

### Citation

Choi, J.J., Haisley, E., Kurkoski, J., & Massey, C. (2012). Small cues change savings choices (Working Paper 17843). Cambridge, MA: National Bureau of Economic Research.

### Highlights

- The study's objective was to gauge the effect of savings cues on 401(k) contribution rates by exposing randomly selected groups of employees to different hypothetical savings rates or amounts.
- The authors analyzed the relationship between exposure to savings rate cues and savings choices among employees at an unnamed U.S. technology company who contributed less than the maximum yearly amount to their retirement savings plans prior to the intervention.
- Overall, the authors found that participants adjusted their 401(k) contribution rates in response to cues. Those who were cued with the maximum contribution amount were 5.7 percent more likely than those who received no cue to contribute at maximal levels.
- The quality of causal evidence provided in this study is low because it is a randomized controlled trial with unknown attrition and unknown equivalence of the analytic groups. This means we are not confident the estimated effects are attributable to savings cues; other factors are likely to have contributed.

### Evaluation of Savings Cues

The authors divided employees who were not already contributing to their 401(k) plans at the maximum level into subgroups based on their current contribution levels (low-, middle-, and high-saver groups). Within each subgroup, employees were randomly assigned to receive by email one of several savings cues (treatments) or a control condition. The savings cues specified an additional contribution amount (anchor cue), the maximum contribution threshold (threshold cue), or a savings goal (goal cue). In particular, the following savings cues were analyzed:

- Anchor cues: The email suggested that employees could increase 401(k) contributions by a given share of income and receive a greater employer match. The emails suggested increases of 1, 3, 10, or 20 percent of income.
- Threshold cues: The email indicated the maximum amount of money an individual could contribute to the 401(k). Some employees assigned to this group received emails that specified they could contribute up to 60 percent of their income in any pay period. Other emails specified that additional contributions of a set dollar amount (determined by current contributions) would be matched at 100 percent by the employer or specified the additional contributions required to maximize the employer's matching contribution.
- Goal cues: the email suggested an annual savings goal of \$7,000 or \$11,000 and the associated increase in the employer's matching contribution.

The authors conducted two randomized experiments at a U.S. technology company, the first in fall 2009 and the second in fall 2010. Each experiment contained multiple contrasts. In the 2009 experiment, half of about 1,800 low and middle savers were assigned either to receive the 1 percent anchor cue or the control condition. About 2,900 high savers were randomly assigned in approximately equal proportions to one of three groups: one group received the 1 percent anchor cue, another received the 60 percent threshold cue, and one received no cue. Analysis was conducted using data for each pay period from November 2009 to October 2010.

In the 2010 experiment, the authors cued about 450 low savers using the threshold cues that provided dollar amounts, randomly assigning the cue received. About 800 middle savers were assigned to either of the two different levels of the savings goal treatment or no savings goal. Finally, about 2,200 high savers were randomly assigned to receive no cue, the 3 percent anchor treatment, the 10 percent anchor treatment, or the 20 percent anchor treatment. Analysis was conducted using data for each pay period from October 2010 to September 2011.

## Findings

- Receiving the 2009 maximum contribution threshold treatment increased 401(k) contribution rates only among low savers. Differences also decreased throughout the year of the evaluation. Pooling across pay periods, participants in this treatment group were 5.7 percent more likely than their control counterparts to contribute at the maximum level in the first year post-intervention.
- In the 2010 experiment, high savers cued with any additional contribution treatment made significantly higher contributions than did those who received no savings cue. The version of the cue did not affect savings rates.
- In the 2010 experiment, the high savings threshold treatment led to significantly higher contributions among both low and middle savers.

## Considerations for Interpreting the Findings

Study participants were all employees at the same technology company and thus cannot be considered a representative sample of the general population.

## Causal Evidence Rating

The level of causal evidence provided in this study is low. This means we are not confident the estimated effects are attributable to the various savings cues; other factors are likely to have contributed. Although the authors conducted a randomized controlled trial, no information was provided on sample attrition, making it impossible to assess the validity of the experiment. In cases of high or unknown attrition, a study can receive a moderate causal evidence rating if the analysis controls for possible differences in background characteristics of the analytic treatment and control groups. However, the authors did not use such controls, and therefore differences in the outcomes of interest may reflect factors other than the experimental treatments.