

WORKING PAPER

Executive Summary

MAY 2014, WP 2014-5

CENTER *for*
RETIREMENT
RESEARCH
at BOSTON COLLEGE

WHAT IMPACT DOES SOCIAL SECURITY HAVE ON THE USE OF PUBLIC ASSISTANCE PROGRAMS AMONG THE ELDERLY?

BY NORMA B. COE AND APRIL YANYUAN WU

Low take-up by the elderly in most means-tested transfer programs is a persistent and puzzling phenomenon: estimated elderly take-up rates for Supplemental Security Income (SSI) range from 38 percent to 73 percent (for example, Coe 1983; Shields et al. 1990; McGarry 1996; Strand, Rupp, and Davies 2009) and less than 35 percent for the Supplemental Nutrition Assistance Program (SNAP) (Haider, Jacknowitz, and Schoeni 2003; Wolkwitz and Leftin 2008; Wu 2009). This low take-up is especially surprising since the elderly have fewer opportunities to work their way out of poverty and might be expected to be more reliant on the safety net than their younger counterparts. To the extent that low take-up by the elderly in means-tested programs reflects serious unmet need, this is an issue of public concern.

Despite this well-documented counter-intuitive phenomenon, not much is known about the reasons behind the low take-up rate in means-tested programs. While an extensive literature has explored program participation among the eligible population broadly, only a few have focused specifically on the elderly.¹ Further, most of these studies are limited to measuring correlations between potential benefit levels and program participation. SNAP and SSI are national programs with relatively uniform eligibility criteria and benefit levels;² although state SSI Supplement programs introduce state-level benefit variation, this variation is likely correlated with the cost of living within the state and is not an ideal source for identification. As a result, the inherent selection issue that must be addressed before causal estimates can be measured – individuals who are in the program may be different from non-participating eligible individuals – is difficult to address. Thus, relatively little is known about what factors matter most in the take-up decision of the elderly, how these factors and their relative importance differ by age, or how enrollment in transfer programs might be increased.

¹ Examples include McGarry 1996; Choi 1998; Davies 2002; Haider, Jacknowitz, and Schoeni 2003; Levy 2008; and Wu 2009.

² There are some very recent variations in SNAP eligibility rules across states. In 2009, 13 states had exempted all or almost all households from the asset test, and all states exclude some or all vehicles from countable assets. Many states supplement federal SSI benefit levels.

Using the *Health and Retirement Study* linked to administrative earnings records and geographic identifiers, this paper examines the take-up decision of the elderly in SNAP and SSI programs by exploiting the interaction between Social Security Old-Age and Survivor Insurance benefits and public assistance programs. Social Security interacts with means-tested transfer programs in two ways. First, by providing a considerable source of income, Social Security changes who is eligible for means-tested transfer programs; in 2011, 14.5 million people were lifted out of poverty by Social Security benefits (Van de Water and Sherman, 2012). If the likelihood of take-up varies among individuals, Social Security benefits could have a large impact on the take-up rate by changing the composition of the eligible pool. Second, among those still eligible, receiving retirement income from Social Security changes the expected public assistance benefit amount individuals are eligible to receive from means-tested transfer programs. Since the take-up decision is likely impacted by the expected benefit of participating, this factor could be another explanation for the different take-up rates between the young and the elderly.

The program interactions with Social Security provide age-related variations in eligibility and benefit levels of means-tested public transfer programs that can be exploited to estimate the causal impact of the expected public assistance benefit level on the take-up of means-tested programs. We develop an instrumental variable using the exogenous variation in potential SNAP/SSI benefits caused by potential receipt of Social Security benefits. This instrumental variable captures the fact that Social Security benefits, the major source of income for the low-income elderly population, reduce SNAP/SSI payments on nearly a dollar-for-dollar basis.

This paper contributes to the literature in several ways. First, we use instrumental variables techniques to exploit exogenous changes in the benefit level to estimate the causal relationship between take-up and benefit levels in two means-tested programs. Second, we improve on measurement error issues by using Social Security administrative earnings records matched to survey data and using instrumental variable techniques. Finally, traditional economic theory suggests that cash transfers are superior to in-kind transfers in terms of the recipient's utility: in-kind transfers may constrain the behavior of the recipients, while cash transfers do not. This paper examines whether the interactions with Social Security have different behavioral responses between these cash (SSI) and in-kind (SNAP) transfer programs.³

Our findings are summarized as follows. First, we do not find evidence that the low take-up among the elderly is driven by changes in the pool of eligible individuals that have differential take-up patterns. However, Social Security has a significant impact on the use of public assistance programs among the elderly, because the increase in income decreases the potential benefits available from public programs. Our estimates are inconclusive about the behavioral response to a change in SNAP benefits, but our estimates suggest that a \$100 increase in SSI benefits leads to a 4-6-percentage-point increase in the probability of participating in SSI, a smaller effect than traditionally found in the literature.⁴ These findings are robust across different model specifications and different definitions of the eligible population. The average SSI benefit for eligible individuals aged 50 to 62 is about \$472 per month, and the benefits for those above Social Security's Early Eligibility Age of 62 is approximately \$229. A simple back-of-the-envelope calculation shows that Social Security decreases the take-up rate of SSI by 10-15 percentage points. Together with the fact that eligible individuals more often continue participating in SSI after receiving Social

³ Since SNAP benefits are now received as a debit card balance, one could consider them as a cash equivalent. However, the benefits can still be used only in a subset of stores to buy a subset of goods.

⁴ The literature fails to reach a consensus on the impact of SSI benefits on program participation. For instance, McGarry (1996) using the 1984 SIPP find that a 25 percent increase in benefits induces a 6.1 percentage point increase in the probability of participating. Using HRS Ahead 1993-1994 waves, Davies (2002) finds a \$100 increase in benefits leads to 6-15 percentage point increase in participation. On the other hand, using SIPP 1984-1997, Elder and Powers (2004) report that the influence of expected SSI benefits has declined over time. They find insignificant results of benefits on participation using different sample specification, alternative approaches to imputing the expected SSI benefit, and more detailed information on application and receipt culled from administrative files.

Security benefits than they maintain SNAP enrollment, we posit that the different estimated behavioral response could be due to individual preferences for cash over in-kind transfers. This finding suggests that effective policy interventions should take into account the type of benefits when targeting poverty relief for the elderly.

© 2014, Norma B. Coe and April Yanyuan Wu. All rights reserved. The research reported herein was performed pursuant to a grant from the U.S. Social Security Administration (SSA) funded as part of the Retirement Research Consortium (RRC). The opinions and conclusions expressed are solely those of the authors and do not represent the views of SSA, any agency of the federal government, the RRC, the University of Washington, or Boston College.

CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

Hovey House, 140 Commonwealth Avenue, Chestnut Hill, MA 02467-3808

phone 617.552.1762 fax 617.552.0191 crr@bc.edu crr.bc.edu