



TECHNICAL APPENDIX FOR

Hunger and the Important Role of SNAP as an American Safety Net

The Hamilton Project

November 22, 2013

This appendix explains the details and data sources for the figures and calculations in the post “Hunger and the Important Role of SNAP as an American Safety Net.”

Figure 1. Child Food Insecurity Rates by State in 2011

Source: Feeding America 2013.

Figure 1 shows child food insecurity rates by state in 2011 (data from [Feeding America 2013](#)). Children are considered food insecure if they live in a household that has limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.

Figure 2. Supplemental Nutrition Assistance Program (SNAP) Participation Rate and Unemployment Rate, by Year

Sources: BLS 2012, 2013a, 2013b; CBO 2011, 2013; NBER 2012; USDA 2013a, 2013b; authors' calculations.

Figure 2 shows the historical trends of SNAP participation rates and unemployment rates in the United States. Annual average monthly SNAP participation data come from [USDA \(2013a\)](#) and [USDA \(2013b\)](#) for fiscal years 1970 to 2013. Annual civilian noninstitutional population data come from [BLS \(2012\)](#) for the years 1970 to 2013. We calculated the annual average monthly SNAP participation rate by dividing the annual average monthly SNAP participation by the corresponding annual civilian noninstitutional population. Monthly unemployment rate data come from [BLS \(2013\)](#) for the years 1969 to 2013. We calculated the quarterly unemployment rate by taking the average of the monthly unemployment rate data within each quarter for fiscal years 1970 to 2013. For example, the unemployment rate for the first quarter of fiscal year 1970 is the average of the monthly unemployment rates for October, November, and December 1969. Projections of annual average monthly SNAP participation data come from [CBO \(2013\)](#) for fiscal years 2014 to 2020. Projections of annual civilian noninstitutional population data come from [CBO \(2011\)](#) for the years 2014 to 2020. We calculated the projected annual average SNAP

participation rate by dividing the projected annual average monthly SNAP participation by the corresponding projected annual civilian noninstitutional population. Projections of annual unemployment rate data come from [CBO \(2013\)](#) for fiscal years 2014 to 2020. We assigned the projection for each fiscal year to the fourth quarter of that year. We then calculated the value of the unemployment rate for quarters one through three of each fiscal year by taking the difference between the fourth quarter unemployment rates of sequential fiscal years, and smoothing out this difference between the remaining three quarters. Quarterly U.S. economic recession data come from [NBER \(2012\)](#) for fiscal years 1970 to 2013.

Works Cited

Bureau of Labor Statistics (BLS). 2012. "Employment Status of the Civilian Noninstitutional Population, 1942 to date." Labor Force Statistics from the Current Population Survey. Author, Washington, DC. Available at <http://www.bls.gov/cps/cpsaat01.htm>.

Bureau of Labor Statistics (BLS). 2013. "Labor Force Statistics from the Current Population Survey, 1969–2013." Databases, Tables & Calculators by Subject. Author, Washington, DC. Available at <http://data.bls.gov/timeseries/LNS14000000>.

Congressional Budget Office (CBO). 2011. "CBO's Labor Force Projections through 2021." Table 1. Author, Washington, DC. Available at <http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/120xx/doc12052/03-22-laborforceprojections.pdf>.

Congressional Budget Office (CBO). 2013. "Supplemental Nutrition Assistance Program—May 2013 Baseline." Author, Washington, DC. Available at <http://www.cbo.gov/publication/44211>.

Feeding America. 2013. "Map the Meal Gap: Highlights of Findings for Overall and Child Food Insecurity." Table 10. Author, Chicago. Available at http://feedingamerica.org/hunger-in-america/hunger-studies/map-the-meal-gap/~/_media/Files/a-map-2011/2011-mm-g-exec-summary.ashx.

National Bureau of Economic Research (NBER). 2012. "US Business Cycle Expansions and Contractions." Author, Cambridge, MA. Available at http://www.nber.org/cycles/US_Business_Cycle_Expansions_and_Contractions_20120423.pdf.

U.S. Department of Agriculture (USDA). 2013a. "Supplemental Nutrition Assistance Program Participation and Costs." Food and Nutrition Services. Author, Washington, DC. Available at <http://www.fns.usda.gov/pd/SNAPsummary.htm>.

U.S. Department of Agriculture (USDA). 2013b. "Supplemental Nutrition Assistance Program." Food and Nutrition Services. Available at <http://www.fns.usda.gov/pd/34SNAPmonthly.htm>.