

Increasing Tax-Time Saving through Behavioral Interventions: Evidence from the 2013 Refund to Savings Experiment

Michal Grinstein-Weiss¹, Krista Comer¹, Blair Russell¹,
Dana C. Perantie¹, Clinton Key², Dan Ariely³

¹Washington University in St. Louis, ²Pew Charitable Trust, ³Duke University

Introduction

The annual occasion of filing taxes presents a “golden moment” to encourage and facilitate saving behavior at a time when people anticipate receiving lump sums—tax refunds—beyond usual income. In 2013 (tax year 2012), approximately 680,000 refund-eligible tax filers participated in the R2S experiment, which Intuit embedded in TurboTax Freedom Edition (TTFE), the tax-preparation software that Intuit offers for free to qualified LMI households. The experiment’s randomized controlled design enables rigorous evaluation of a variety of interventions to increase the number of savers and the dollar amounts saved. This report presents results from an evaluation of R2S interventions in 2013.

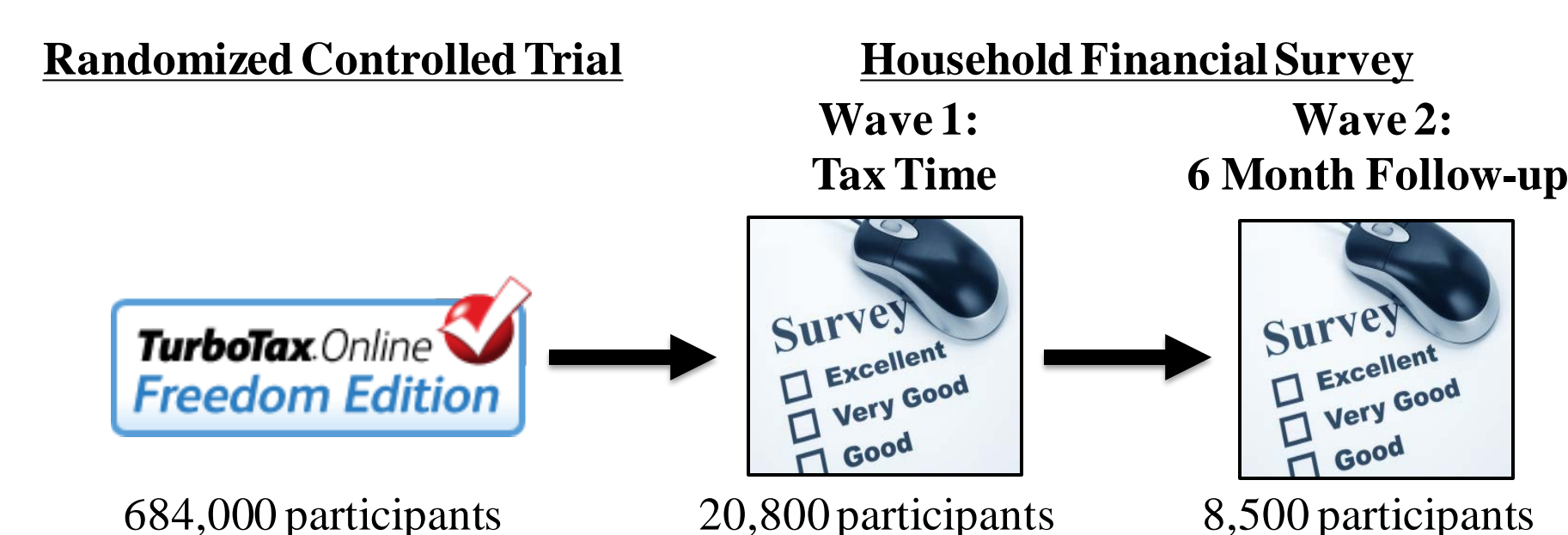
Principles of behavioral economics informed the content of messages and the format of these interventions. In addition, the experiment was designed to make saving a salient default option. We tested two main behavioral mechanisms in varying combinations throughout the 2013 tax-filing season: (a) motivational prompts and (b) suggested savings amounts (anchors).

We examine four primary research questions:

1. Can behavioral economics techniques increase the number of people who deposit to savings at tax time?
2. Does R2S increase the amount of money deposited into savings at tax time?
3. Do R2S interventions increase the number of people who save their refund for 6 months?
4. Can R2S increase the proportion of refund saved 6 months?

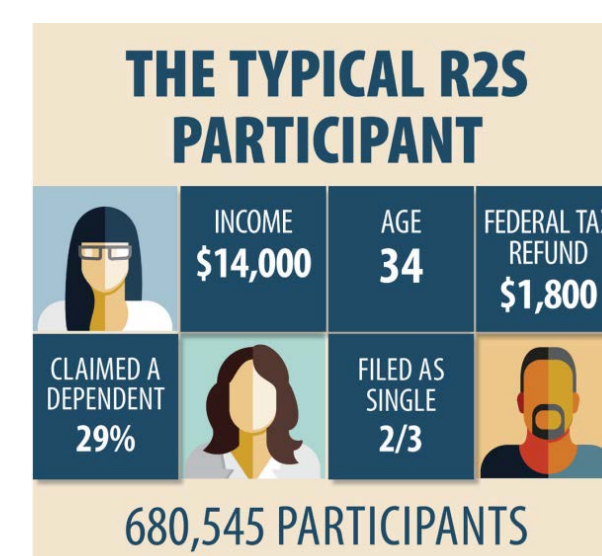
Research Design

Data collection:



Experimental sample:

- TurboTax Freedom Edition users
 - Household AGI below \$31,000,
 - Qualified for EITC, or
 - Active-duty military with AGI under \$57,000



R2S interventions:

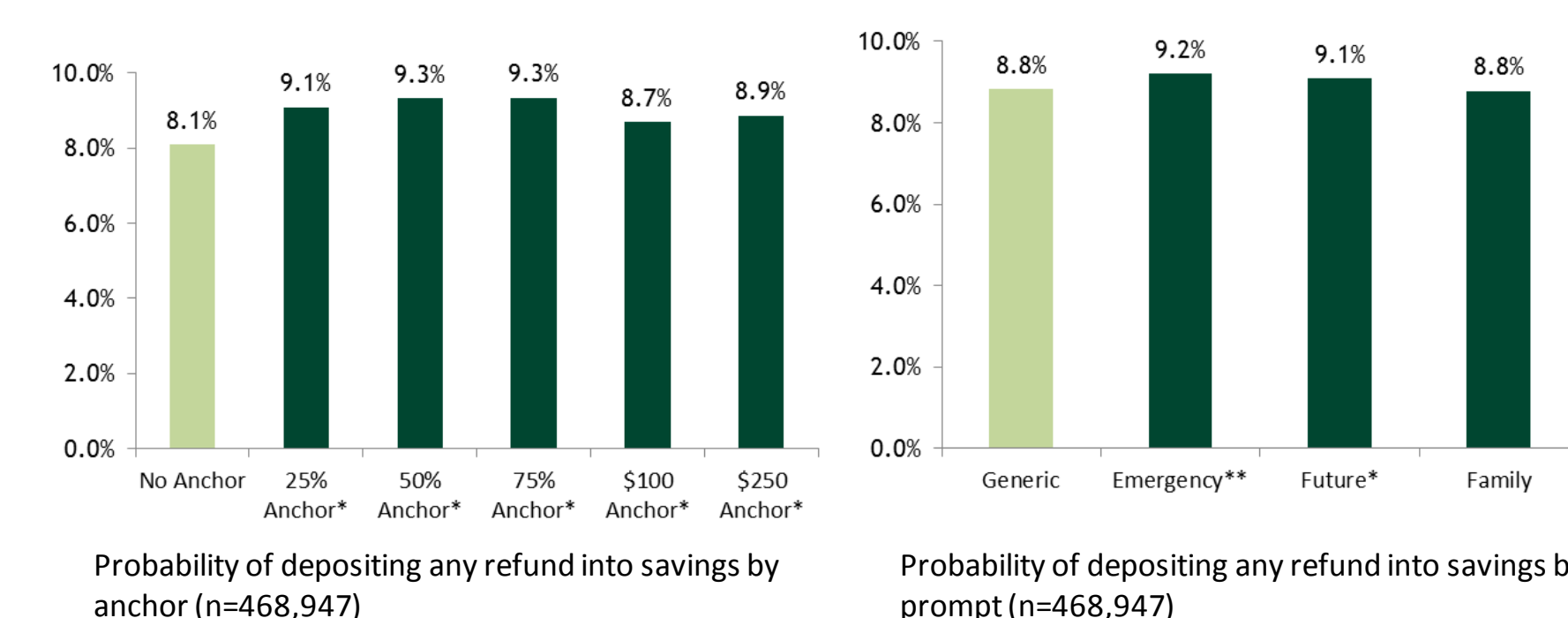
- Random assignment to control or treatment condition
 - Combinations of prompt and anchor, including some with anchor and no prompt
 - Prompts: Emergency, Family, Future
 - Anchors: 25%, 50%, 75%, \$100, \$250
 - Anchors are prefilled defaults in tax allocation screen

Results

Research Question 1:

Interventions led to significant increases in the number of depositors to savings vehicles at tax time.

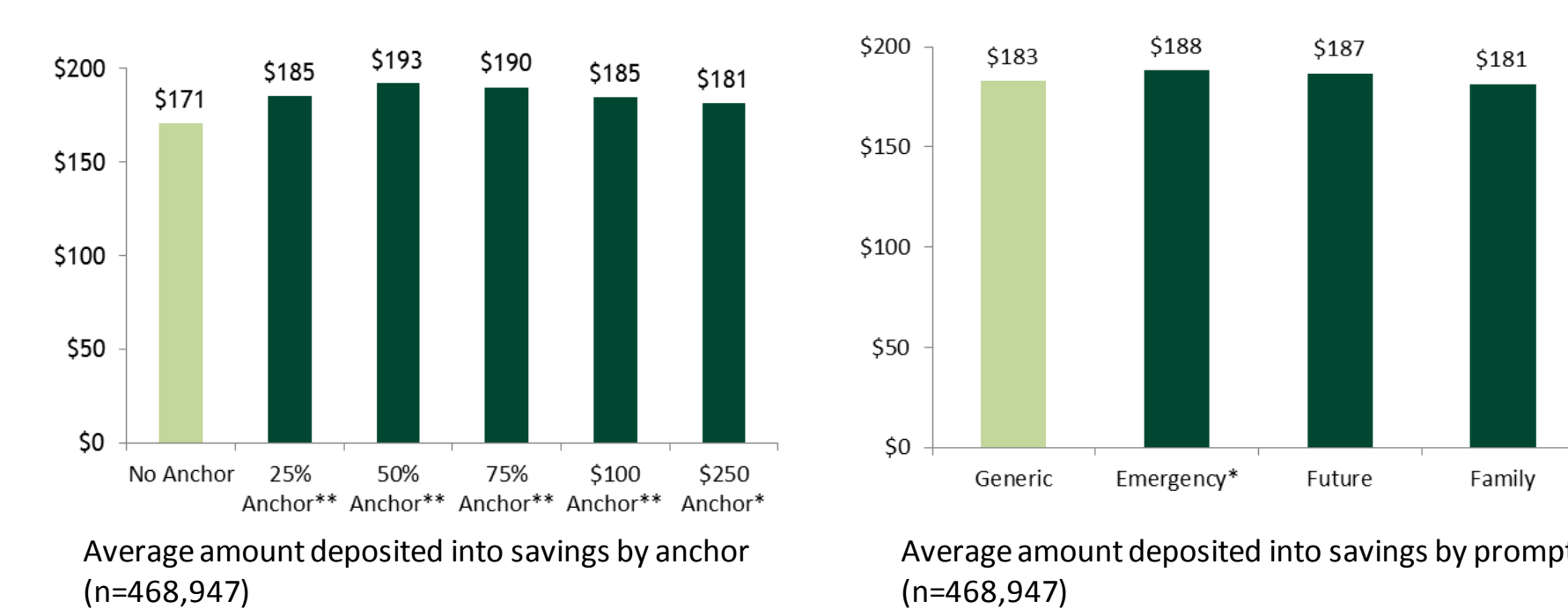
Anchors were associated with larger increases than prompts.



Research Question 2:

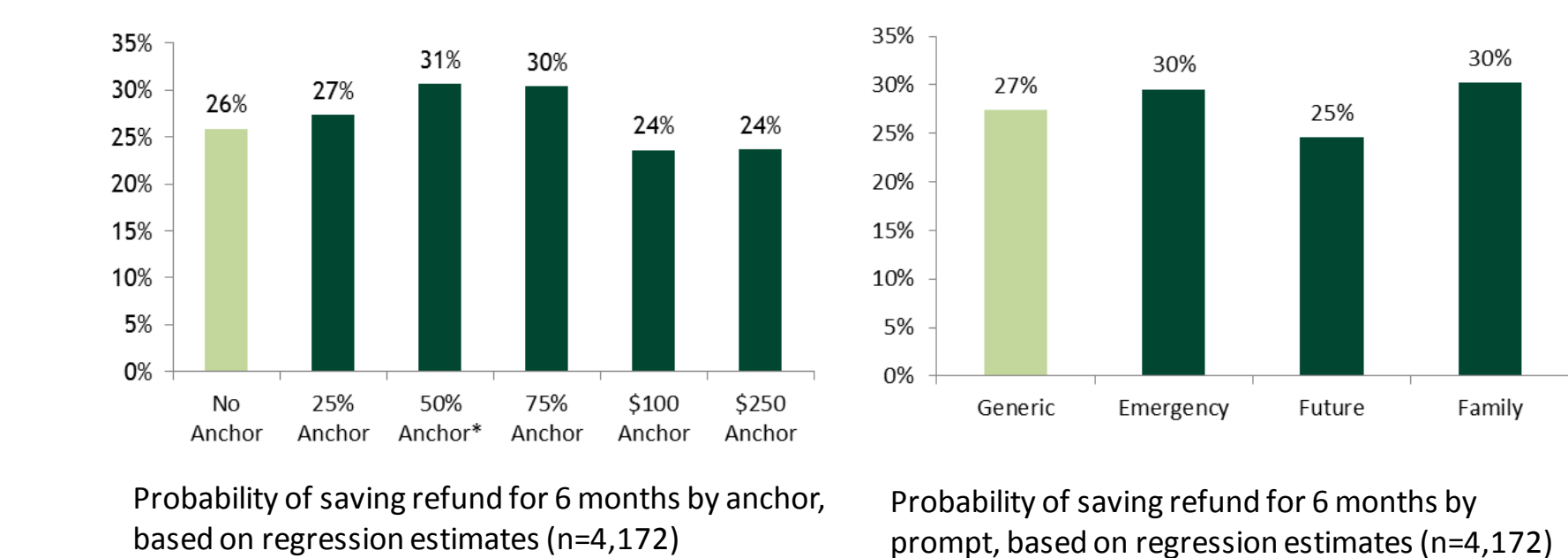
R2S interventions significantly increased the average amount deposited to savings.

Anchors were more effective than prompts.



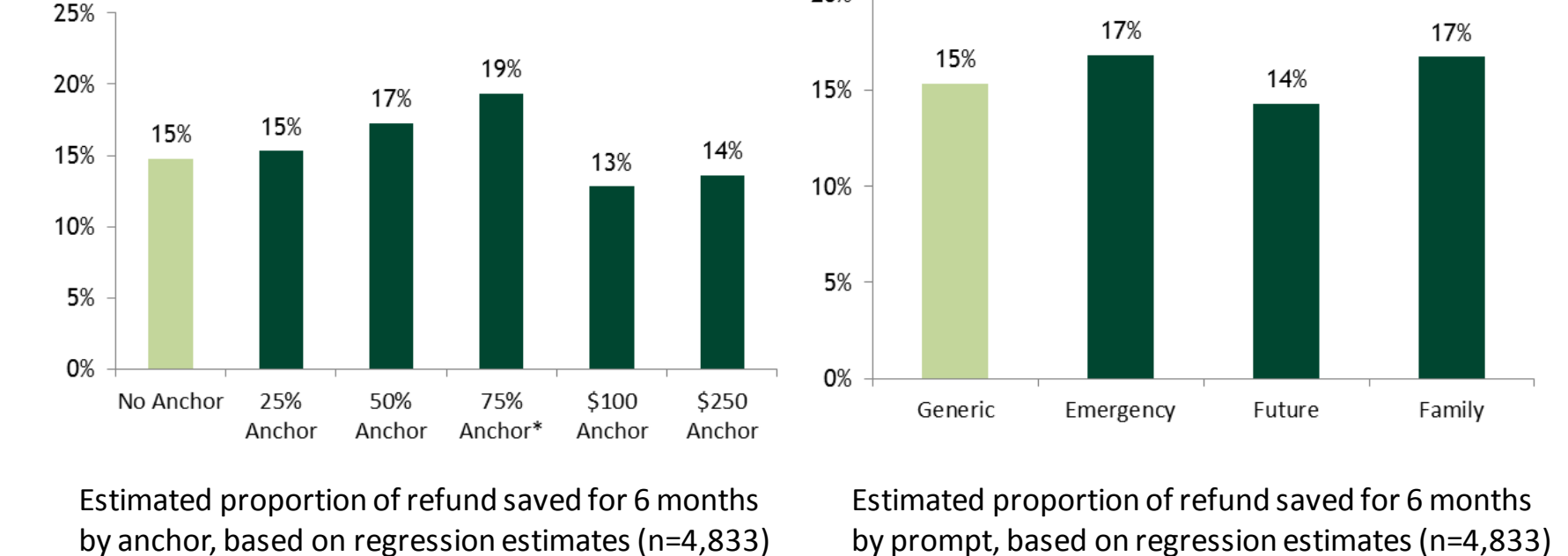
Research Question 3:

Participants in higher anchor treatment groups were more likely to have saved part of their refund for 6 months.



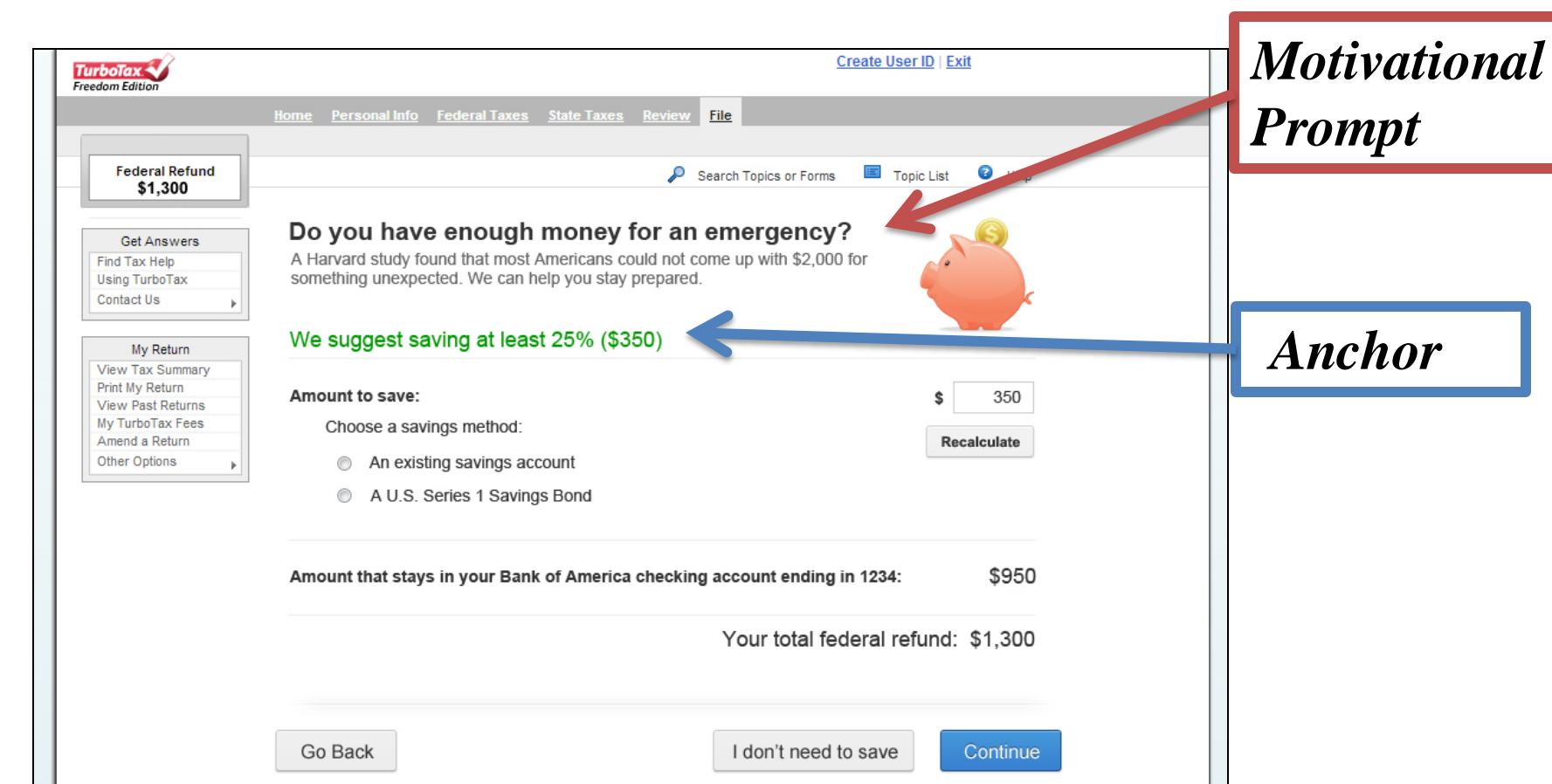
Research Question 4:

The 75% anchor increased the proportion in savings after 6 months.



* = p < .10; ** = p < .05

Sample treatment group screenshot



Literature

Asset-based interventions are driven by the perspective that financial security and well-being are determined by assets as well as by income (Shapiro, 2001; Sherraden, 1991). With many households lacking the liquid assets to withstand a financial emergency (Collins & Gjerston, 2013; Lusardi et al., 2011), tax-time interventions may offer a unique opportunity to improve household financial stability by promoting saving.

Recent evidence from behavioral economics provides a framework for understanding and promoting positive financial behaviors. Several insights from the field hold promise in building interventions to promote saving:

- Choice architecture (e.g. Johnson et al., 2012)
- The power of default options (e.g. Kahneman, 1991)
- Anchoring (e.g. Epley & Gilovich, 2001)

Conclusions

The 2013 Refund to Savings experiment tested two main behavioral mechanisms: motivational prompts and default suggested savings amounts (also known as anchors). In addition to the behavioral interventions, the design made saving a salient default option instead of requiring taxpayers to opt into depositing their refunds into a savings vehicle.

The results of the 2013 R2S experiment are promising and suggest that low-touch behavioral interventions can increase the proportion of filers who deposit refunds directly into savings and the size of those deposits. The project highlights the potential for these low-cost interventions to make an impact on an even larger scale. Theoretically, the most effective interventions could be applied via any electronic tax-filing software (e.g., those used by all Free File Alliance members or commercial products) and could be modified and tested beyond the electronic setting with third-party tax preparers (e.g., through the Volunteer Income Tax Assistance program or by paid preparers).

We also find that the impact of R2S interventions last for at least 6 months. Statistical analyses demonstrate that certain R2S interventions are positively associated with the likelihood of saving and with the amount still saved 6 months after tax filing. Although the probability that control-group members reported saving a portion of their refunds for 6 months was around 25%, it was 30% for certain treatment groups.

Main takeaways:

- Behavioral economics techniques can increase the number of LMI tax filers that deposit refunds into savings vehicles at tax time
- In our experimental sample, interventions increased the amount of money deposited into savings by almost \$6 million
- Low-touch interventions continued to positively affect saving outcomes 6 months after tax filing.

Other descriptive findings:

- Many LMI households are able to save tax refund money despite barriers.
- Saving for emergencies was the most commonly cited reason to save.
- Debt repayment accounts for the greatest portion of tax refund usage.
- Most people who spent the tax refund reported spending it on necessities.
- People without bank accounts are interested in receiving their tax refunds on prepaid debit cards or in newly opened bank accounts.
- Age-eligibility requirements prevent many working single people from receiving the EITC.
- Many people approaching retirement age have no funds set aside for retirement.

References

Collins, J. M., & Gjerston, L. (2013). Emergency savings for low-income consumers. *Focus*, 30(1), 12–17.

Epley, N., & Gilovich, T. (2001). Putting adjustment back in the anchoring and adjustment heuristic: Differential processing of self-generated and experimenter-provided anchors. *Psychological Science*, 12(5), 391–396.

Johnson, E. J., Shu, S. B., Dellaert, B. G. C., Fox, C., Goldstein, D. G., Häubl, G., ... Weber, E. U. (2012). Beyond nudges: Tools of a choice architecture. *Marketing Letters*, 23(2), 487–504.

Kahneman, D. (1991). Judgment and decision making: A personal view. *Psychological Science*, 2(3), 142–145.

Lusardi, A., Schneider, D., & Tufano, P. (2011). Financially fragile households: Evidence and implications. *Brookings Papers on Economic Activity*, 2011(1), 83–134.

Shapiro, T. M. (2001). The importance of assets. In T. M. Shapiro and E. N. Wolff (Eds.), *Assets for the poor: The benefits of spreading asset ownership* (pp. 11–33). New York, NY: Russell Sage Foundation.

Sherraden, M. (1991). *Assets and the poor: A new American welfare policy*. Armonk, NY: M. E. Sharpe.