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The Supplemental Nutrition Assistance Program: A central component of the social safety net

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Overview

The Supplemental Nutrition Assistance Program (or SNAP, formerly known as “food stamps”) is the second largest anti-poverty program for children in the United States and plays a critical role in reducing food insecurity. This brief presents the most recent data available regarding SNAP’s impacts on food insecurity and poverty. I also discuss new research regarding SNAP’s long-term effects on families’ well-being. Assessing the long-run causal impact of SNAP is now possible using variation across counties and over birth cohorts in the timing of the introduction of the program, beginning in 1964. The results are striking. SNAP impacts health, education and self-sufficiency, and the benefits of childhood exposure persist through adulthood. Finally, SNAP has desirable macro-economic characteristics as an automatic stabilizer, and played a major role during the Great Recession. I argue that SNAP is central to the United States’ broader social safety net.

1. SNAP plays a critical role in reducing food insecurity and poverty

What is SNAP?¹

The Supplemental Nutrition Assistance Program provides nutrition assistance benefits to low-income individuals and families. It is a means-tested transfer program, with eligibility contingent on a lack of financial resources.² Households with gross monthly income below 130 percent of the poverty line, and less than \$2,250 in countable assets³ are eligible to receive vouchers to buy unprepared food in most grocery stores and supermarkets. SNAP benefits are set federally, and amount to about four dollars per person per day. SNAP recipients receive their benefits through Electronic Benefit Transfer (EBT) cards that work like debit cards but can be used only for food purchases.

In 2014, SNAP reached 46.5 million people at a cost of \$74.6 billion (USDA 2016). It is the largest food and nutrition program, dwarfing the National School Lunch Program (\$11.4 billion), Supplemental Nutrition Program for Women, Infants and Children (WIC) (\$6.2 billion), and the School Breakfast (\$3.7 billion) Program. SNAP is also the most universal and unrestricted of all food programs.

Using a variety of research designs, there is fairly consistent evidence that SNAP leads to a decrease in food insecurity. One approach uses comparisons of the same family pre- and post-SNAP takeup (Mabli *et al.* 2013, Mabli, and Ohls 2015) and another uses expansions in benefits from the federal stimulus (Nord and Prell 2011). The most common approach uses variation in state implementation policies that generates differences in take-up across states over time (Mykerezi and Mills 2010; Ratcliffe *et al.* 2011; Shaefer and Gutierrez 2013; Yen *et al.* 2008). For example, Ratcliffe *et al.* (2011) find that SNAP receipt reduces food insecurity by roughly 30 percent and reduces the likelihood of being very food insecure by 20 percent.

¹ This brief draws on several papers, including Hoynes (2016), “Why SNAP Matters” (https://gspp.berkeley.edu/assets/uploads/research/pdf/Hoynes_Why_SNAP_Matters_1-25-16.pdf), and Hoynes and Schanzenbach (2016) “The Safety Net as an Investment” (<http://www.ipr.northwestern.edu/publications/docs/policybriefs/brief-snap-food-stamps-safety-net-investment-schanzenbach-hoynes.pdf>).

² Means-tested programs contrast for example with unemployment insurance, which depends on prior employment but is available to all income levels.

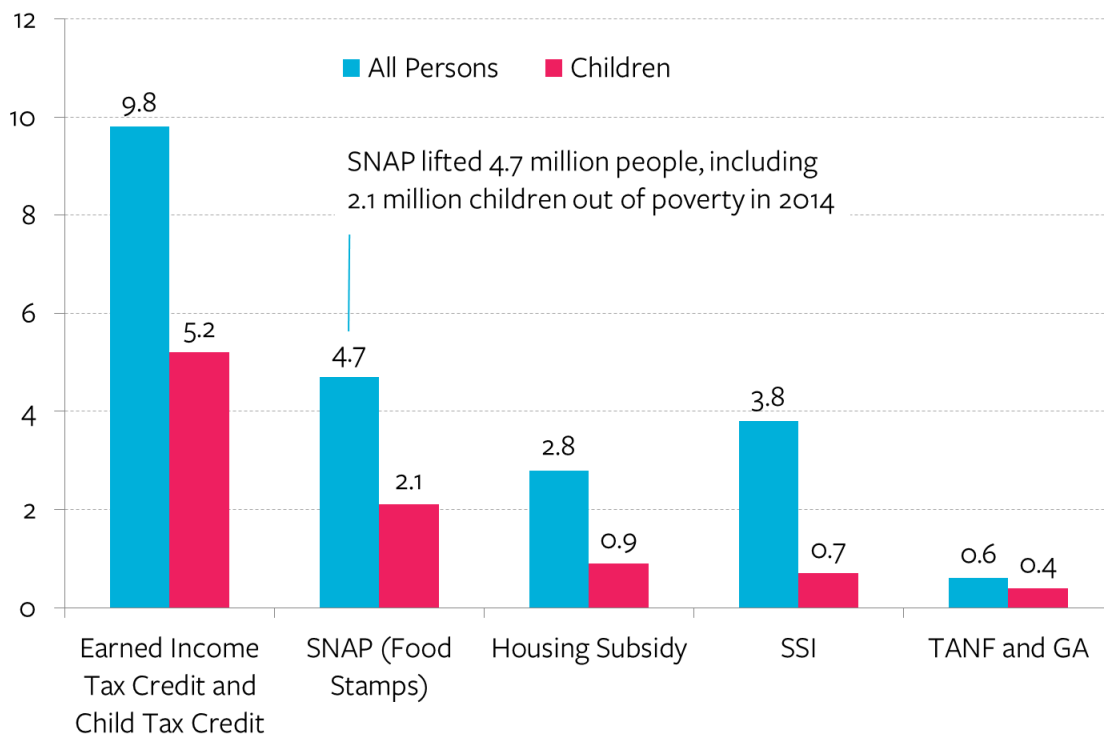
³ Other eligibility criteria, including employment requirements and immigrant eligibility can be found at: <http://www.fns.usda.gov/snap/eligibility>. States have some latitude with regard to eligibility criteria, but not with regard to benefit levels.

However, the need for nutrition programs persists in the United States. Even with the SNAP and other programs in place, about 17 million households were food insecure in 2014, according to the USDA definition and 7 million households had “very low” food security.⁴

SNAP is the second biggest anti-poverty program for children in the United States, and the third biggest for adults

SNAP is the second largest initiative to reduce poverty in the US for children, after the Earned Income Tax Credit (EITC) (see Figure 1). It is the third biggest program for adults, after Social Security (not shown on the figure below) and the EITC.

FIGURE 1 Persons lifted out of poverty by the biggest means-tested income support programs (millions, 2014)



Source: Author’s tabulations of 2015 CPS and Supplemental Poverty Measure.

⁴The USDA defines food insecurity to be the condition when access to adequate food is limited by a lack of income and other resources. The first measure of food insecurity was implemented in 1995, when the food security questionnaire was added to the Current Population Survey. For more information, see: <http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx>.

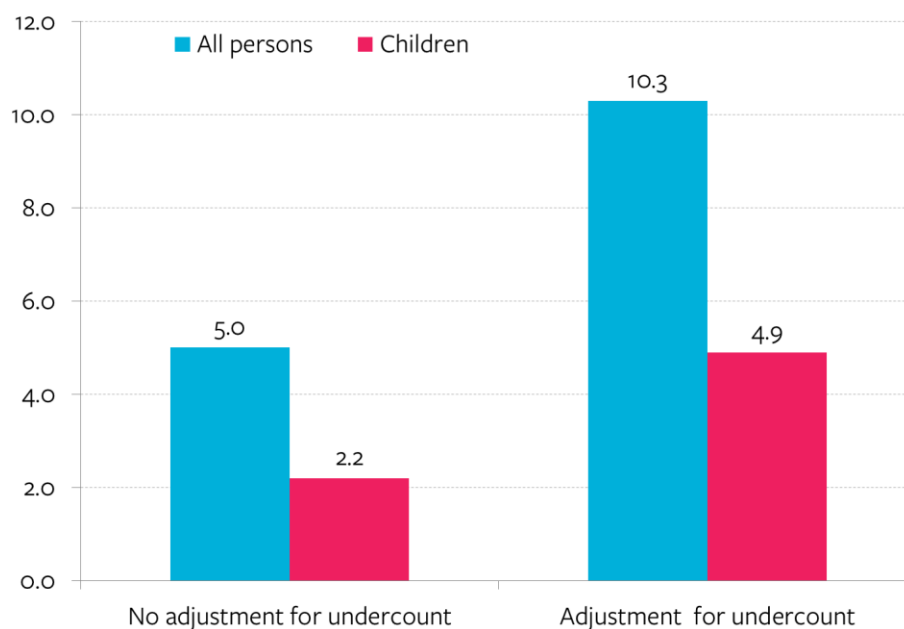
Census calculations based on the Current Population Survey indicate that:

- The EITC, together with the Child Tax Credit (CTC), lifted 9.8 million people, including 5.2 million children, out of poverty in 2014.
- SNAP lifted 4.7 million people, including 2.1 children, out of poverty. It lifted fully 1.3 million children out of extreme poverty, defined as income less than half of the poverty threshold (CEA 2015).

The effects of SNAP on poverty are larger than we thought and could be even bigger if participation increased

As large as these SNAP antipoverty estimates are, they likely underestimate the full effect. These poverty calculations are based on households' self-reports of their SNAP benefits. Recent research shows that households underreport their receipt of SNAP as well as other government transfers such as Temporary Assistance for Needy Families (TANF) and Housing Subsidies (Meyer, Mok, and Sullivan 2015, Meyer and Mittag 2015). This work shows that SNAP underreporting is on the order of 40 percent. Adjusted for this, in 2012 SNAP lifted 10.3 million people, including 4.9 million children, out of poverty, about equal to the combined effects of the EITC and Child Tax Credit (Sherman and Trisi 2015). (See Figure 2.)

FIGURE 2 Persons lifted out of poverty by SNAP, Adjustment for undercount (millions, 2012)



Source: Author's tabulations of 2015 CPS and Supplemental Poverty measure and Sherman and Trisi (2015).

SNAP's effects on poverty could be even greater if participation increased. Approximately 83 percent of eligible individuals receive SNAP benefits, with important variation across demographic groups and regions. For example, the take-up rate in California is only 63 percent, making it one of the lowest participation states in the country (Cunningham 2015). Experiences from different state policies suggest ways forward including connecting enrollment with other state and federal programs and making the application process more accessible and user-friendly (e.g., via online applications and repealing fingerprinting requirements) (Hoynes and Feldstein 2015).

2. SNAP boosts adults and children's well-being and these effects persist in the long-run

SNAP improves health outcomes among recipients

There are two broad channels through which the additional income provided by SNAP can improve health: (1) it can help recipients to buy more and better quality food (i.e. an “income effect”, in economic terms); (2) it can help recipients free up money for other expenditures, such as health and preventive medical care (i.e. a “substitution effect” in economic terms).

There is evidence that both mechanisms are at play (Gregory and Deb 2015, Kushel *et al.* 2005). SNAP recipients are more likely to report they are in very good or excellent health than comparable individuals who are not receiving SNAP. They also report fewer visits to the doctor, hospital, or emergency room. By addressing food insecurity, SNAP is also likely to reduce depression and anxiety among recipients.

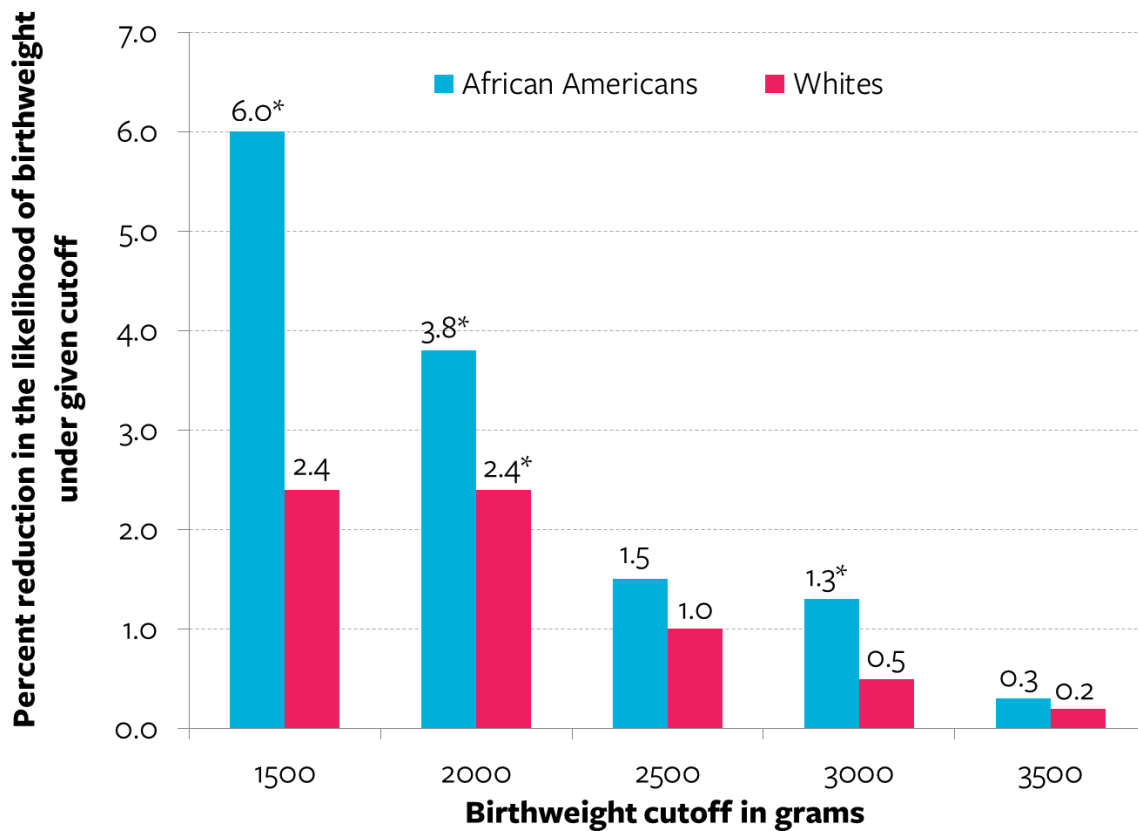
Finally, SNAP helps people with diabetes manage their disease better. A series of studies (Seligman and Schillinger 2010, Seligman *et al.* 2011, Seligman *et al.* 2012, Seligman *et al.* 2012 and Seligman *et al.* 2014) show that hospital admissions rise over the course of the month among low-income individuals, as SNAP benefits are close to being exhausted. The admission rate is 27 percent higher in the last week of the month compared to the first week of the month. This pattern does not exist for middle and high-income individuals.

SNAP's positive impacts on children start before birth and are visible at school

In a recent study, colleagues and I (Almond *et al.* 2011) found that when an expectant mother had access to the Food Stamp Program – the original name of SNAP – during her pregnancy's third trimester, it improved her baby's birth weight. The improvements are largest in more

vulnerable populations, such as babies born in high-poverty counties, and those babies with the lowest birth weights. Figure 3 shows that African American and White babies are respectively 6 percent and 2.4 percent less likely to be born with very low birth weight (less than 1,500 grams) after the introduction of the program in the mother’s county of residence. The figure also shows that the improvements in birth weight are largest among the lowest-birth-weight babies.

FIGURE 3 Impact of In Utero Exposure to Food Stamps: Reduction in Likelihood of Birth Weight Below Selected Cut-Offs



Source: Almond, Hoynes and Schanzenbach (2011).
 Note: * denotes estimate statistically significantly different from zero.

This is one of the first studies to estimate the causal impact of SNAP on health outcomes. Until recently, it has been notoriously difficult for researchers to compare outcomes of SNAP recipients to a good “control group”, i.e. people who do not participate but who would have been likely to have similar outcomes in the absence of the program. As a result, studies that only looked at the differences in outcomes between SNAP and non-SNAP households tended to greatly underestimate the positive impacts of SNAP. Eligibility is (relatively) uniform across

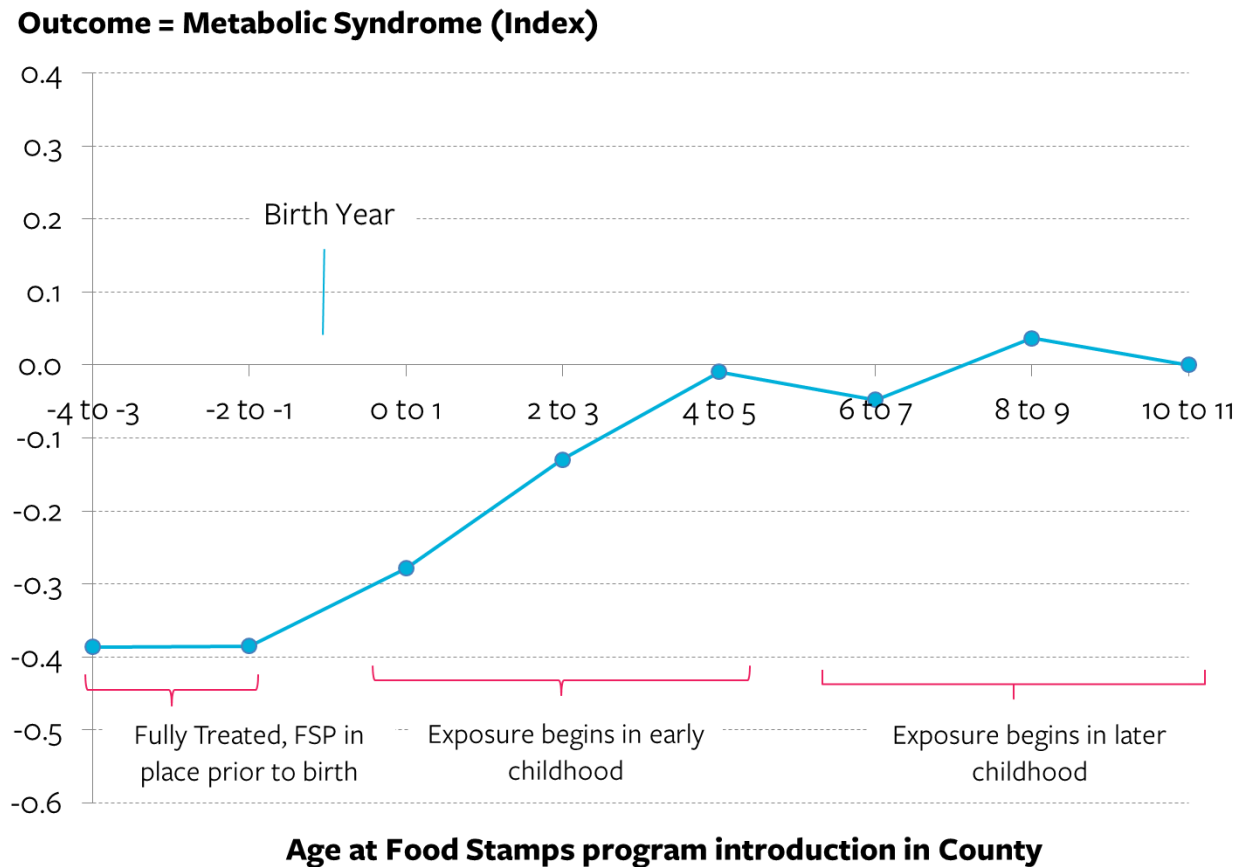
the country and SNAP policies have not changed much over time, frustrating approaches that have been used successfully to study other programs. In this paper and two others (Hoynes and Schanzenbach 2009, and Hoynes, Schanzenbach and Almond 2016), we use variation from the gradual, county-by-county roll-out of the program between 1961 and 1975 to estimate the causal impact of SNAP. We use a “difference-in differences” strategy, which essentially looks at the result of two successive differences for each introduction of the SNAP program in a county. We compare outcomes for children born the same year in two different counties within the same state, in a year where one county had the program and the other didn’t (difference #1). We compare these differences to differences among children who are born earlier or later from the same two counties (difference #2). This allows us to control for the effects of county of residence, birth year, and a host of potentially confounding effects.

SNAP’s impacts on children persist through adulthood

We have recently been able to establish that SNAP’s impacts persist for decades, using both the variation from the gradual roll-out of the program in the 1960s and 1970s and panel data from the University of Michigan’s Panel Study of Income Dynamics (PSID). With the benefit of time, researchers are now able to observe a host of economic and health outcomes among individuals in their 30s to 50s who experienced variation in their exposure to the nutrition assistance program during their childhoods in the 1960s and 1970s.

Our results (Hoynes, Schanzenbach, and Almond 2016) are presented in Figure 4. To summarize adult health status, we combined measures of obesity, body mass index, and presence of chronic conditions such as diabetes and high blood pressure into a measure of health status we call the “metabolic syndrome index”. A lower value represents better health. Individuals with access to food stamps before age five had measurably better health in adulthood. If the nutrition assistance program was introduced prior to a child’s birth, their subsequent adult health improved by 0.4 standard deviation units, as measured by the index we constructed. Impacts are larger for children first exposed to the nutrition assistance program at a younger age. We find that relative to being first exposed at ages 10-11, further exposure at ages 5-10 does not lead to further long-term benefits.

FIGURE 4 Effects of the introduction of Food Stamps program on Metabolic Syndrome Index, by a Child’s Age at introduction



Source: Hoynes, Schanzenbach and Almond (2016).

We also show SNAP increased economic self-sufficiency in adulthood among women who had childhood access to SNAP. Children with access to the program were more likely to earn more and rely less on the social safety net as adults than those who did not.

All these findings are consistent with recent research showing that other programs helping low-income families to meet basic needs (e.g. the EITC or Medicaid) have important long-term benefits for children.⁵

⁵ See Furman and Ruffini (2015) for a survey of these findings.

3. SNAP played a central role during the Great Recession

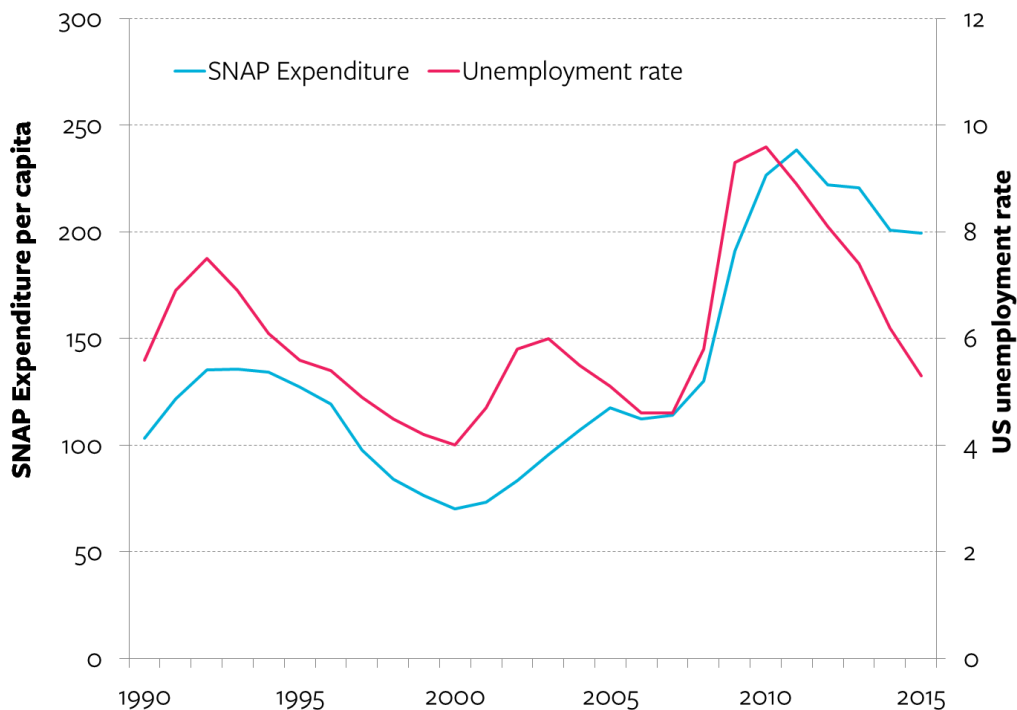
SNAP is countercyclical and reacts quickly in times of need

SNAP is countercyclical. At the individual level, when families experience a decrease in their earnings (after a job loss for example), the benefit amount received by the eligible families increases. The reverse is true when a family see its earnings increasing (Bitler and Hoynes 2016). Thus, SNAP provides substantial countercyclical assistance, rising in recessions and declining in economic expansions. In contrast, TANF (which is block granted) responded little in the Great Recession and showed no evidence of expanding more in states with large unemployment increases (Bitler and Hoynes 2010, 2016). The EITC provides some countercyclical protection for married couples with moderate incomes (where a job loss could move them down into EITC eligibility), though for single parents the in-work nature of the EITC leads to a pro-cyclical pattern (Bitler, Hoynes and Kuka 2016).

The individual-level sensitivity of SNAP eligibility translates into important aggregate automatic stabilizer effects. SNAP is an entitlement, meaning that all persons who are eligible can claim a benefit. This is in sharp contrast with block granted TANF and also housing benefits, which are apportioned on a first-come, first-served basis. Because anyone who is eligible can receive SNAP benefits without the risk of taking away resources from others, being put on a waitlist, or being turned away, the program responds quickly and automatically to changes in the labor market such as recessions, helping to stabilize the economy.

These two characteristics (countercyclicity and speed of reaction) were never more important than in the wake and aftermath of the 2008 Great Recession. Figure 5 shows that demand for SNAP closely tracks overall economic conditions. As the unemployment rate grew to almost 10 percent in 2010, SNAP expenditures per capita expanded to meet the need. In states with larger increases in the unemployment rate, SNAP responded with larger increases in the program during the Great Recession.

FIGURE 5 SNAP expenditures closely follow Economic Cycle



Source: Author’s tabulations of USDA and Census Data.

It’s also worth noting that in spite of this increase in SNAP during the Great Recession, administrative costs have not increased and error rates are at an all-time low (Rosenbaum 2014).

SNAP supplements low-income families throughout the year

SNAP has another desirable macro-economic characteristic: it supplements low-income families’ incomes throughout the year – and is one of the few programs to do so. SNAP is received on a monthly basis. By contrast, EITC benefits are received in the form of a once-a-year tax refund. It provides an important source of income for families with children and has been shown to lead to increases in employment and reductions in poverty (Hoynes and Patel 2015).

SNAP supports a growing number of working families and provides ongoing support that the Earned Income Tax Credit is not providing for those families. Over the past 20 years, the share of SNAP recipients with earned income has increased substantially. Among households with

children and non-elderly, non-disabled adults, more than half are working and many more are employed within a year of receipt (Rosenbaum 2013). This need for the social safety net to “top up earnings” for working Americans is a direct consequence of the decline in wages for less skilled workers. Since the mid-1970s, earnings for less-skilled workers have stagnated (Autor 2014). Hourly wages for men with less than a high school degree have fallen in real terms by more than 20 percent since 1973. Declines, though of a smaller degree, have occurred for men with a high school degree and for those with some college. Real wages for women with a high school degree or some college show small gains, though high school dropouts have seen no real increases. These factors combine to show losses or no change in real family income for the bottom 20 percent of the population (Mishel *et al.* 2012). This is particularly salient given the high and persistent premium paid to college educated workers (Autor 2014) and the steady gains in income held by the top one percent of taxpayers (Piketty and Saez 2003).

Conclusion

SNAP is vital to low-income livelihoods in many ways: it not only helps lift low-income families and their children out of poverty, it also benefits their well-being more generally. The economics literature has made tremendous recent progress in measuring and documenting the benefits of SNAP on a large variety of health outcomes.

The program can also be seen as a major instrument to break the cycle of poverty across generations. In the long-run, children who have had access to the program have better education outcomes, and rely less on the social safety net. We also show that the program is all the more effective when received early in childhood. Thus, as with early childhood education, SNAP can be thought of as an investment made when children are young that yields rewards in adulthood.

SNAP is the closest thing the United States has to a “universal safety net”, able to support families throughout the year in times of need. It is an essential piece of the United States’ social safety net.

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