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Savings and Personal Discount Rates in a Matched Savings Program for Low-Income Families

Background. Matched savings programs that assist low-income individuals save toward specific goals such as home-ownership or educational expenses have become a popular way to try to help low-income individuals accumulate assets; acquire the habit of saving; and, ultimately, escape poverty. While these programs are reducing structural barriers to savings, their success may depend on variation in individuals’ desires to save and in their abilities to act on those preferences.

Time preference (i.e., ‘discount rate’) is a concept to describe how present- or future-oriented a person may be. Persons with lower future orientation place greater emphasis on their current well-being, whereas persons with higher future orientation are more oriented toward their future well-being. Researchers have suggested that variations in time preferences are likely to be important for understanding individuals’ financial outcomes. For example, when faced with competing demands for one’s money, individuals with higher time preferences may have a harder time controlling their spending or accumulating savings. However, finding a robust and reliable way to measure time preferences has been difficult, which has made it hard to determine their influence on financial behaviors.

Methods. Marieka Klawitter, Professor of Public Affairs and WCPC Affiliate, along with colleagues C. Leigh Anderson and Mary Kay Gugerty, used data from a local matched savings program run by the United Way of King County (Seattle metropolitan area) to try to develop a summary measure of the concept of time preference and to link participants’ time preferences with savings levels across families and over time. The study sample included over 600 families who participated in the matched savings program between 2002 and 2009, and who completed baseline and two follow-up surveys about both hypothetical and actual savings behaviors. To deal with the fact that time preference cannot be directly observed, the authors used factor analysis to summarize patterns across self-reported willingness to borrow at different loan amounts and periods and to characterize individual time preferences from these observed measures.

Findings. The authors found that a single, summary measure accurately captured individual time preferences, and did not find evidence of unique time preference patterns as a result of loan period or loan amount. This finding has important implications for future research on time preferences as it indicates that this unobservable concept can be accurately measured through a relatively simple set of questions.

Results from analyses to test the effects of time preferences on savings behaviors showed that persons with lower future orientation had significantly lower average savings deposit amounts in their first year in the matched savings program. In dollar terms, a one-unit increase in a participant’s time preference factor score was correlated with about $15 less in monthly savings in the first program year (relative to an average monthly savings of roughly $130). Persons with lower future orientation were also significantly less likely to reach the maximum savings limit or use their funds to buy a home. In contrast, this study did not find evidence that individual time preferences influenced how frequently program participants made savings deposits or the risk of dropping out of the program. Additionally, this study did not find evidence that program participants’ time preferences became more future-oriented during their time in the matched savings program.

This study offers insights for both researchers and policymakers considering how to account for individual time preferences in relation to individual savings behaviors and the effectiveness of matched savings program for low-income persons. The findings suggest that even after case management, financial training, and experience with the matched savings program, participants’ time preferences remained largely resistant to change. The authors argue that it may be advantageous for matched savings programs to provide additional supports and services, particularly in the first year of the program and to participants with low future orientation in order to increase savings goals and program completion rates.
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Savings and Personal Discount Rates in a Matched Savings Program for Low-Income Families

New research from Marieka M. Klawitter, C. Leigh Anderson, and Mary Kay Gugerty

Key Findings

• New methods show that the unobservable concept of ‘time preference’ can be accurately measured with a single summary score that can be drawn from a relatively simple set of questions.

• Survey results from a Seattle-area matched savings program showed that low-income participants more oriented toward present than future well-being made smaller monthly savings deposits in the first program year and were less likely to successfully complete the program. A one-unit increase in a participant’s time preference factor score was correlated with about $15 less in monthly savings in the first program year (relative to an average monthly savings of roughly $130).

• The growing program and policy emphasis on supporting savings among low-income families should consider additional supports and services to better serve persons with lower future orientations, particularly in the first program year of matched savings programs.