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The Impacts of Supplemental Nutrition Assistance Program Redemptions on County-Level Employment

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What Is the Issue?

The Supplemental Nutrition Assistance Program (SNAP)—previously called the Food Stamp Program—is the third-largest means-tested Federal program (in terms of outlays) and is the largest USDA program. Inflation-adjusted SNAP payments nearly quadrupled between 2001 and 2013, in part due to changes in policies intended to help stimulate the economy during and after the Great Recession. Increased SNAP benefits may increase economic output and employment by stimulating demand for food and through multiplier effects on other economic sectors, particularly during a recession. A large increase in SNAP benefits authorized by the American Recovery and Reinvestment Act (ARRA) of 2009 was predicted to have the largest impacts on gross domestic product (GDP) per dollar spent of any of the spending authorized by ARRA, mainly because SNAP benefits are targeted to low-income people, who have a high propensity to spend rather than save. Although the stimulus impacts of SNAP payments have been predicted using national economic simulation models, no published studies have investigated the actual impacts of these payments after the fact using statistical methods.

This study fills that gap by using statistical analysis to estimate the impact of SNAP redemptions (the value of SNAP benefits redeemed by SNAP-authorized stores) on county-level employment from 2001 to 2014. The average impact is estimated for this entire period, as well as for three subperiods: prior to the Great Recession (2001-07), a period including the recession and its immediate aftermath (2008-10), and after the recession (2011-14). The use of county-level data enables researchers to determine the extent to which impacts differ between metro and nonmetro counties and the extent to which SNAP redemptions in one county affect employment in neighboring counties ("spillover effects"). The study also compares the impacts of SNAP redemptions to the impacts of other transfer payments and other Federal spending in general on employment.

What Did the Study Find?

SNAP redemptions per capita grew rapidly between 2001 and 2011, more than tripling in inflation-adjusted terms, then declined by about 12 percent between 2011 and 2014. The value of SNAP redemptions per capita varied widely across counties.

Key findings include the following:

Ouring the 2001 to 2014 period, SNAP redemptions had a positive average impact on county-level employment in nonmetro counties but a statistically insignificant impact in metro counties. Employment increased by about 0.4 job per \$10,000 of additional SNAP redemptions on average in nonmetro counties, while the estimated impact in metro counties was much smaller (0.05 job per \$10,000 of SNAP redemptions) and statistically insignificant.
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- The impact of SNAP redemptions was much greater during the recession period (2008-10) in both nonmetro and metro counties. SNAP boosted employment by about 1.0 job per \$10,000 of additional SNAP redemptions in nonmetro counties and by about 0.4 job per \$10,000 of additional SNAP redemptions in metro counties during the recession. Prior to the recession (2001-07), SNAP redemptions increased employment in nonmetro counties by about 0.2 job per \$10,000 of SNAP redemptions but reduced employment in metro counties by about 0.2 job per \$10,000 of SNAP redemptions. The impacts of SNAP redemptions after the recession (2011-14) were statistically insignificant for both nonmetro and metro counties.
- During the Great Recession, the impacts of SNAP redemptions per dollar spent were larger than impacts per dollar spent on other Federal or State government transfer payments combined—including Social Security, Medicare, Medicaid, unemployment insurance compensation, veterans' benefits and other government transfer payments to individuals—and were much larger than the impacts of total Federal Government spending per dollar spent. The estimated average impact of other government transfer payments in all counties during the recession was less than 0.2 job per \$10,000, while that for all other Federal Government spending besides SNAP and other transfer payments during the recession was much smaller.
- o In nonmetro counties over the entire study period, SNAP redemptions in neighboring counties had as large an impact on local employment as SNAP redemptions in the same county (0.4 job per \$10,000). In contrast, findings reveal no such spillover effects for all counties on average or in metro counties.

The finding of relatively large impacts of SNAP on economic activity during the recession is consistent with previous studies based on national economic models, but the size of impacts estimated in this study are larger. However, this study's findings are not strictly comparable to those of prior studies that estimated national-level impacts of SNAP, since county-level impacts may represent to some extent shifts in economic activity across counties that could have smaller aggregate effects on national-level employment.

How Was the Study Conducted?

This study used data on employment and transfer payments from the U.S. Bureau of Economic Analysis (BEA), data on SNAP redemptions from USDA's Food and Nutrition Service, and ERS data on SNAP policies. The study also used county-level demographic variables and Federal Government spending data from the U.S. Census Bureau. This study's measure of SNAP spending may be less subject to measurement error than data on other types of government spending, which tends to reduce impact estimates in statistical analysis. The SNAP redemptions data used by ERS are subject to audit and of high quality. "Employment" is defined by the BEA as a "count of jobs, both full-time and part-time," and "includes wage and salary jobs, sole proprietorships, and individual general partners, but not unpaid family workers or volunteers." ERS researchers used a variety of statistical methods to estimate impacts of SNAP redemptions on employment, but the preferred model was the ordinary least squares second difference (OLS-SD) estimator. In alternative analyses, researchers addressed concerns about potential reverse causality (changes in employment may affect as well as be affected by SNAP redemptions) using instrumental variables estimators, which produced estimates that were as large as or larger than the estimates produced by the OLS-SD model.