

# Single Email Prompts Individuals to Increase Retirement Savings

DOL Behavioral Interventions Project Brief

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## Study background

The Department of Labor (DOL) Behavioral Interventions project was launched to explore the potential of using behavioral insights to improve the performance and outcomes of DOL programs. It is sponsored by the DOL Chief Evaluation Office and draws on insights from behavioral economics, psychology, and related fields.

This brief presents initial findings on the effects of an email designed to encourage U.S. Department of Labor (DOL) employees to increase their contributions to the Thrift Savings Plan (TSP)—a plan similar to 401(k) plans in the private sector—and take full advantage of the available employer match. The Employee Benefits Security Administration (EBSA) and DOL's Human Resources (HR) department, in partnership with the DOL Behavioral Interventions (DOL-BI) team, tested the effectiveness of an email carefully tailored to employees who were contributing less than 5 percent of their salary, the amount needed to receive the full employer matching contribution. The message built on retirement planning resources that are already available to federal employees and drew on findings from behavioral research to address mental barriers that may prevent individuals from saving for retirement.

The new email was sent to half of the 4,078 DOL employees that either were not participating in the TSP or were contributing less than 5 percent. The message's effect on TSP savings was measured using DOL records of retirement contributions made six weeks after the email was sent. In this brief, we report on how the study and the email were designed, and present findings on the email's effect on employees' TSP participation and contribution levels.

## KEY FINDINGS

- The email caused some DOL employees to increase their TSP contributions enough to receive the full employer match.
- The email did not make employees start contributing to the TSP if they were not already doing so.
- The message had the largest impact on DOL employees who were already contributing to the TSP and on younger DOL employees.

## INTERVENTION DESIGN

**Previous efforts.** The TSP has made significant efforts to increase employees' contributions to their retirement savings accounts. In August 2010, a retirement savings policy was implemented in which new DOL employees were automatically enrolled in the TSP, with their contributions set by default at 3 percent of salary unless they chose otherwise. In 2014, the TSP released a series of educational materials organized around the theme "Take Five for Your Future" to highlight the ease of changing TSP contribution levels (in five minutes), the range of investment options (five core and five lifecycle funds), and the benefit employees gain by contributing at least 5 percent of their annual salary to the TSP (thus receiving the full employer match).

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## Study goal

Increase workers' retirement security by "nudging" more employees to start contributing to TSP accounts or increase their contribution level to 5 percent of their salary or more.

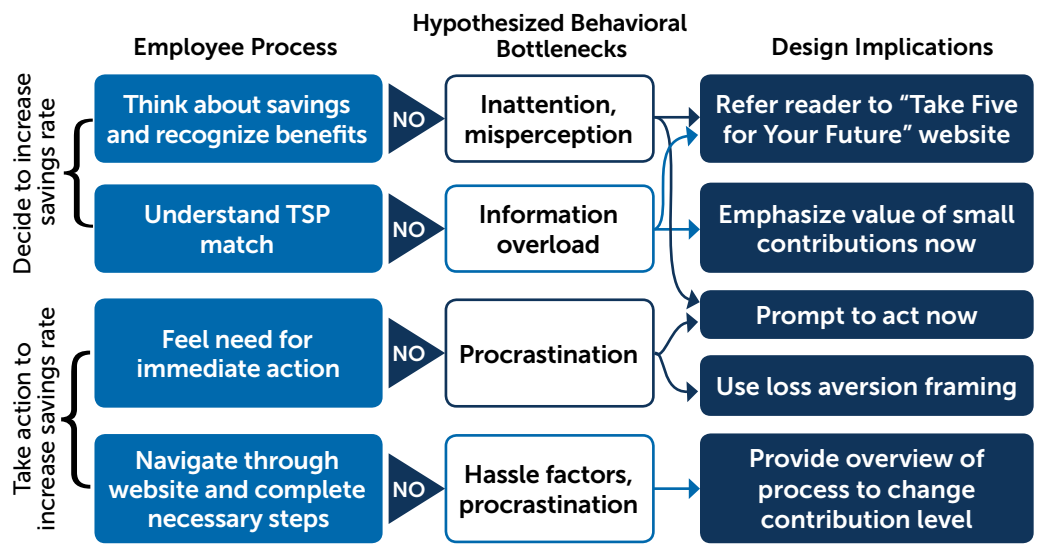
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As of fall 2015, however, more than one-quarter of eligible employees were contributing less than 5 percent of their salary to the TSP. One of the goals of this study was to leverage existing educational materials in new outreach efforts targeted directly to this group.

**Behavioral factors.** The DOL-BI team collaborated with EBSA and HR staff to diagnose potential factors that may lead employees to contribute less than 5 percent of their salaries to the TSP. Figure 1 shows the possible behavioral bottlenecks that we identified. As the figure shows, three central themes emerged:

- 1. Inattention and misperception.** Employees may not set aside time to plan for retirement or may not place enough emphasis on the benefit of additional retirement income.
- 2. Information overload.** Employees may not realize or may forget they are forgoing matching funds.
- 3. Hassle factors and procrastination.** Employees may find navigating the DOL payroll website and changing their contribution level to be an unwelcome hassle, raising the risk of procrastination.

**Figure 1. Behavioral bottlenecks and email design implications**



**Email design.** In consultation with EBSA and HR staff, the DOL-BI team developed an email with three components that addressed these potential bottlenecks (Exhibit 1 at the end of this brief):

- 1. Emphasize the concrete benefits of retirement savings** in a graphic that contrasts a retirement with many consumption options with one that has fewer options. The email also includes a link to the TSP's "Take Five" educational resources.
- 2. Use positive and negative framing** by highlighting the "free money" that employees "miss out on" if they contribute less than 5 percent to the TSP. This message draws on behavioral research suggesting people are more strongly motivated to avoid losses than to achieve equal-size gains, as well as studies indicating that people tend to consume as much of a free good as is socially acceptable.
- 3. Encourage employees to "act now" and show how easy it is to increase savings** by describing how to change their contribution level in five simple steps. An email attachment uses images of the DOL payroll website to illustrate these steps (Exhibit 2 at the end of this brief).

## STUDY DESIGN

To test the effectiveness of this message, the DOL-BI team randomly selected half of the DOL employees who were contributing less than 5 percent to the TSP to receive the email (the treatment

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## Research question

Can a simple email informed by behavioral science (1) increase the number of federal employees participating in the TSP and (2) increase the number contributing enough to receive the full employer match?

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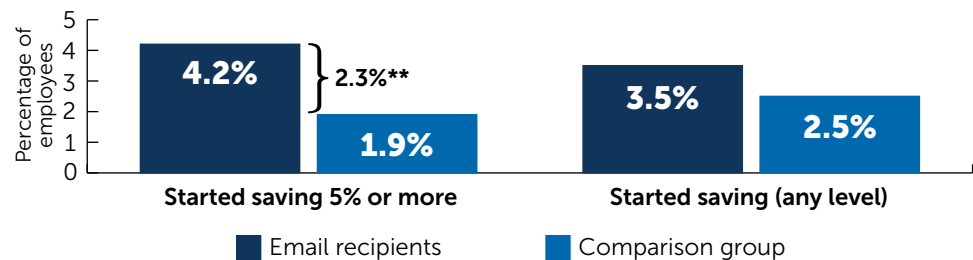
group), while the rest of these employees (the control group) did not receive any new communications exclusively focused on the TSP. DOL-HR sent the email to the randomly selected employees in late September 2015, and provided records on the TSP contribution levels of both groups (treatment and control) in November 2015.

## FINDINGS

**The email increased the number of DOL employees receiving the full employer match.** The message caused a 2.3 percentage-point increase in the number of employees contributing at least 5 percent of their salary to the TSP (Figure 2).

**The email did not make employees start contributing to the TSP if they were not already doing so.** Although email recipients were approximately 1 percentage point more likely to begin contributing to the TSP than nonrecipients were, this difference was not statistically significant and could have been due to chance alone (Figure 2).

**Figure 2. Impact on share of employees at two levels of TSP participation**



\*\*Difference is statistically significant at the 0.01 level.

Note: The estimated impact on beginning to save 5 percent or more is measured in a sample of employees that were saving less than 5 percent before the study, including those contributing nothing. The estimated impact on beginning to save at any level is measured among employees who were not making any contributions to the TSP before the study.

**The email's impact was largest among younger DOL employees and those who were already contributing to the TSP.** The message's effect on the number of employees saving 5 percent or more was concentrated among those who had already been making some contributions to the TSP (but were contributing less than 5 percent). The email also had a larger impact on younger DOL employees (under the median age of 45) than it did on older employees.

**The average employee who received the email and raised her contributions increased her annual savings by approximately \$3,000 and gained 1 percent in employer matching funds.** If maintained over 20 years, this increase in savings would translate to approximately \$115,000 in additional retirement income, assuming a 6-percent annual return.<sup>i</sup>

## IMPLICATIONS AND NEXT STEPS

The results of this random assignment study demonstrate that a single email informed by behavioral research can cause employees to increase their savings levels and maximize employer matching funds. If the DOL employees who received the new email and increased their contributions maintained this level of savings until retirement, they could gain a meaningful amount of retirement savings—approximately \$115,000, on average. This is notable because of the low-touch, low-cost nature of the intervention. The study's findings are also consistent with those from a recent study by the White House Social and Behavioral Sciences Team; the most effective of eight email designs in that study featured similar design elements and increased the number of U.S. military service members participating in the TSP by two percentage points.<sup>ii</sup>

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Our finding that the email was more effective among younger employees and among those who were already contributing suggests that a different set of messages or an altogether different tool may be needed to influence older employees and those who are not contributing to the TSP program at all. Also, while a single email led to an improvement in retirement savings, sending multiple emails (for example, reminders after the original email is sent) may further encourage employees to take action and increase the potential for impact.

EBSA was interested in exploring these alternatives. In a second phase of this study, we are testing the effects of sending a reminder email and augmenting the initial email with new language that invokes social norms by noting that the majority of DOL employees contribute at least 5 percent to the TSP. Results from this second phase are anticipated in fall 2016.

**Submitted to:**  
**United States Department of Labor Chief Evaluation Office**  
**Office of the Assistant Secretary for Policy**  
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**Washington, DC 20210**

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**Contract Number: DOLQ129633249/DOL-OPS 4-U-00001**

**This brief was prepared with funding from the U.S. Department of Labor. The views expressed are those of the authors and should not be attributed to the Federal Government or the Department of Labor.**

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<sup>1</sup> Additional retirement savings are estimated over a 20-year period because the median age of email recipients who gained the full employer match was 42 years. The match gained by each employee in this group was estimated by applying TSP matching policy at each percentage-point threshold. (For instance, an employee increasing contributions from 3 percent [the default saving rate for new employees] to 5 percent would gain 1 percent in employer match [from a 4-percent employer contribution when the employee saves 3 percent of his or her salary to the maximum 5 percent when the employee saves 5 percent].) Each employee's increase in annual savings was estimated as [annual salary] × [increase in contribution + employer match based on TSP matching policy]. The average increase in annual TSP contributions among this group (\$3,130) and the corresponding gain in employer match were estimated using the medians of the resulting values to avoid undue influence of extreme values. The total savings increase over 20 years was calculated, assuming a 6 percent annual return rate, as  $\sum_{i=1}^{20} \$3,130 \times (1.06)^{(i-1)} = \$115,139$ . On average, the employer match represents about one-third of the total increase in savings.

<sup>2</sup> Social and Behavioral Sciences Team. "Servicemember TSP Enrollment." Available at <https://sbst.gov/projects/tsp-enrollment/>. Accessed April 18, 2016.

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## Exhibit 1. Study email sent to randomly selected employees

[Subject line: You are missing out on free money every pay period – here's how to get it]

**How will you spend your retirement?**



A simple choice now can give you more choices to enjoy in retirement. But if you aren't contributing at least 5% to the Thrift Savings Plan (TSP), you are missing out on free money every pay period! Each time you contribute money to your TSP retirement account, DOL will match your contributions up to 5% of your salary. Getting the full match today may open up more choices for you to enjoy in retirement. The sooner you start, the more you can make your money work for you.

You can easily change your contribution right now to make sure you're getting the money you've earned.

### **How to quickly change your contribution now**

1. Log into your [Employee Personal Page](#) and click "TSP" on the left hand side. Forgot your user ID or password? Click [here](#).
2. Click "self-service" in the upper right corner.
3. Click "change," then enter the percent you want to contribute (for example, 5%) and the pay period you would like to start your new contribution amount. ***\*\*Don't worry, this decision isn't final. You can change your contribution at ANY time.\*\****
4. Click "continue," then, "yes," and then "submit" to finish.
5. Sit back and watch your money grow!

Remember, setting aside a little money today can [make a big difference in the future](#). Start [now](#) by trying at least 5% this pay period.

Need more help navigating the Employee Personal Page? Use the attached guide that shows you how to change your contribution level. You can also contact your servicing human resources office if you have any further questions.

*Office of Worklife, Leave and Benefits Policy & Programs  
Human Resources Center*

← **Combines negative and positive framing**

← **Emphasizes concrete benefits of retirement savings**

← **Combines negative and positive framing**

← **Illustrates ease of changing contributions**

← **Prompts to act now**

**Exhibit 2. Attachment to study email**

## Just a few clicks can give you more choices to enjoy in retirement.

Complete these **5 simple steps** now to get your full match from DOL and avoid missing out on free money. Don't worry, this decision isn't final. You can change your contribution at ANY time.

