

# Decomposing the Effect of SNAP\*

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## Abstract

I analyze the impact of an increase in SNAP benefits (the supplemental nutrition assistance program, formerly called food stamps) on shopping behavior, consumption choice, and prices. Using consumer scanner data, I show that the increase in benefits due to ARRA (American Recovery and Reinvestment Act) (1) reduces shopping effort (the number of shopping trips as well as use of specials and coupons), (2) raises the price for the same barcode, and (3) results in substitution into high price products. With these empirical findings in mind, I construct a structural model with costly shopping which allows me to construct a theory-based CES price index that incorporates preference shocks and allows me to estimate the extent of these different margins of adjustment. The increase in SNAP benefits is associated with a 4.6% increase in the price index. Of this, 15% comes from the pure price increase, 10% comes from a change in consumption variety both within and across product groups, 74.2% comes from a change in preference shocks, and 0.3% comes from a change in the number of shopping trips. As a counter-factual exercise, I analyze the impact of an upcoming pilot policy, which allows SNAP recipients to use SNAP benefits to buy from online retailers. By saving time for shopping trips, the pilot policy raises SNAP recipients' welfare by at least \$15 a quarter purely through easier access to retail stores. The gains can be as high as \$250-\$327 a quarter if they allocate the saved shopping time into labor supply.

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