

Correcting for SNAP Underreporting: Using Administrative Records to Develop a Model for
Improving Reported SNAP Receipt in the CPS ASEC

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Abstract:

Policy leaders today look to quality data and statistics to help inform and guide programmatic decisions. As a result, assessing the quality and validity of major household surveys in capturing accurate program participation is essential. One method for evaluating survey quality is to compare self-reported program participation in surveys to administrative records from the program itself.

Previous research using administrative records to evaluate self-reported Supplemental Nutrition Assistance Program (SNAP) receipt has found evidence of misreporting in the Current Population Survey Annual Social and Economic Supplement (CPS ASEC) for select states where administrative data were available. For example, Meyer and Mittag (2015) compared SNAP, TANF and general assistance, and housing assistance administrative data from New York to the 2008-2013 CPS ASEC. Fox, Heggeness, Pacas, and Stevens (2017) compared SNAP self-reporting in the CPS ASEC to state SNAP administrative records from Illinois, Maryland, Oregon, and Virginia for calendar years 2009 through 2015. Both studies find that the CPS ASEC understates the income of those in poverty due to underreporting of program receipt and benefit amounts. Fox et al. (2017) finds that the underreporting of SNAP participation inflates the SPM rate by 0.6 percentage points.

Beyond direct replacement of reported transfer program benefits with administrative data, a possible solution to the issue of underreporting is to use a microsimulation model that corrects for this underreporting. The Transfer Income Model, version 3 (TRIM3) produces annual baseline simulations of actual program rules to correct for the underreporting of transfer program participation in the CPS ASEC.¹ While TRIM3 matches administrative aggregate values for

¹ TRIM3 is developed and maintained by the Urban Institute under funding from the Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (HHS/ASPE).

program participation and total benefit dollars, recent work by Stevens, Fox and Heggeness (2018) finds evidence that TRIM3 may over-allocate benefits to the bottom of the income distribution, potentially overstating the impact of underreporting on the poverty rate.

While previous research has been constrained by limited administrative data availability or has used TRIM3 as a method of correction, this paper extends prior analyses to provide the first set of regression-based corrections for household-level SNAP receipt for all 50 states. Building off of previous research (Fox et al. 2017 and Stevens, Fox, and Heggeness, 2018) that has directly linked individual-level state administrative SNAP records to the CPS ASEC, this paper uses out-of-sample prediction to predict the likelihood of household SNAP receipt and estimate predicted SNAP values. The results of this analysis will be compared to both uncorrected CPS ASEC and TRIM3 SNAP estimates. We will examine how replacing values from the CPS ASEC with either regression-based corrections or TRIM3 estimates change poverty rate estimates using the Supplemental Poverty Measure (SPM).

This study allows us to understand the role of administrative records and microsimulation in measurement of national statistics. Given current trends in the reliance of administrative data to improve survey measurement and reduce respondent burden, this paper advances our knowledge of the relevance and the role administrative records can play in advancing our ability to precisely and accurately measure national statistics, such as the SPM. The paper also improves our understanding of how closely microsimulation aligns with administrative records, providing an alternative option to correct for underreporting.

References

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