Supplemental Nutrition Assistance Program participation during the economic recovery of 2003 to 2007

Janna Johnson

Janna Johnson is a graduate student in Public Policy at the Harris School, University of Chicago.

The recent sharp rise in Supplemental Nutrition Assistance Program (SNAP) participants has received much attention in the press and from policymakers.[1] Since the start of the Great Recession in December 2007, SNAP participation has increased to its highest level ever, serving 40.3 million Americans each month, more than 13 percent of the population, in fiscal year 2010.[2] Less attention has been given to the fact that SNAP participation also increased during the preceding economic expansion. Between fiscal years 2003 and 2007, total SNAP participation increased from 21 million to 27 million, an increase of almost 30 percent. This rise marked the first time in the program's history that participation increased during a period of economic recovery and growth.

Many studies have documented the relationship between macroeconomic conditions and SNAP participation levels. The majority of these studies find that the unemployment rate and other macroeconomic conditions have accounted for a large share of the changes in SNAP participation.[3] Given this historical relationship, one would have expected SNAP participation to have fallen by about 6 percent during the economic expansion of 2003 to 2007.[4] Instead, participation increased by over 20 percent.

The fact that participation in SNAP behaved contrary to expectations based on the economic conditions during this time period has prompted researchers to seek explanations for the increase. A recent report prepared for the U.S. Department of Agriculture found that the increase in participation in the early 2000s (when the economy was in recession) can be accounted for by an increase in the number of individuals eligible for the program, while the increase during the recovery period was due to an increase in the participation rate among those eligible.[5] The authors attribute the increase in the eligible population to changes in state unemployment, labor force participation rates, and minimum wages; and the increase in the participation rate among those eligible to changes in the unemployment rate and changes in SNAP policy. Another study came to a similar conclusion, that the increase in participation between 2000 and 2008 can be explained by a combination of economic factors and policy changes.[6]

The existing studies have all focused on reasons for the aggregate caseload increase, but have not explored participation at the individual level. In this article I summarize my study, which looks for the cause of the increase in SNAP participation at its underlying source: the determinants of the participation decision at the individual level, including the dynamics of SNAP entry and exit.[7] Before examining the dynamics of SNAP participation, I describe the significant policy changes that may have influenced whether or not individuals chose to participate in SNAP.

SNAP policy changes

There have been a number of changes to SNAP policy during the last decade. The 2002 Farm Bill gave states much more flexibility over the eligibility requirements for their SNAP programs. Following the passage of this bill, many states began to align the eligibility requirements for SNAP with those for other programs such as Temporary Assistance for Needy Families (TANF) and Supplemental Security Income (SSI). Most of these changes were aimed at making it easier to apply and qualify for the SNAP program, such as combined applications, decreased asset requirements, and simplified definitions of income and deductions. However, many changes also affected those already receiving SNAP benefits, and could have affected how long an individual remained a program participant. These policies include more flexible reporting requirements, longer certification periods, and expanded categorical eligibility.

Reporting requirements

States now have the option of requiring SNAP recipients to report on their income and finances at various intervals and in various ways. They may institute a type of periodic reporting system or they may rely on households to report changes within 10 days of occurrence, known as "incident reporting." Under the periodic system, participants report either quarterly or monthly, or under a "simplified" system with reduced reporting requirements. Under the simplified reporting option, households are required to report changes in income between certification and scheduled reporting periods only when total countable income rises above 130 percent of the poverty level. States implementing simplified reporting may set reporting intervals at four, five, or six months. Prior to passage of the 2002 Farm Bill, SNAP (then called the Food Stamp program) had the option to use a reporting system with reduced reporting requirements for earned-income

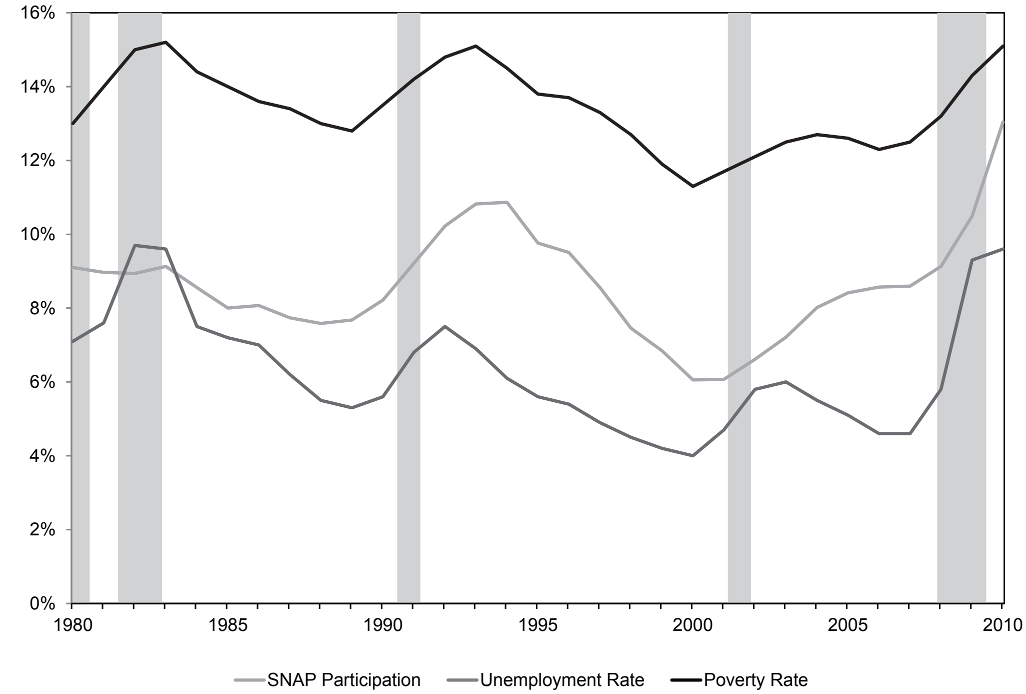

Figure 1. SNAP Participation, Poverty, and Unemployment Rates, 1980–2010.

Source: Bureau of Labor Statistics, U.S. Department of Agriculture, and U.S. Census data.

Note: Shading indicates periods of recession, as determined by the National Bureau of Economic Research.

households on a semi-annual schedule. With passage of the Farm Bill's simplified reporting option, states may expand their reporting systems for earned-income households to any and all households that can be asked to report periodically.[8] During the 2000s, many states did switch to simplified reporting, as well as to longer reporting intervals and fewer reporting requirements.

Certification periods

With simplified reporting, states have the option of choosing how long a household is certified to receive SNAP. At the end of the period, a household must recertify their eligibility for the program to keep receiving benefits. Certification periods are assigned by caseworkers and are usually based on household characteristics and income. Certification periods became longer after implementation of the 2002 Farm Bill; by 2007, most states were assigning certification periods of 12 months or longer.

Expanded categorical eligibility

Regular participation-based categorical eligibility makes anyone who is currently certified to receive TANF or SSI benefits automatically eligible to receive SNAP. States can choose to offer optional expanded categorical eligibility, which additionally makes households that receive benefits or services through programs that are at least 50 percent funded by TANF or maintenance-of-effort sources eligible for SNAP. Note that for many of these services the only requirement for eligibility is to have income less than 200 percent of the poverty line, which is higher than the 130 percent requirement for SNAP eligibility.

The dynamics of SNAP participation

I now attempt to identify the reason for the SNAP participation increase during the economic recovery of 2003 to 2007. I first describe three potential mechanisms for the increase, then use a descriptive analysis to identify which of these is the likely cause.

Potential mechanisms for a caseload increase

At the individual level, there are three mechanisms by which SNAP participation can increase: an increase in the number of individuals eligible for the program, an increase in the rate at which individuals enter the program, and a decrease in the rate at which participants exit the program.

When considering which of these three mechanisms to be the most likely cause of the increase in SNAP participation during the 2003 to 2007 recovery, it is important to keep in mind that this recovery was atypical. Economic growth, while positive, was quite low, and the unemployment rate did not fall very much as a result. The historical relationship between the unemployment rate and the percentage of the population participating in SNAP since 1980 can be seen in Figure 1. The shaded areas on the figure indicate periods of official recession (as determined by the National Bureau of Economic Research). Here it is apparent that prior to

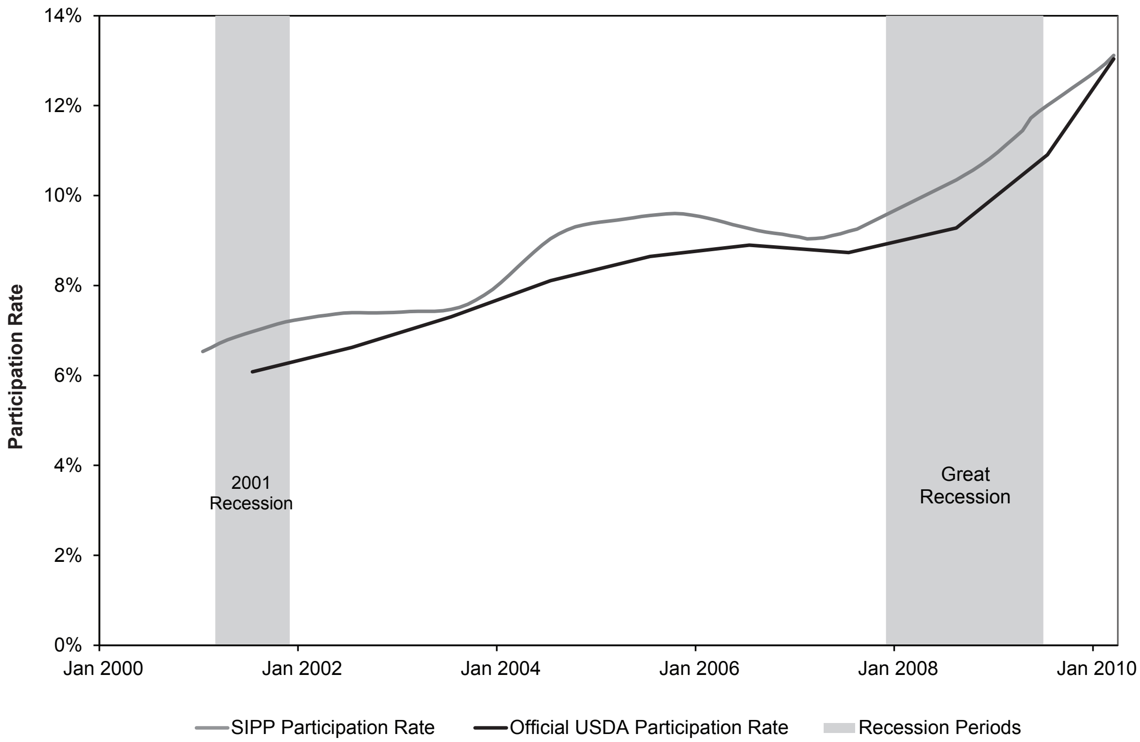

Figure 2. SNAP Participation Rate, 2001–2010.

Source: Author's calculations using Survey of Income and Program Participation (SIPP) and U.S. Department of Agriculture data.

Notes: Participation rate defined as percentage of population participating in SNAP. Sample includes the fourth month for each SIPP wave for all individuals. SIPP participation rate calculated using monthly average participation rates and Lowess smoothing with a bandwidth of 0.2.

the 2000s the unemployment rate and SNAP participation moved in tandem.[9]

Figure 1 also illustrates a unique feature of the economic recovery of 2003 to 2007; that the poverty rate did not fall during that period. During a typical economic recovery period, we would expect the number of individuals eligible for SNAP to fall, since overall incomes tend to rise with economic growth. We would also expect the rate at which individuals enter the program to fall, and the exit rate from SNAP to rise. As noted above, however, the 2003 to 2007 recovery was not typical, and the expected patterns did not occur.

Descriptive analysis results

To find out which of these three mechanisms behaved differently than expected and therefore could be identified as the likely cause of the increase in SNAP participation between 2003 and 2007, I used the Survey of Income and Program Participation (SIPP), a nationally-representative panel survey containing detailed information on households and individuals in the United States at a monthly level.[10] Figure 2 shows the monthly participation rate in SNAP calculated using all individuals in the SIPP data. It follows the official participation rate very closely, starting at around 7 percent of the population in early 2001, and rising throughout the period to over 13 percent in early 2010. The two shaded areas mark the 2001 recession and the Great Recession. During the recovery period of 2003 to 2007, the participation rate rose from around 8 percent to near 10 percent, although the SIPP data shows some evidence that it may have declined somewhat in 2007.

The first potential mechanism by which SNAP participation could rise is an increase in the number of those eligible for the program. Eligibility for SNAP is primarily income-based, but assets, participation in other programs like TANF and SSI, and expenses for things like medical and child care are also taken into account. It appears that the number of people with household incomes less than 200 percent of the poverty line remained relatively constant between 2003 and 2007, around 32 percent of the population. As noted above, the poverty rate remained constant over this period. It therefore appears unlikely that an increase in the number of SNAP-eligible individuals was the cause for the increase in participation during the recovery period before the Great Recession.

An increase in the entry rate is another way the SNAP caseload can increase. There is little evidence that this mechanism caused the increase in SNAP caseloads in the mid-2000s. Overall, the entry rate into the program remained constant among individuals age 15 and over through the period leading up to the Great Recession, when it increased sharply. On average, around 1.25 percent of all individuals over age 15 entered the program each month before the end of 2007.

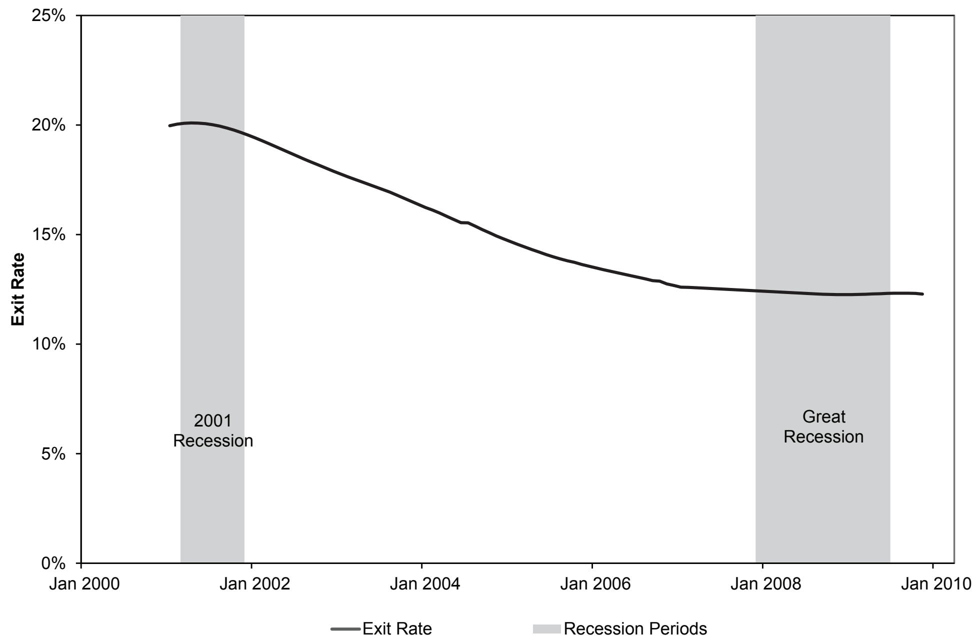

Figure 3. SNAP Exit Rate, 2001–2010.

Source: Author's calculations using SIPP data.

Notes: Sample includes the fourth month for each SIPP wave for all individuals. Exit rate calculated using monthly average exit rates and Lowess smoothing with a bandwidth of 0.8.

The final mechanism that could cause an increase in SNAP participation is a fall in the exit rate, meaning that once individuals enter the program, they leave at a decreased rate and therefore experience longer participation spells on average. The exit rate from SNAP among those over age 15, shown in Figure 3, decreased dramatically during the recovery period, from around 18 percent in early 2003 to close to 12 percent in 2007, a decrease of over 30 percent. The decline appears to have been steady over the entire period. The exit rate remained around 12 percent through the Great Recession. Thus, I conclude that the decrease in the exit rate appears to be the main reason for the increase in SNAP participation between 2003 and 2007.

Explaining the decrease in the exit rate

In the next part of my analysis, I attempt to determine the reason for the decrease in the SNAP exit rate during 2003 to 2007. As illustrated above, I believe that this decrease was the driving factor behind the increase in SNAP participation during a period of economic recovery.

Potential causes

There are at least two potential reasons why the rate at which SNAP participants left the program could have decreased during a time when the economy was improving: (1) the many SNAP policy changes that were implemented during the period; and (2) that SNAP participants retained their eligibility longer by experiencing a longer spell of poverty or near-poverty. However, since median poverty spell durations appear to remain fairly constant over time, longer eligibility periods do not appear to be a likely explanation for the decrease in the exit rate.[11] Therefore, I look more closely at whether the evidence suggests that the decreased exit rate is due to policy changes.

There are a number of different mechanisms through which the SNAP policy changes described above could have changed the exit rate. Moving to simplified reporting from incident reporting or shorter reporting intervals would be expected to decrease the exit rate and increase SNAP participation spell length since a household could keep receiving benefits longer even after an income increase as they do not have to report their income to the SNAP agency as often. It also decreases the cost associated with participating in the program, as submitting a report takes time. Increasing the certification period length could decrease the exit rate for the same reasons lowering reporting requirements could: it would allow no-longer-eligible households to keep receiving benefits longer and also decrease participation cost.

Finally, expanded categorical eligibility is more likely to increase the entry rate into SNAP, as more of the population would be eligible for the program. However, it could also decrease the exit rate if it allows higher-income households to keep their eligibility longer than they would under regular categorical eligibility. It has also been shown in numerous previous studies to have a strong positive effect on SNAP participation.[12] The number of states offering expanded categorical eligibility remained relatively constant through the 2003 to 2007 period. Note that other policy changes occurred during this period, such as the loosening of the asset test with regard to vehicles, the implementation of special SNAP policies for noncitizens, and the introduction of online electronic applications, but these changes would either not be expected to affect the exit rate or would not be expected to affect a large enough share of the population to change the overall exit and participation rate.

In order to attempt to determine whether any of these policy changes were responsible for the SNAP exit rate decrease, I conducted an empirical hazard analysis. This analysis seeks to link the likelihood of exit from SNAP to the presence or absence of specific state policies that could theoretically affect program exit. However, the theoretically relevant policies do not have consistent impacts across models, and some policies that are not theoretically relevant nonetheless appear linked to the likelihood of exiting. As a result, these findings make it difficult to reach any firm conclusions about whether the decrease in exit rate is due to policy changes.

Conclusions

Based on a descriptive analysis of SNAP participation spells using SIPP data, my results indicate that a fall in the rate at which participants left the program was likely the primary cause of the increase in SNAP participation during the economic recovery period of 2003 to 2007. Over this period, the entry rate into SNAP as well as the proportion of the population eligible for the program did not significantly change. The Great Recession, in contrast, saw increases in the entry rate and eligibility rate but no further change in the SNAP exit rate. While it seems clear from these results that the fall in the rate at which participants left the program is at the root of the increase in participation, my hazard regression results do not provide evidence one way or another that the decline in the exit rate can be attributed to SNAP policy changes that occurred during the 2003 to 2007 recovery. The explanation must lie elsewhere, or the policy variables I currently use are not accurately measuring true policy implementation. Future research is required to provide a definitive answer to this question.■

---

[1]The Food Stamp Program was renamed SNAP in October 2008 as part of the Food, Conservation, and Energy Act of 2008. The program is referred to as SNAP throughout this article, although part of the time period addressed occurs prior to the name change.

[2]Throughout this article "SNAP participation" refers to the overall population participation rate, not the participation rate among the eligible, unless otherwise specified.

[3]Examples of studies documenting the effects of policy changes and the economy on SNAP participation include C. Ratcliffe, S. McKernan, and K. Finegold, "Effects of Food Stamp and TANF Policies on Food Stamp Receipt," *Social Service Review* 82, No. 2 (June 2008): 291–334; and D. C. Ribar, M. Edelhoch, and Q. Liu, "Watching the Clocks: The Role of Food Stamp Recertification and TANF Time Limits in Caseload Dynamics," *Journal of Human Resources* 43 (2008): 208–239.

[4]This is based on a finding from J. P. Ziliak, C. Gundersen, and D. N. Figlio. "Food Stamp Caseloads over the Business Cycle," *Southern Economic Journal* 69 (April 2003): 903–919, that a 1 percentage point increase in the unemployment rate leads to a 2.3 percent increase in participation after one year.

[5]J. Mabli, E. S. Martin, and L. Castner, "Effects of Economic Conditions and Program Policy on State Food Stamp Program Caseloads, 2000 to 2006," PR 09-21, Mathematica Policy Research, Princeton, NJ, 2009.

[6]J. Mabli and C. Ferrerosa, "Supplemental Nutrition Assistance Program Caseload Trends and Changes in Measures of Unemployment, Labor Underutilization, and Program Policy from 2000 to 2008," PR 10-37, Mathematica Policy Research, Princeton, NJ, 2010.

[7]This article is a summary of a longer report prepared in November 2011 for the IRP RIDGE Center for National Food and Nutrition Assistance Research, "The Dynamics of SNAP Participation and the Increase in SNAP Caseloads during the Recovery of 2003–2007," Discussion Paper No. 1397-12, Institute for Research on Poverty: University of Wisconsin–Madison. Available at: www.irp.wisc.edu/publications/dps/pdfs/dp139712.pdf.

[8]Description taken from US Department of Agriculture Food and Nutrition Service, "Food Stamp Program State Options Report, Fourth Edition," September, 2004.

[9]Also note in Figure 1 the comparative non-response of SNAP participation to the recession of the early 1980s. However, legislation enacted in 1981 and 1982, coinciding with the so-called "Reagan recession", implemented large cutbacks in the program, making it much harder to qualify for and receive Food Stamps.

[10]I use the 2001, 2004, and 2008 panels, covering January 2001 to March 2010.

[11]R. J. Anderson, "Dynamics of Economic Well-Being: Poverty 2004–2006," *Current Population Reports* P70-123, March 2011, found that the median poverty spell duration for all individuals remained fairly constant across the 2001 and 2004 SIPP panels, with values of 4.3 and 4.5 months, respectively. These data cover the years 2001–2003, and 2004–2006. The results indicate that the length of time in poverty did not change very much over this time period, although unfortunately the report does not cover the entire period of interest.

[12]See, for example, Mabli, Martin, and Castner, "Effects of Economic Conditions."