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# The Stimulus Act of 2009 and Its Effect on Food-At-Home Spending by SNAP Participants

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## What Is the Issue?

Understanding the effect of Supplemental Nutrition Assistance Program (SNAP) benefits on food spending is an important food assistance policy question. However, the investigation requires disentangling the effect of additional benefits from household characteristics that determine participation choices. This report does so by using a difference-in-differences estimation approach. The American Recovery and Reinvestment Act of 2009 (ARRA), commonly known as the Stimulus Act, included a provision that increased SNAP benefits by nearly 14 percent in April 2009. This temporary boost in benefits (benefit increases ended in October 2013) provides a unique opportunity to measure how participants respond to changes in benefit levels. Because SNAP accounts for a majority of USDA's food and nutrition assistance budget, policymakers and their constituents are particularly interested in how SNAP participation and benefit levels affect the spending behavior of low-income households.

## What Did the Study Find?

Previous research and neoclassical economic theory predict that SNAP households treat SNAP benefits no differently than cash income when it comes to expenditure decisions. This means that the increase in benefits after ARRA should cause households to make the same spending choices as if they received an identical increase in cash income. More technically, the marginal propensity to spend (on food) out of SNAP and cash income is theoretically the same for infra-marginal households—those that spend more on food than their SNAP benefit.

This study examines the effects of the ARRA-induced increase in benefits by estimating the effect on households' food-at-home expenditure share of total expenditures. First, the study analyzes the entire population in the sample and compares the food-at-home share of SNAP participants to similar nonparticipants. Then, the population is separated into four, potentially overlapping, subgroups: households at the lowest income quartile, single parent-headed households, elderly households, and households with an unemployed member. Findings include:

- Among the entire SNAP population, for every additional \$1 received in benefits, the household will spend 53 cents on food. This implies that the additional 47 cents is allocated to

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other household expenditures. By contrast, previous studies comparing SNAP and cash income have found that every additional \$1 received in cash will result in just 5-10 cents more spent on food.

- Lowest income households (here, those with incomes under \$15,000 per year), single-parent households, and households with an unemployed member increased the food share of total expenditures the most in response to increased benefit levels. The lowest income households increased food share by 3.5 percentage points, single-parent households by 2.4 percentage points, and unemployed households by 3.2 percentage points. Elderly households showed no significant changes in food share after an increase in SNAP benefits, perhaps due to reliance on other government assistance and savings. Although these results are statistically significant, they cannot be compared across groups because the subgroups likely overlap; a single-parent household may also be in the lowest income subgroup.
- SNAP households are only allowed to use benefits on food at home. Restaurant and takeout food (known as food away from home) cannot be purchased using SNAP. Therefore, the food-away-from-home share of total expenditures should not increase after the increase in SNAP benefits. This report found that the *food-away-from-home* share of total expenditures did *not* change after ARRA, implying that higher benefits disproportionately affected food-at-home spending, above and beyond the income effect (the increase in *all* household spending due to a higher income).
- Results suggest that SNAP benefits are not interchangeable with other income because the marginal propensity to spend on food out of SNAP is higher than the propensity to spend out of cash income. As such, higher SNAP benefits can redirect households' spending behavior toward food at home.

## How Was the Study Conducted?

This study uses data from the 2008-09 Bureau of Labor Statistics' Consumer Expenditure Survey (CE). The CE is a nationally representative survey that collects information on household purchases as well as the amount of benefits received from food assistance programs such as SNAP. Respondents are interviewed quarterly for five consecutive quarters. Changes in spending behavior are analyzed using econometric models that control for other mutable factors.

To overcome empirical challenges faced by many previous studies associated with analysis of SNAP participants, the study uses a difference-in-differences approach to estimate changes in food share after the increase in SNAP benefits. This controls for the effects of changing macroeconomic circumstances as well as unobserved household-level characteristics that may cause estimates to misrepresent true behavior.