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EVALUATING WEB-BASED SAVINGS INTERVENTIONS: A PRELIMINARY ASSESSMENT

Wei-Yin Hu, Olivia S. Mitchell, Cynthia Pagliaro, and Stephen P. Utkus *

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Retirement plan sponsors in other countries often have auto-enrollment or "opt-out" saving regimes, implying that employees are atomically enrolled into the workplace-based retirement plans at the point of hire, and plan contribution rates may also be periodically increased. Such efforts have been shown to boost retirement saving rates, but few US workers are automatically enrolled, and automatic contribution escalation programs are even less common. For this reason, many American workers must still make active saving choices when it comes to retirement saving in their defined contribution pension plans.

We explore the efficacy of a technological approach to promote voluntary saving in 401(k) accounts, namely a Boost Your Saving dial that appeared on the participants' webpages. Consistent with expectations, contribution rates rose for those seeing the Boost Your Saving dial compared to the control period. Compared to a year earlier, the fraction of participants increasing plan contributions rose by 17%. Some 9% used the Boost Your Saving dial, increasing their contribution rates by an average of 2 percentage points. There was no change in the fraction of participants decreasing their contributions.

Background

Recent research has suggested that people lack financial knowledge to design and formulate retirement saving plans, and they also tend to have difficulty turning good intentions into reality. As a result, it may be that assistance or guidance may be needed to help plan participants do a better job of saving for retirement. Yet to date, relatively little analysis has been done on how to better inform active employees of the need to save more for retirement. Accordingly, there is a growing interest in experimental interventions making it easier for retirement plan participants to save more when they decide to do so.

The "Boost Your Saving" Dial

For this project, the Vanguard Group designed and implemented a Boost Your Saving dial in the context of 401(k) retirement plan websites. Our analysis asks whether this encouraged existing plan participants visiting the site to boost their plan contribution rates immediately. While participants already had the option of boosting their deferral rates online, the process could be complicated. Accordingly, the Saving dial was designed to test whether increasing the salience and ease of increasing individuals' plan deferral rates would alter retirement plan contribution behavior. The dial appeared prominently on the "account balance" page seen by existing plan participants when first logging on their 401(k) account.

^{*} Wei-Yin Hu is director of Financial Research at Financial Engines. Olivia S. Mitchell is the International Foundation of Employee Benefit Plans Professor, professor of Business Economics and Public Policy, professor of Insurance and Risk Management, and the executive director of the Pension Research Council at the Wharton School of the University of Pennsylvania. Cynthia Pagliaro is a senior research analyst at the Vanguard Center for Retirement Research. Stephen P. Utkus is a principal at the Vanguard Center for Retirement Research. This Research Brief is based on MRRC Working Paper 2013-299.

The dial was launched December 6, 2012, by 1,100 defined contribution retirement plan sponsors electing to introduce it to their websites, covering a total population of 1.5 million participants. To evaluate possible changes in behavior, we applied several screens to the participant population we examined. First, participants had to be registered to access their accounts via the Internet. Second, the dial was offered only to participants contributing 1-19% of pay, inclusive, to their retirement plans. Third, the intervention was offered only to participants contributing from one type (or "source") of money — namely, either pre-tax contributions or Roth contributions, but not both. Fourth, to see the dial, participants had to log on to their accounts during our evaluation period, November 30, 2012 – May 31, 2013. And fifth, when participants did make a change, either increasing or decreasing plan contributions, the dial was removed from their account pages for any subsequent logons.

Methods and Data

The "Boost Your Savings" mechanism showed participants their current plan contribution rates and recommended that they boost their contributions by one, two or three percentage points from that base. Participants seeing the dial were randomly assigned to a recommended contribution size increment, based on which minute of an hour they had logged onto the account. For example, someone logging on five minutes after the hour received one of the percentage change offers, someone logging in six minutes after the hour received another, and so on. Because the Boost Your Saving dial was implemented by the recordkeeper, we were unable to randomly assign plan participants to treatment and control groups during the evaluation period. Instead, we used a pre/post treatment comparison: that is, we compare changes in plan savings behavior when the dial was offered, with those for a prior period when it was not offered.

Preliminary Results

To date we have produced summary statistics on savings rate changes over time using the aggregate dataset, comparing patterns to participants seeing the dial to those from a year earlier when the dial was unavailable. We find that some 4-5 million participants logged on during both periods. In the prior period, some 0.42% of those who logged on boosted their saving rates; during the treatment period, this rose slightly to 0.49%. The average percentage increase in saving rates was 4.32% during the control period, and 4.28% during the treatment period. In both periods, only about 0.2% of those who logged on curtailed their contribution rates, and the average percentage decrease among these few individuals was a negative 4.1-4.2 percent. The contribution increases started after the introduction of the Boost Your Saving dial, and the treatment effect was largest during this initial phase. After several months, the rise in those electing to boost their saving rates dissipated. We attribute this partly to the fact that web usage among plan participants is highly skewed, with a small fraction of participants logging on frequently. After an initial exposure, it appears that the effect of the savings dial declined.

Conclusions and Future Work

These findings are relevant to efforts to evaluate programmatic interventions to improve financial literacy and savings, particularly those that address the increasing role of technology-based household financial decisions. Employees and their families are increasingly using electronic media to obtain financial information and conduct financial transactions. Understanding how interventions in the electronic world can alter household saving behavior will continue to deserve research and policy attention. Our future work will incorporate additional statistical controls so as to more cleanly extract the impact of the web-based innovation. We will also extend our analysis to longer time periods and additional innovative technological interventions.

University of Michigan Retirement Research Center Institute for Social Research 426 Thompson Street Room 3026 Ann Arbor, MI 48104-2321 Phone: (734) 615-0422 Fax: (734) 615-2180 mrrc@isr.umich.edu www.mrrc.isr.umich.edu

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