

Title:

The Effects of SNAP on Child Poverty in California: Modeling CalFresh Benefit Receipt on the Resources Available to Families Using a Range of Assumptions

Authors:

Christopher Wimer, Caroline Danielson, and Sarah Bohn
Stanford Center on Poverty and Inequality and the Public Policy Institute of California

Contact information:

Christopher Wimer
Center on Poverty and Inequality
450 Serra Mall, Bldg 370
Stanford, CA 94305
cwimer@stanford.edu

Caroline Danielson
PPIC
500 Washington Street Suite 600
San Francisco CA 94111
danielson@ppic.org

Sarah Bohn
PPIC
500 Washington Street Suite 600
San Francisco CA 94111
bohn@ppic.org

Abstract:

This paper utilizes augmented data from the 2009 and 2010 American Community Survey (ACS) to model the effects of the Supplemental Nutrition Assistance (SNAP) program on material resources available to families with children in California. California's SNAP program, called CalFresh, and its population are distinct in several ways that potentially distinguish the program's poverty reduction role from its role in other states. We consider the effects of two of these: the exclusion of undocumented immigrants and the exclusion of SSI recipients. We model SNAP receipt and benefit amounts for California families using program rules as they occur, and then under separate conditions where we allow undocumented immigrants and SSI recipients to receive benefits, respectively. We then examine child poverty rates and composition under various policy scenarios and imputation techniques, highlighting how different policy decisions affect the level of economic resources available to families with children.

Extended abstract:

The Supplemental Nutrition Assistance Program (SNAP) has grown to be one of the largest U.S. means-tested programs. Excluding health insurance programs, it is higher in expenditures than the Earned Income Tax Credit and much higher than Temporary Assistance for Needy Families cash assistance. Given this, it is not surprising that the U.S. Bureau of the Census experimental Supplemental Poverty Measure (SPM) for 2009 accords SNAP a substantial role in reducing child poverty (Short, 2011). Relying on augmented American Community Survey (ACS) data, state poverty measures draw the same conclusion (NYC Center for Economic Opportunity, 2012; Isaacs, Marks, Thornton and Seeding, 2011; Wheaton, Giannarelli, Martinez-Schiferl, and Zedlewski, 2011).

However, both the SPM and state poverty measures rely on imputation to correct for survey underreporting of SNAP. The state measures must address shortcomings of the ACS survey question about the SNAP, which include (1) asking only whether anyone in the household (vs. who in the household) received SNAP in the past year and (2) not gathering information about amount of benefits received. Given the important role of SNAP in alleviating poverty, a better understanding of the ramifications of the assumptions researchers have made to impute SNAP benefits appears critical.

Our paper utilizes augmented data from the 2009 and 2010 American Community Survey (ACS) to model the effects of the SNAP program on material resources available to families with children in California. First, we address several issues that have the potential to substantially alter our conclusions about the level of material resources available to families. Second, we impute SNAP benefits under several different assumptions about eligibility. In particular, we consider two key SNAP eligibility exclusions: unauthorized immigration status and Supplemental Security Income (SSI reciprocity). Despite potential income eligibility, an estimated 2.5 million unauthorized immigrants in California are ineligible for SNAP, as are roughly 1.2 million SSI recipients (Passel and Cohn, 2011)—or roughly 10 percent of California's total population, and a higher share of its income-eligible SNAP population.

California's size and demographic composition make the impact of these eligibility criteria both (1) critically important to take account of for SPM estimates and (2) feasible to evaluate empirically. Taken together, this set of exercises will give us a range of estimates for SNAP that we can then use to assess for a large, diverse state the sensitivity of the conclusions made about SNAP's poverty alleviation role to the approaches taken to impute SNAP benefits. The role of SNAP in California is also particularly likely to be sensitive to assumptions made because only roughly half of eligibles take up the program (Cunyngham, Castner, and Sukasih, 2012).

Data

This exercise relies on representative survey data on household income and program participation from the American Community Survey, augmented with administrative data for California's SNAP program.

ACS: Our base household data are the 2009 and 2010 samples from the Census Bureau's American Community Survey. The ACS includes detailed household income and SNAP participation information, but importantly does not ask households about SNAP benefit amount (unlike recent Current Population Survey-ASEC samples). However, to obtain reliable poverty estimates for the state and sub-regions (counties or county groups), it is necessary to exploit the large ACS sample.

SNAP Quality Control samples: As part of the U.S. Department of Agriculture's quality control program, each state draws a sample of roughly 100 SNAP cases per month and verifies benefits. We use a version of these data released by Mathematic Policy Research (available at <http://hostm142.mathematica-mpr.com/fns/>). These data enable us to model the amount of monthly benefits by household characteristics.

State reports of recipients and benefits received: The California Department of Social Services produces several monthly reports (available at <http://www.dss.cahwnet.gov/research/>) that list, by county, number of recipients and amount of benefits. We use these data to create administrative targets.

Methods

Our goal is to assess the impact of various research decisions surrounding the SNAP program on the ultimate SPM-style California poverty measure. However, key SNAP decisions are a few of the many that go into creating a full SPM. In general, we will follow the approach of researchers in other states to-date in creating state-level SPM-style measures (NYC Center for Economic Opportunity, 2012; Isaacs, Marks, Thornton and Seeding, 2011; Wheaton, Giannarelli, Martinez-Schiferl, and Zedlewski, 2011). Note that there is, as yet, no standard method that can be applied to every state, given important differences in state-level safety net programs as well as a bevy of choices that must be made by the researcher.

Embedded in the procedure for developing an SPM for California is the procedure for imputing SNAP benefits to recipients in the ACS data, which is the focus of this paper. We will focus on the impact of three key modeling decisions for the SNAP procedures, which we outline below. Before doing so, we describe the general method for imputing SNAP benefits to Californians in the ACS. First, in ACS data we define eligible family units (distinct from households as surveyed) based on CalFresh program rules. This number of eligible units exceeds those who report

participation due in part to under-reporting (but also, of course, due to low take-up as well as error in measuring the concept of household SNAP receipt). Thus, next we select units from the pool of eligibles who do not report receipt to approximate state administrative totals. Last, using a model of benefit amounts derived from the SNAP Quality Control data, we impute benefit amount to each ACS SNAP unit.

Within this framework, we focus on the impact of three key decisions: receipt of SNAP in households split into multiple program units, ineligibility of SSI recipients, and ineligibility of unauthorized immigrants.

Receipt of SNAP in split households: The first step in imputing SNAP benefits to ACS respondents is to redefine ACS households into SNAP units according to program rules. This involves a number of judgment calls with regard to relationships between individuals in the ACS. Given those choices, an additional complication is that the ACS question on SNAP receipt asks whether anyone in the household received benefits, but, as stated above, the household is not necessarily the same as the SNAP unit. For example, an adult sibling who lives with a mother-child dyad would not be required to apply for SNAP together if the three do not generally prepare and eat meals together. When an ACS household reporting receipt of benefits is split into multiple SNAP eligible units, we may choose to impart SNAP receipt to only one or to several sub-units. We will model the impact of these various decisions on the ultimate SPM rates for California.

SSI participant ineligibility: California is the only state to maintain a policy, known as “SSI cash out,” that augments SSI monthly checks by \$10 in lieu of SNAP eligibility. We will model the impact of various decisions regarding SNAP eligibility with regard to SSI program status. Income from SSI is asked at the person level in the ACS; however, under- or mis-reporting of SSI as some other type of benefit factors into appropriate exclusion of SSI recipients from SNAP-eligible households.

Unauthorized immigrants: Last, we will assess the impact on our SPM-style measure for California based on the treatment of unauthorized immigrants in the data. This is a large group in California, both in sheer number and because – were it not for their status – many would be eligible based on income for safety net programs. The key challenge here is that unauthorized immigrants are not directly identified in the ACS data. We will use proxies based on previous research (Passel and Cohn, 2011; Bohn, Lofstrom and Raphael, 2011) to identify likely unauthorized immigrants in the ACS, ensuring that our counts match (or under-count) new estimates of the geographic distribution of unauthorized immigrants across the state (Hill and Johnson, 2011). We can model the impact of various decisions within this methodology on our ultimate estimates of an SPM-style poverty measure for California.

References

Bohn, Sarah, Magnus Lofstrom, and Steven Raphael. 2011. *Lessons from the 2007 Legal Arizona Workers Act*. San Francisco, CA: Public Policy Institute of California. Available at <http://www.ppic.org>.

Cunningham, Karen, Laura Castner, and Amang Sukasih. 2012. *Empirical Bayes Shrinkage Estimates of State Supplemental Nutrition Assistance Program participation Rates in 2007-2009 for All Eligible People and the Working Poor*. Princeton, NJ: Mathematica Policy Research. Available at <http://www.fns.usda.gov/ora/MENU/Published/snap/FILES/Participation/Techpartrate2007-2009.pdf>.

Hill, Laura and Hans Johnson. 2011. *Unauthorized Immigrants in California: Estimates for Counties*. San Francisco, CA: Public Policy Institute of California. Available at <http://www.ppic.org>.

Isaacs, Julia, Joanna Young Marks, Katherine Thornton, and Timothy Seeding. 2011. "The New Demography of Poverty: The Wisconsin Poverty Measure and Effects of Federal and State Policies in Wisconsin". Working paper prepared for Population Association of America annual meetings.

NYC Center for Economic Opportunity. 2012. "The CEO Poverty Measure, 2005-2010". Working paper.

Passel, Jeffrey and D'Vera Cohn. 2011. "Unauthorized Immigrant Population: National and State Trends, 2010". Pew Hispanic Center.

Short, Kathleen. 2011. "The Research Supplemental Poverty Measure". *Current Population Reports*, Washington, DC: United States Census Bureau.

Wheaton, Laura, Linda Giannarelli, Michael Martinez-Schiferl and Sheila Zedlewski. 2011. "How Do States' Safety Net Policies Affect Poverty?" *Working Families Paper 19*, Urban Institute.