Projecting SNAP Program Costs in the Next 10 Years

The Supplemental Nutrition Assistance Program (SNAP) is the largest Federal food and nutrition assistance program. In fiscal year (FY) 2017, the program served 42.2 million people each month with an average benefit of $126 per person per month. The total annual expenditure was $68 billion, down 4.1% from FY 2016 (USDA-ERS, 2018).

FAPRI-MU has developed a model (see box) to project SNAP program costs assuming a continuation of current program rules. We project that SNAP program costs will decrease slightly in FY 2018. The decline would have been sharper had it not been for temporary assistance provided to hurricane victims in the fall of 2017. Baseline SNAP costs continue to decline in FY 2019 and FY 2020 as program participation declines with a growing economy. After FY 2020, projected costs increase, as participation levels off and benefit levels per person increase with rising food prices. Projected program benefits in FY 2027 are nearly equal to those in FY 2017, and are well below the FY 2013 peak.

The cost of food is a major driver of monthly SNAP benefits. FAPRI-MU uses food-at-home CPI projections provided by the Agricultural Markets and Policies (AMAP) team at the University of Missouri to estimate the maximum monthly benefit for a one-person household. AMAP projects that the food-at-home CPI will increase at an annual rate of 2.3% over the 2018-2027 period. The maximum benefit for a one-person household is projected to increase from its 2018 level of $192 (based on a USDA February 2018 update) to $236 in FY 2027. Average monthly benefits also increase at a similar pace, given baseline assumptions. By FY 2027, the projected average monthly benefit reaches $154 per person.

To be eligible for SNAP, a household generally must have gross income below 130% of the federal poverty level, and net income after various deductions below 100% of the poverty line. Thus, it should not be a surprise that the share of population receiving SNAP benefits generally moves with the share of the population below the poverty line, although often with some lags.

Summary:
Federal spending on the Supplemental Nutrition Assistance Program (SNAP) is declining as the number of beneficiaries is reduced. Baseline projections assuming a continuation of current policies suggest spending could increase again in a few years, as higher food prices increase average monthly benefits.

For more on this topic, see these FAPRI-MU publications:

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Baseline Update for U.S. Agricultural Markets

Authors:
Hoa Hoang
HoangH@missouri.edu

Pat Westhoff
WesthoffP@missouri.edu
The poverty rate averaged 15% between 2010 and 2012, but dropped to 12.7% in 2016. We project the poverty rate will decline to 11% in 2023 and remain fairly stable thereafter, based in part on IHS Markit forecasts of 18% growth in real disposable income per capita between 2017 and 2027 and continued low unemployment.

Not all eligible households participate and receive SNAP benefits; in FY 2015, 83% of eligible households participated. SNAP participation oftentimes fluctuates with the health of the economy but it is also affected by changes in the program rules. For example, the increase in SNAP participation after 2007 was a combined effect of a weaker economy and an increase in Federal spending under the Food, Conservation, and Energy Act of 2008 and later, the American Recovery and Reinvestment Act of 2009 (USDA-ERS, 2012). As the economy recovered, the share of the population receiving SNAP benefits declined, in part because of a decline in program eligibility, but also because of a slight reduction in the percentage of the eligible population participating. We project that 35 million people will receive SNAP benefits in FY 2027 if current program rules remain in place, which is about 1% less than the share of the population living under the poverty line in the same year or 7 million less than the FY 2017 participation level.

These projections are very similar to baseline projections issued by the Congressional Budget Office (CBO) in April 2018 (CBO, 2018). FAPRI-MU and CBO both project about $600 billion in program benefits over the FY 2018-2027 period, with CBO showing a smaller decline in program benefits over the next several years, but also a smaller increase in later years. The main difference is in projected program participation, as projected average monthly benefits are very similar. In CBO’s baseline, participation declines through FY 2027; in the FAPRI-MU baseline, participation levels off after FY 2023.

Note that these projections assume a continuation of current policies and January 2018 IHS Markit forecasts for the general economy. A new farm bill could change program rules, and it is safe to assume that food prices, income levels and poverty rates will not evolve exactly as indicated. The simple model used to develop these projections also has inherent limitations, adding another source of uncertainty. Thus it is likely that actual SNAP expenditures in future years will differ from those reported here, perhaps by a significant amount.

References

The Model

At FAPRI-MU, we developed a model to project SNAP program costs in the next 10 years. The model structure and variable linkages are demonstrated in the flow chart below. The direction of the arrow shows the causal effect of one variable on the other. One endogenous variable (i.e., variables that are estimated, to be distinguished with exogenous variables which are taken as "hard data" throughout the projection period) can be specified as a function of multiple variables, which could either be endogenous or exogenous. For example, the percentage of people eligible for SNAP is a function of the percentage of population below the poverty line and food-at-home CPI. The latter, food-at-home CPI, is taken from the AMAP Food CPI model, which provides projections for food-at-home and food-away-from-home CPIs based on changes in farm commodity and input markets. Thus, changes in the farm gate prices of cattle or wheat should be reflected in the cost of food, and eventually in the fiscal cost of SNAP.

Total participants are a product of the participation rate times the number of people eligible. The latter is a product of the percentage of people eligible times U.S. population.

Total benefits is a product of the average benefit per person times the total participants. Total program cost is the sum of total benefits and all other costs.