with 340 of those counties being in nonmetropolitan areas (2004).² These areas were predominately in the rural South (U.S. Department of Agriculture, 2004).

This research examines the disparity between children's poverty and adult poverty geographically. Using single-year county-level poverty estimates for all counties in the U.S. from 2006 to 2009³, this research explores the spatial location of child and adult poverty for correlations. Further, this research explores whether the disparity between child and adult poverty is marginalized in historically high poverty areas. Because the 2009 data has not been released publicly, preliminary date are not available.

¹ Metropolitan statistical areas are geographical entities defined by the U.S. Office of Management and Budget (OMB). A metropolitan area contains a core urban area of 50,000 or more population and a nonmetropolitan area has a population of less than 50,000. Each metropolitan or nonmetropolitan area consists of one or more counties.

² The USDA defined counties as being persistently poor if 20 percent or more of their populations were poor over the last 30 years (measures by the 1970, 1980, 1990 and 2000 decennial censuses (U.S. Department of Agriculture, 2004).

This research uses a four-year time series (2006 to 2009) instead of a five-year because of differences in the ACS sample from 2005 to 2006. The Group Quarters (GQ) population is included in the 2006 ACS and not included in the 2005 ACS. The portion of the group quarters population in the poverty universe is more likely to be in poverty than people living in households. Direct comparisons would likely result in erroneous conclusions about changes in the poverty status of all people in the poverty universe, and thus should not be made.

Research objectives

This research has three main objectives. Specifically,

- 1. Using data from 2006 to 2009, how do the poverty rates and percent change for the child population (ages 0 to 17) compare to adult poverty (ages 18 and over)?
- 2. How do these county-level poverty rates compare geographically, specifically by region, state, and metropolitan and nonmetropolitan statistical areas?
- 3. In geographic areas with historically higher poverty rates, does the disparity between child poverty and adult poverty become less apparent?

Data

This research uses data from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program from the years 2006 to 2009. SAIPE data are model-based estimates using the American Community Survey (ACS) as the dependent variable and administrative records including aggregated income tax data, Supplemental Nutrition Assistance Program (SNAP) receipt, intercensal population estimates, and Census 2000 as the predictor variables. The modeling techniques allow SAIPE to publish single-year estimates for all counties. The SAIPE estimates are broadly consistent with the direct survey data, but, with the help of administrative record data, the SAIPE estimates are more precise for smaller areas than survey estimates alone.

SAIPE data match the ACS survey in both definition of poverty⁴ and the poverty universe⁵. A single year of ACS sample is used for every county, even those with populations under 65,000 for which the ACS data is unpublished⁶. Although only the counties with nonzero reported poverty in the ACS are used to estimate the parameters of the model, regression predictions were produced for all counties in the U.S.

Methods

We first examine the poverty data from 2006 to 2009 for both child poverty and adult poverty including percent change. Next we explore the geographical differences in the poverty estimates for both data sets by region, state, and metropolitan and nonmetropolitan status. Then we compare the 2006 to 2009 child poverty data to the adult poverty data within specific high poverty regions (including those outlined by USDA) for correlations.

_

⁴ The ACS defines poverty as: A family, and all individuals in the family, is in poverty if their total money income is less than the poverty threshold for the family size and age composition.

⁵ Poverty status excludes unrelated persons under age 15, and all persons in institutions, dorms or barracks. ⁶ ACS 1-year estimates are published annually for areas with a population size of 65,000 or larger; ACS 3-year estimates are published annually for areas with a population size of 20,000 or larger; and ACS 5-year estimates will soon be published annually for all counties and school districts, as well as for other small geographic areas (e.g., census tracts).

References:

The Annie E. Casey Foundation. 2010. "2010 Kids Count Data Book," *The Annie E. Casey Foundation*.

DeNavas-Walt, Carmen, Bernadette Proctor, and Jessica Smith. 2009. "Income, Poverty, and Health Insurance Coverage in the United States: 2008," *Current Population Reports*, U.S. Census Bureau, September.

Tickamyer, Ann R. and Cynthia M. Duncan. 1990. "Poverty and Opportunity Structure in Rural America" *Annual Review of Sociology*, Vol. 16.

United States Department of Agriculture, Economic Research Service. 2004. "Rural Poverty at a Glance," *Rural Research Development Report*, No. 100, July.

_____ 2003. "Comparisons of Metropolitan-Nonmetropolitan Poverty During the 1990s", Rural Development Research Report, No. 96, June.

Appendix 1:

