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Alleviating Poverty in the United States The Critical Role of SNAP Benefits

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What Is the Issue?

The Supplemental Nutrition Assistance Program (SNAP, formerly called the Food Stamp Program) plays a vital role in the social safety net in the United States, providing almost \$72 billion in benefits in 2011. An important measure of SNAP's effectiveness is the extent to which the program reduces poverty. Evaluations of the antipoverty effect of safety net programs often focus on the *rate* of poverty. However, the poverty rate reflects only one aspect of the antipoverty effect of a safety net program—whether or not adding program benefits to a family's resources lifts them above the poverty threshold. Two other measures, portraying the depth and severity of poverty, capture how program benefits increase income among the poor even if they do not lift them out of poverty. Both measures provide richer information on how program benefits improve the well-being of poor families, and the severity measure is particularly sensitive to how program benefits increase well-being among the poorest of the poor.

In this report, we calculated the rate, depth, and severity of poverty, using the definition of family income in the official U.S. poverty estimation (which does not include SNAP benefits). We then estimated the reduction in the three poverty measures for the years 2000 through 2009, after including SNAP benefits in family income. Our analysis focuses on a time period that includes the 2001 and the 2007-2009 recessions as well as the implementation of additional SNAP benefits through the 2009 stimulus legislation.

What Did the Study Find?

SNAP benefits have a relatively stronger effect on the depth and severity of poverty than on the prevalence of poverty, and have a particularly strong alleviative effect on poverty among children, who experience significantly higher rates of poverty than the overall population.

Specifically, we found that:

• SNAP benefits led to an average annual decline of 4.4 percent in the prevalence of poverty from 2000 to 2009, while the average annual decline in the depth and severity of poverty was much larger (10.3 and 13.2 percent, respectively).

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- When SNAP benefits are included in family income, the average annual decline from 2000 to 2009 in the depth of child poverty was 15.5 percent and the average annual decline in the severity of child poverty was 21.3 percent.
- SNAP benefits reduced the depth and severity of poverty in both metropolitan areas and nonmetropolitan areas, with somewhat greater poverty reductions among individuals in nonmetropolitan areas.

SNAP's antipoverty effect was strongest in 2009, when benefit increases were authorized by the American Recovery and Reinvestment Act (ARRA), also known as the stimulus package. In 2009, SNAP benefits:

- Reduced the depth of child poverty by 20.9 percent and the severity of child poverty by 27.5 percent.
- Ensured that the depth and severity of poverty in the overall population increased only slightly from their 2008 levels despite worsening economic conditions.

Our analysis shows that examining the basic poverty rate on its own leads to an understatement of the role of SNAP benefits in the reduction of poverty. Extending the analysis to include the poverty-gap and squared-poverty-gap indices adds to our understanding of the role SNAP plays in improving the welfare of individuals in low-income households.

How Was the Study Conducted?

We used 10 years of cross-sectional data from the U.S. Census Bureau's Annual Social and Economic Supplement to the Current Population Survey (CPS), a nationally representative sample of households that provides information on several different sources of income, including in-kind benefits such as SNAP. SNAP benefits are not included in the definition of family income used in the official U.S. poverty calculation. We added the value of SNAP benefits to family income, and compared several measures of annual poverty with and without SNAP benefits. We used the CPS for this analysis because it is the data source for official U.S. poverty estimation. A limitation of the CPS is that SNAP participation and benefits are under-reported in the survey, thus leading to an underestimate of SNAP's effect on poverty.

To estimate the effect of SNAP on poverty, we examined how supplementing income with SNAP benefits affects the headcount, poverty-gap, and squared-poverty-gap indices. The headcount is simply the proportion of persons living in poverty, or the poverty rate. The poverty-gap index measures the depth of poverty and is defined by the mean distance below the poverty threshold, where the mean is formed over the entire population (the nonpoor are counted as having zero poverty gap). The third measure is the squared-poverty-gap index, which provides a measure of the severity of poverty, and is defined as the mean of the squared proportionate poverty gaps.