Can Information Change Personal Retirement Savings?
Evidence from Social Security Benefits Statement Mailings

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Online Appendix

Appendix Table 1. Summary Statistics by Control (No Statement) and Treatment (Received Statement) Group

| Treatment? | Strategy 1 (2011 <br> Termination) |  | Strategy 2(Temporary 2012Reintro) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Yes | No | Yes |  |  |  |  |  |  |  |  |  |  |
| Female (\%) | 35\% | 37\% | 39\% | 42\% |  |  |  |  |  |  |  |  |  |  |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| High School Grad (\%) | 28\% | 26\% | 27\% | 26\% |  |  |  |  |  |  |  |  |  |  |
| Some College (\%) | 17\% | 18\% | 21\% | 23\% |  |  |  |  |  |  |  |  |  |  |
| College (\%) | 49\% | 49\% | 45\% | 43\% |  |  |  |  |  |  |  |  |  |  |
| Grad Degree (\%) | 4\% | 5\% | 4\% | 5\% |  |  |  |  |  |  |  |  |  |  |
| Savings Rates |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average TSP (\%) | 5.1 | 5.1 | 5.2 | 5.4 |  |  |  |  |  |  |  |  |  |  |
| Average TSP (\%) Windsorized | 4.8 | 4.9 | 4.9 | 5.1 |  |  |  |  |  |  |  |  |  |  |
| Likelihood of Saving (\%) | 88\% | 87\% | 91\% | 91\% |  |  |  |  |  |  |  |  |  |  |
| N | 1,039 | 1,135 | 3,130 | 350 |  |  |  |  |  |  |  |  |  |  |
|  | Strategy 3 (Reintroduction at 5 Year Age Ranges) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age Group | 25 |  | 30 |  | 35 |  | 40 |  | 45 |  | 50 |  | 55 |  |
| Treatment? | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No | Yes |
| Female (\%) | 40\% | 43\% | 38\% | 37\% | 39\% | 40\% | 41\% | 40\% | 39\% | 38\% | 36\% | 35\% | 36\% | 37\% |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| High School Grad (\%) | 32\% | 35\% | 30\% | 31\% | 33\% | 33\% | 35\% | 35\% | 36\% | 37\% | 35\% | 35\% | 34\% | 33\% |
| Some College (\%) | 21\% | 26\% | 17\% | 18\% | 17\% | 16\% | 18\% | 17\% | 18\% | 17\% | 19\% | 18\% | 19\% | 19\% |
| College (\%) | 34\% | 30\% | 36\% | 34\% | 30\% | 32\% | 28\% | 28\% | 26\% | 25\% | 26\% | 27\% | 27\% | 28\% |
| Grad Degree (\%) | 7\% | 3\% | 15\% | 15\% | 18\% | 18\% | 18\% | 19\% | 18\% | 18\% | 18\% | 19\% | 19\% | 18\% |
| Savings Rates |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average TSP (\%) | 5.5 | 5.2 | 5.9 | 5.6 | 5.7 | 5.7 | 5.8 | 5.9 | 6.2 | 6.0 | 7.2 | 7.2 | 8.1 | 8.0 |
| Likelihood of Saving (\%) | 94\% | 95\% | 92\% | 92\% | 90\% | 90\% | 87\% | 86\% | 87\% | 88\% | 88\% | 87\% | 89\% | 88\% |
| N | 1,751 | 435 | 5,830 | 1,482 | 7,761 | 2,175 | 7,761 | 1,885 | 10,062 | 2,621 | 13,932 | 3,504 | 14,411 | 3,626 |

Notes: The table includes expanded summary statistics for our three different strategies. Strategy 1 includes only those who turn 25 in 2011. Strategy 2 includes those who turn 25 in 2012. Strategy 3 includes those who turn 23-55 in the first half of 2015. Savings rates are computed for the six months following someone's relevant birthday.

Appendix Table 2 - Results for Males

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Panel A: Average Effect of Statement (Intensive Margin) |  |  |  |  |  |  |  |  |
|  | 2011 | 2012 Temporary | 2015 Reintroduction |  |  |  |  |  |  |
|  | Termination | Re-introduction | 25 | 30 | 35 | 40 | 45 | 50 | 55 |
| Treatment | $\begin{gathered} 0.07 \\ (0.21) \end{gathered}$ | $\begin{gathered} 0.43 \\ (0.30) \end{gathered}$ | $\begin{gathered} -0.16 \\ (0.30) \end{gathered}$ | $\begin{gathered} -0.30^{*} \\ (0.16) \end{gathered}$ | $\begin{gathered} -0.10 \\ (0.14) \end{gathered}$ | $\begin{gathered} 0.02 \\ (0.16) \end{gathered}$ | $\begin{gathered} -0.26^{*} \\ (0.14) \end{gathered}$ | $\begin{gathered} 0.06 \\ (0.13) \end{gathered}$ | $\begin{gathered} -0.49 * * * \\ (0.14) \end{gathered}$ |
| Observations | 1,403 | 2,145 | 1,321 | 4,561 | 6,322 | 5,778 | 7,859 | 11,305 | 11,542 |
| R-squared | 0.06 | 0.07 | 0.06 | 0.08 | 0.07 | 0.06 | 0.06 | 0.05 | 0.05 |
| Control Mean | 5.35 | 5.52 | 5.79 | 6.14 | 6.01 | 5.98 | 6.27 | 7.16 | 8.14 |
|  | Panel B: Likelihood of Saving (Extensive Margin) |  |  |  |  |  |  |  |  |
|  | 2011 | 2012 Temporary | 2015 Reintroduction |  |  |  |  |  |  |
|  | Termination | Re-introduction | 25 | 30 | 35 | 40 | 45 | 50 | 55 |
| Treatment | $\begin{gathered} -0.03 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.01 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.02 \\ (0.02) \end{gathered}$ | $\begin{gathered} -0.01 \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.01) \end{gathered}$ | $\begin{gathered} -0.02 \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.01 \\ (0.01) \end{gathered}$ | $\begin{gathered} -0.01 \\ (0.01) \end{gathered}$ | $\begin{gathered} -0.02 * * * \\ (0.01) \end{gathered}$ |
| Observations | 1,403 | 2,145 | 1,321 | 4,561 | 6,322 | 5,778 | 7,859 | 11,305 | 11,542 |
| R-squared | 0.04 | 0.04 | 0.07 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 |
| Control Mean | 0.90 | 0.91 | 0.94 | 0.93 | 0.89 | 0.87 | 0.87 | 0.87 | 0.89 |

Notes: This table presents OLS regression coefficients for receiving a SSA statement on savings rates (Panel A) and the probability of savings (Panel B) for males only. Column 1 includes only those who turn 25 in 2011 (treatment group: those who turn 25 between January and June of 2011). Column 2 includes those who turn 25 between October 2011 and December 2013 (treatment group: those who turn 25 between October 2012 and December 2012). Columns 3-9 include those who turn 23-55 in the first half of 2015 (treatment group: those who turn $25,30,40,45,50$, or 55 during that time). See the Empirical Strategy section of the paper for more details on each sample. Savings rates are computed for the six months following someone's relevant birthday. All regressions control for education and job category. Heteroskedasticity robust standard errors are provided in parentheses. ${ }^{* * *}$, **, and * represent significance at the $1 \%, 5 \%$, and $10 \%$ level, respectively.

Appendix Table 3 - Results for Females


Notes: This table presents OLS regression coefficients for receiving a SSA statement on savings rates (Panel A) and the probability of savings (Panel B) for females. Column 1 includes only those who turn 25 in 2011 (treatment group: those who turn 25 between January and June of 2011). Column 2 includes those who turn 25 between October 2011 and December 2013 (treatment group: those who turn 25 between October 2012 and December 2012). Columns 3-9 include those who turn 23-55 in the first half of 2015 (treatment group: those who turn $25,30,40,45,50$, or 55 during that time). See the Empirical Strategy section of the paper for more details on each sample. Savings rates are computed for the six months following someone's relevant birthday. All regressions control for education and job category. Heteroskedasticity robust standard errors are provided in parentheses. ***, **, and * represent significance at the $1 \%, 5 \%$, and $10 \%$ level, respectively.

Apppendix Table 4 - Main Results for Individuals Not Previously Saving in the TSP

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Panel A: Average Effect of Statement (Intensive Margin) |  |  |  |  |  |  |  |  |
|  | 2011 | 2012 Temporary | 2015 Reintroduction |  |  |  |  |  |  |
|  | Termination | Re-introduction | 25 | 30 | 35 | 40 | 45 | 50 | 55 |
| Treatment | $\begin{gathered} -0.02 \\ (0.19) \end{gathered}$ | $\begin{aligned} & 0.46^{*} \\ & (0.27) \end{aligned}$ | $\begin{gathered} 0.16 \\ (0.44) \end{gathered}$ | $\begin{gathered} 0.17 \\ (0.14) \end{gathered}$ | $\begin{gathered} 0.08 \\ (0.12) \end{gathered}$ | $\begin{gathered} 0.08 \\ (0.10) \end{gathered}$ | $\begin{gathered} -0.13 \\ (0.11) \end{gathered}$ | $\begin{gathered} -0.02 \\ (0.09) \end{gathered}$ | $\begin{gathered} -0.10 \\ (0.10) \end{gathered}$ |
| Observations | 262 | 331 | 99 | 475 | 897 | 1,055 | 1,385 | 1,904 | 1,713 |
| R-squared | 0.05 | 0.07 | 0.09 | 0.04 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 |
| Control Mean | 0.48 | 0.63 | 0.49 | 0.35 | 0.42 | 0.35 | 0.44 | 0.39 | 0.38 |
|  | Panel B: Likelihood of Saving (Extensive Margin) |  |  |  |  |  |  |  |  |
|  | 2011 | 2012 Temporary | 2015 Reintroduction |  |  |  |  |  |  |
|  | Termination | Re-introduction | 25 | 30 | 35 | 40 | 45 | 50 | 55 |
| Treatment | $\begin{gathered} -0.02 \\ (0.05) \end{gathered}$ | $\begin{gathered} 0.17 * * \\ (0.08) \end{gathered}$ | $\begin{gathered} 0.05 \\ (0.10) \end{gathered}$ | $\begin{gathered} 0.06 \\ (0.04) \end{gathered}$ | $\begin{gathered} -0.01 \\ (0.03) \end{gathered}$ | $\begin{gathered} 0.02 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.01 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.01 \\ (0.02) \end{gathered}$ | $\begin{gathered} -0.04^{* *} \\ (0.02) \end{gathered}$ |
| Observations | 262 | 331 | 99 | 475 | 897 | 1,055 | 1,385 | 1,904 | 1,713 |
| R-squared | 0.05 | 0.06 | 0.11 | 0.05 | 0.02 | 0.01 | 0.01 | 0.01 | 0.02 |
| Control Mean | 0.14 | 0.16 | 0.12 | 0.13 | 0.13 | 0.11 | 0.11 | 0.09 | 0.10 |

Notes: This table presents OLS regression coefficients for receiving a SSA statement on savings rates (Panel A) and the probability of savings (Panel B) for those that were not saving prior to their birthday. Column 1 includes only those who turn 25 in 2011 (treatment group: those who turn 25 between January and June of 2011). Column 2 includes those who turn 25 between October 2011 and December 2013 (treatment group: those who turn 25 between October 2012 and December 2012). Columns 3-9 include those who turn 23-55 in the first half of 2015 (treatment group: those who turn $25,30,40,45,50$, or 55 during that time). See the Empirical Strategy section of the paper for more details on each sample. Savings rates are computed for the six months following someone's relevant birthday. All regressions control for gender, education, and job category. Heteroskedasticity robust standard errors are provided in parentheses. ***, **, and * represent significance at the $1 \%, 5 \%$, and $10 \%$ level, respectively.

Appendix Table 5 - Robustness Analyses

|  | (1) |  | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Panel A: Average Effect of Statement (Intensive Margin) |  |  |  |  |  |  |  |  |  |
|  | 2011 Termination |  | 2012 Temporary Re-introduction | 2015 Reintroduction <br> (1 Year +/- Statement Birth Year) |  |  |  |  |  |  |
|  | (DD) |  | (Oct-Dec) | 25 | 30 | 35 | 40 | 45 | 50 | 55 |
| Treatment x 25 | $\begin{gathered} 0.10 \\ (0.26) \end{gathered}$ | Treatment | $\begin{gathered} 0.25 \\ (0.23) \end{gathered}$ | $\begin{gathered} 0.08 \\ (0.23) \end{gathered}$ | $\begin{gathered} -0.28^{* *} \\ (0.13) \end{gathered}$ | $\begin{gathered} -0.08 \\ (0.12) \end{gathered}$ | $\begin{gathered} 0.13 \\ (0.13) \end{gathered}$ | $\begin{gathered} -0.25^{* *} \\ (0.12) \end{gathered}$ | $\begin{gathered} 0.05 \\ (0.12) \end{gathered}$ | $\begin{aligned} & -0.18 \\ & (0.12) \end{aligned}$ |
| Observations | 3,802 | Observations | 1,099 | 1,247 | 4,359 | 6,320 | 5,680 | 7,824 | 10,570 | 11,053 |
| R-squared | 0.08 | R-squared | 0.11 | 0.09 | 0.09 | 0.09 | 0.08 | 0.07 | 0.06 | 0.05 |
| Mean | 5.05 | Mean | 5.11 | 5.27 | 5.78 | 5.76 | 5.79 | 6.18 | 7.17 | 8.05 |
| Panel B: Likelihood of Saving (Extensive Margin) |  |  |  |  |  |  |  |  |  |  |
|  | 2011 Termination |  | 2012 Temporary Re-introduction | 2015 Reintroduction <br> (1 Year +/- Statement Birth Year) |  |  |  |  |  |  |
|  | (DD) |  | (Oct-Dec) | 25 | 30 | 35 | 40 | 45 | 50 | 55 |
| Treatment x 25 | $\begin{gathered} 0.03 \\ (0.02) \end{gathered}$ | Treatment | $\begin{gathered} 0.01 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.01 \\ (0.01) \end{gathered}$ | $\begin{gathered} -0.01 \\ (0.01) \end{gathered}$ | $\begin{gathered} -0.00 \\ (0.01) \end{gathered}$ | $\begin{gathered} -0.01 \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.01) \end{gathered}$ | $\begin{gathered} -0.01 \\ (0.01) \end{gathered}$ | $\begin{gathered} -0.01 \\ (0.01) \end{gathered}$ |
| Observations | 3,802 | Observations | 1,099 | 1,247 | 4,359 | 6,320 | 5,680 | 7,824 | 10,570 | 11,053 |
| R-squared | 0.05 | R-squared | 0.03 | 0.07 | 0.03 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 |
| Mean | 0.86 | Mean | 0.91 | 0.94 | 0.93 | 0.90 | 0.87 | 0.88 | 0.87 | 0.89 |

Notes: This table presents regression coefficients of savings rates (Panel A) and savings probability (Panel B). Column 1 includes regression coefficients from a difference-in-difference analysis comparing those who turned 24 in between January and June or July and December (none of whom would have received the statement not have received the statement) and those who turned 25 in the first or second half of 2011 (those who turned 25 in the first half of the year would have received the statement). Column 2 and Columns 3-9 are the same as Table 2 except the control group in Column 2 are just those who are born in October through December and the control groups for Columns 3-9 are those who are born either the year before or the year after those who receive the statement. More details and the population samples are included in Empirical Strategy section of the paper. Savings rates are computed for the six months following someone's relevant birthday. All regressions control for gender, education, and job category.
Heteroskedasticity robust standard errors are provided in parentheses. ${ }^{* * *},{ }^{* *}$, and * represent significance at the $1 \%, 5 \%$, and $10 \%$ level, respectively.

Appendix Table 6 Individual Difference in Difference

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Panel A: Average Effect of Statement (Intensive Margin) |  |  |  |  |  |  |  |  |
|  | 2011 | 2012 Temporary | 2015 Reintroduction |  |  |  |  |  |  |
|  | Termination | Re-introduction | 25 | 30 | 35 | 40 | 45 | 50 | 55 |
| Post | $\begin{gathered} 0.10 \\ (0.17) \end{gathered}$ | $\begin{gathered} 0.25 \\ (0.16) \end{gathered}$ | $\begin{gathered} 0.17 \\ (0.14) \end{gathered}$ | $\begin{gathered} 0.08 \\ (0.08) \end{gathered}$ | $\begin{gathered} 0.05 \\ (0.07) \end{gathered}$ | $\begin{gathered} 0.04 \\ (0.08) \end{gathered}$ | $\begin{gathered} 0.10 \\ (0.07) \end{gathered}$ | $\begin{gathered} 0.11 \\ (0.07) \end{gathered}$ | $\begin{gathered} 0.11 \\ (0.08) \end{gathered}$ |
| Treatment | $\begin{gathered} -0.15 \\ (0.18) \end{gathered}$ | $\begin{gathered} 0.41 \\ (0.26) \end{gathered}$ | $\begin{gathered} 0.34 \\ (0.23) \end{gathered}$ | $\begin{gathered} 0.21 \\ (0.13) \end{gathered}$ | $\begin{gathered} 0.26^{* *} \\ (0.12) \end{gathered}$ | $\begin{gathered} 0.41^{* * *} \\ (0.15) \end{gathered}$ | $\begin{gathered} -0.04 \\ (0.12) \end{gathered}$ | $\begin{gathered} -0.07 \\ (0.12) \end{gathered}$ | $\begin{aligned} & -0.12 \\ & (0.12) \end{aligned}$ |
| Treatment x Post | $\begin{gathered} 0.13 \\ (0.25) \end{gathered}$ | $\begin{gathered} -0.29 \\ (0.35) \end{gathered}$ | $\begin{gathered} 0.07 \\ (0.33) \end{gathered}$ | $\begin{gathered} 0.11 \\ (0.19) \end{gathered}$ | $\begin{gathered} 0.11 \\ (0.17) \end{gathered}$ | $\begin{gathered} 0.12 \\ (0.21) \end{gathered}$ | $\begin{gathered} 0.08 \\ (0.17) \end{gathered}$ | $\begin{gathered} 0.17 \\ (0.17) \end{gathered}$ | $\begin{gathered} 0.16 \\ (0.17) \end{gathered}$ |
| Obs | 3,462 | 2,992 | 3,570 | 12,642 | 17,030 | 16,134 | 22,798 | 33,604 | 31,674 |
| R2 | 0.09 | 0.08 | 0.08 | 0.10 | 0.10 | 0.08 | 0.07 | 0.07 | 0.05 |
| Mean | 5.02 | 5.22 | 5.30 | 5.43 | 5.51 | 5.54 | 6.04 | 7.19 | 7.98 |
|  | Panel B: Likelihood of Saving (Extensive Margin) |  |  |  |  |  |  |  |  |
|  | 2011 | 2012 Temporary | 2015 Reintroduction |  |  |  |  |  |  |
|  | Termination | Re-introduction | 25 | 30 | 35 | 40 | 45 | 50 | 55 |
| Post | $\begin{gathered} 0.01 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.01 \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.01) \end{gathered}$ | $\begin{gathered} -0.00 \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.01) \end{gathered}$ | $\begin{gathered} -0.00 \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.01) \end{gathered}$ |
| Treatment | $\begin{gathered} -0.02 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.07 * * * \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.04 * * * \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.02 * * \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.03 * * * \\ (0.01) \end{gathered}$ | $\begin{gathered} -0.01 \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.01) \end{gathered}$ |
| Treatment x Post | $\begin{gathered} -0.00 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.02 \\ (0.03) \end{gathered}$ | $\begin{gathered} -0.00 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.02) \end{gathered}$ | $\begin{gathered} 0.00 \\ (0.01) \end{gathered}$ | $\begin{gathered} 0.01 \\ (0.01) \end{gathered}$ | $\begin{gathered} -0.00 \\ (0.01) \end{gathered}$ |
| Obs | 3,462 | 2,990 | 1,900 | 6,546 | 8,792 | 8,286 | 11,865 | 17,119 | 16,148 |
| R2 | 0.06 | 0.05 | 0.09 | 0.05 | 0.04 | 0.05 | 0.04 | 0.04 | 0.04 |
| Mean | 0.86 | 0.88 | 0.92 | 0.89 | 0.88 | 0.85 | 0.86 | 0.86 | 0.88 |

Notes: This table presents difference in difference coefficients for receiving a SSA statement on savings rates (Panel A) and the probability of savings (Panel B). We use savings rates before and after (Post = 1) an individual's birthday. Column 1 includes only those who turn 25 in 2011 (treatment group: those who turn 25 between January and June of 2011). Column 2 includes those who turn 25 between October 2011 and December 2013 (treatment group: those who turn 25 between October 2012 and December 2012). Columns 3-9 include those who turn 23-55 in the first half of 2015 (treatment group: those who turn $25,30,40$, 45,50 , or 55 during that time)See the Empirical Strategy section of the paper for more details on each sample. Savings rates are computed for the six months following someone's relevant birthday. All regressions control for education and job category. Heteroskedasticity robust standard errors are provided in parentheses. ${ }^{* * *}{ }^{* *}$, and ${ }^{*}$ represent significance at the $1 \%, 5 \%$, and $10 \%$ level, respectively.

