



Center for Social Development

GEORGE WARREN BROWN SCHOOL OF SOCIAL WORK

2012

REFUND TO SAVINGS (R2S): INSIGHT FROM THE FIELD



Washington University in St. Louis



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Refund to Savings (R2S): Insight from the Field, 2012

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Disclaimer

Statistical compilations disclosed in this document relate directly to the bona fide research of and public policy discussions concerning the promotion of increased savings in connection with the tax compliance process. All compilations are anonymous, and do not disclose cells containing data from fewer than ten tax returns. IRS Reg. 301.7216



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I. Refund to Savings Overview

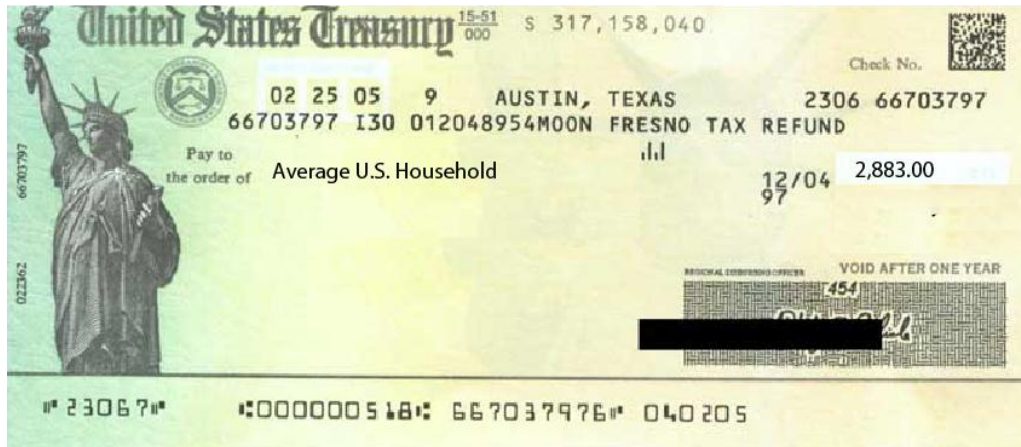
Program Description

Refund to Savings (R2S) is an innovative, rigorously designed, and scalable initiative intended to help low-income households build savings and increase financial security.

R2S, the result of collaboration between Washington University in St. Louis, Duke University, and Intuit Inc., is the largest savings experiment conducted in the United States to date. It is integrated into Intuit's TurboTax Freedom Edition product—available free to lower-income taxpayers—and reaches approximately 1.2 million households.

The goal of the initiative is to design and test a low-touch, low-cost scalable intervention that can transform the tax-refund windfall—\$2,883 for the average U.S. household¹—into savings. Because the intervention is incorporated into existing infrastructure and integrates with normal financial behavior, it can be expanded quickly and inexpensively to millions of American households.

Figure 1. The average U.S. household's refund in 2011 was \$2,883.



Research and Evaluation Plan

The R2S initiative involves collecting three streams of data to evaluate the impact of the intervention and inform the design of future innovations to build savings. In 2012 and 2013, we have fielded or are in the process of fielding the following data sources.

¹ Internal Revenue Service. (2012). *2011 IRS databook*. Retrieved from <http://www.irs.gov/pub/irs-soi/11databk.pdf>

Figure 2. Three data streams in the R2S initiative.



1. The **Intention Survey** is cross-sectional and designed to elicit information about possible behaviors and responses to behavioral economics-inspired prompts. It also gauges ownership of financial products (e.g., checking account, savings bond) and interest in using or opening these products at tax time. Findings from the Intention Survey contributed to the development of the In-Product Saving Offer and the Household Financial Survey. In 2012, 4,087 Intuit customers responded to the Intention Survey.
2. The **In-Product Saving Offer** is the largest saving experiment ever undertaken in the U.S. TurboTax Freedom Edition users with refunds are assigned randomly to a treatment condition or control group. The control group uses the regular TurboTax program. The treatment group uses a version of the program in which they receive a prompt and a saving opportunity designed to increase saving. Data generated by program use and refund allocation behavior will be evaluated to determine whether the prompts, saving opportunity, or both increased saving levels compared to the control groups. In 2012, 150,000 people were included in the study, and about 1 million tax filers are expected to be included in 2013.
3. The **Household Financial Survey (HFS)** is a longitudinal cohort study designed to determine the impact of tax-time saving and examine the effects of supply (e.g., availability of and access to savings products) and demand (e.g., awareness of the need for precautionary savings) factors that may influence the use and impact of the intervention. HFS participants will be sampled from those randomized in the In-Product Saving Offer and surveyed immediately after tax filing and again six months later. The HFS will allow R2S researchers to understand the impact of saving on the financial lives of households by (a) describing the context in which people choose to save at tax time, (b) determining if savings initiated by the In-Product Offer are new (i.e., not money that would have been saved in the absence of the intervention), and (c) verifying whether the savings ultimately increase households' financial security. In 2012, the HFS pilot included about 350 households, and we expect about 12,000 households to participate in 2013.

Initial Program Results

Preliminary results indicate we can increase the frequency and amount of saving at tax time by using behavioral economic techniques.

Highlights from the Intention Survey show:

- tax filers plan to save at least some portion—on average 40%—of their refund;
- the most popular saving purpose was short-term saving;
- motivational prompts heightened the intention to save;
- 10% of low-income respondents were unbanked;
- 10–20% of respondents would be interested in purchasing a savings bond or opening a CD, Money Market account, IRA, 529 college savings account, or a health savings account; and
- 50% of the sample were interested in using a checking account to save their refunds.

Highlights from the In-Product Saving Offer show:

- an increase in rate of splitting the tax refund ($p < .001$); and
- an increase in any saving ($p < .001$) (9.8% of treatment group members deposited money into a savings account compared to 7.7% of control group).
- among those who split their refund, the treatment had a large impact on amount and portion of refund saved.

II. Refund to Savings 2012 Implementation

In-Product Saving Offer Implementation

Tax Filing Process

The R2S In-Product Saving Offer is built into the TurboTax Freedom Edition product available free to low- and moderate-income households. The tax filer is guided step by step through the tax filing process (Figure 3). After all information is input and the refund amount (or additional taxes owed) is calculated, the tax filer completes the Finish and File section. If owed a federal tax refund, the filer must decide whether to receive the refund by check or direct deposit into a bank account (Figure 4). At this point, the R2S intervention begins.

Figure 3. TurboTax Program

The screenshot shows the TurboTax Freedom Edition website. At the top, it says "TurboTax Choose Easy." and "Intuit Tax Freedom Project". The main heading is "TurboTax Freedom Edition: Prepare and eFile your federal taxes for FREE". Below this, there are three eligibility criteria: "You earned... \$31,000 or less", "You were... Active Duty Military", and "You qualify for the... Earned Income Credit (EIC)". A central button says "I qualify! Start Now". On the right, there are promotional banners for "Fastest Refund Possible" and "Time's almost up! (Or not.)" with a calendar showing April 17th.

Figure 4. Filer Chooses Refund Payment Method

The screenshot shows the TurboTax Freedom Edition website during the filing process. The top navigation bar includes "Home", "Personal Info", "Federal Taxes", "State Taxes", "Wrap-Up", and "Print & File". The main heading is "How Do You Want Your Federal Refund?". Below this, it says "You have a federal refund of \$3,066." There are two options: "Direct Deposit (Recommended for a faster refund)" and "Mail me a check". The "Direct Deposit" option is selected. The "Mail me a check" option is also visible. On the left, there are navigation menus for "Federal Refund \$3,066", "Get Answers", and "My Return".

Sampling Characteristics

The intervention includes 148,619 TurboTax Freedom Edition users who completed their taxes between March 16 and April 17, 2012, and were to receive a federal refund. Users who opted to receive their refunds via paper check—40,939—were excluded from the experiment. The final sample consists of 107,680 participants.

A few sample characteristics are noteworthy. The experiment occurred in the last month of the three-month timeframe for normal tax filing, which means the participants are “late filers” who may be demographically and behaviorally different than “early” or typical tax filers. Sample participants are very low-income with a median adjusted gross income (AGI) of \$11,166. AGI mean is \$13,000. They also received a modest refund amount—median \$589 and mean \$1,019. Based on the number of dependents claimed on the tax form, we estimate that only 10% of sample participants have children.

Test Groups

Participants were assigned randomly to one of nine test groups. As show in Table 1, we tested eight combinations of motivational prompts and default saving options, and a control group. Users were shown one of three motivational prompts (or no prompt in the case of the control group) and saw their refund split at one of two default ratios.

Table 1. In-Product Offer Test Groups


	No prompt	Emergency	Goals	Retirement
No anchor	Control Group			
Anchor-25%	✓	✓	✓	✓
Anchor-75%	✓	✓	✓	✓

Two types of behavioral interventions were tested: motivational prompts and choice architecture with anchoring.

Motivational prompts

Three motivational prompts were chosen from those that had the largest effect on saving intention among low- and moderate-income households in the 2011 Intention Survey. For example, TurboTax Freedom Edition users in the test group with the emergency savings prompt and 75% savings default anchor would see the prompt in Figure 5.

Figure 5. Motivational Prompt for Emergency Savings



Would you like to save for a rainy day?

Everyone has unexpected costs throughout the year. Why not put some of your refund away in case of medical expenses, car or home repair, or loss of income?


We suggest putting 75% (\$2,300) of your refund in your savings account.

Yes, I'd like to split my refund

No, I'll put it all in one account

In 2012, we also tested prompts on savings goals and future self (Figure 6).

Figure 6. Motivational Prompts for Goals and Retirement Savings




Want to save a little money for something special?

Maybe you're thinking of saving for new a home, your child's education, or a vacation. Or maybe you just want a little extra in the bank.

We suggest putting 25% (\$350) of your refund in your savings account.

Yes, I'd like to put some of my refund in my savings account

No, I'll put it all in one account.



Would you like to save a little money for your retirement?

It never hurts to put a little away for retirement security. Get peace of mind that you've got enough in your nest egg.

We suggest putting 25% (\$350) of your refund in your savings account.

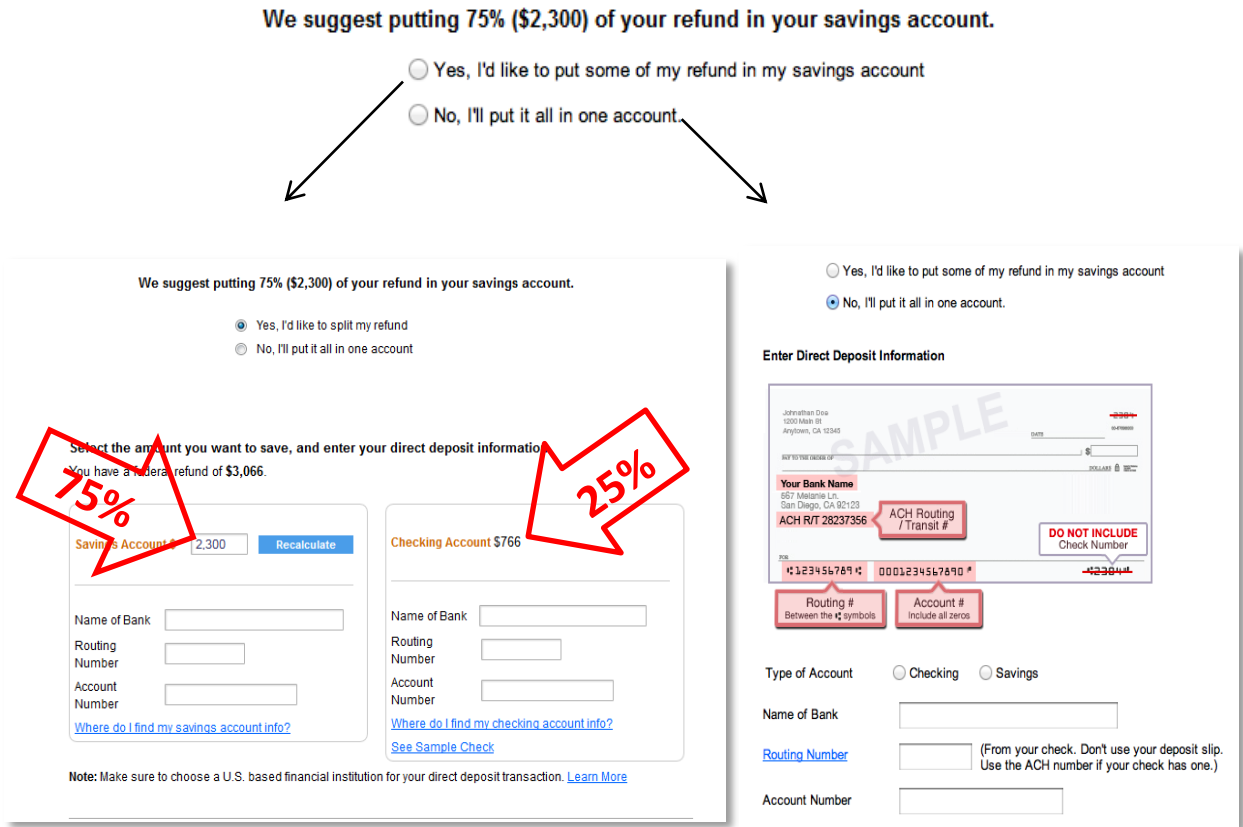
Yes, I'd like to put some of my refund in my savings account

No, I'll put it all in one account.

Choice architecture with anchoring

If the tax filer chose to divide the refund, the offer to split the money between checking and savings accounts was prepopulated based on the anchoring value of the assigned test group. Participants could change the distribution ratio or decide to use only one account at any time. Two default saving anchors chosen to test the effect of anchoring showed tax refunds divided between saving accounts and checking accounts at a 25/75 or 75/25 ratio (Figure 7). The goal is to determine if a higher default saving value (e.g., 75% of refund) encourages people to choose a higher allocation to savings.

Figure 7. Choice Architecture and Anchoring



III. Lessons from the Implementation

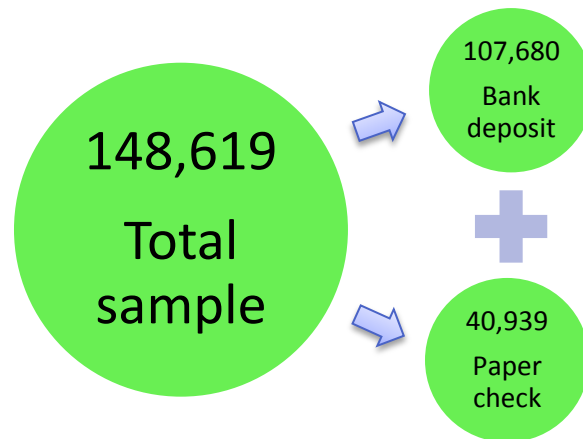
Lesson 1: Provide Financial Access to Underbanked and Unbanked Tax Filers

Key takeaways:

- Explore and offer other refund saving options.
- Continue investigating the needs and wants of underbanked and unbanked customers at tax time.

The high use of paper check refunds among R2S participants points to the need for financial access for underbanked and unbanked tax filers. Despite the ease and efficiency of using direct deposit, 28% of tax filers using the TurboTax Freedom Edition chose a paper check refund (Figure 8). The high use of paper check refunds in the R2S sample signals the need to improve financial access and inclusion during the tax filing process.

Figure 8: 2012 In-Product Savings Offer sample



Tax filers might choose a paper check refund instead of direct deposit to a bank account for many potential reasons, including that they:

- do not have access to a bank account;
- do not like their bank account due to fees, overdraft charges, or other unexpected costs;
- prefer the convenience of and comfort with paper checks;
- are nervous about direct deposit or concerned that the government may be able to take money out of the account for back taxes due or payment of child-support; or
- own a shared account with other family members and do not want others having access to the money

Although some tax filers may always prefer a paper check, tax season may be an opportune time to intervene with those who choose paper checks because they do not have access to a traditional checking or savings account with a main stream financial institution.

Explore and Offer Other Refund Saving Options

Pre-paid debit cards and savings bonds may be powerful tools for facilitating tax saving for underbanked and unbanked tax filers. MyAccountCard, a program recently piloted by the U.S. Department of the Treasury, seeks to use tax refunds to connect households to prepaid debit cards. Building on this idea, the R2S research team will explore potential options to incorporate pre-paid debit cards into the initiative.

In tax-refund saving pilot programs, low-income filers have shown interest in savings bonds, but the take-up rate is low. In the 2012 R2S saving experiment, only 0.05% of tax filers chose to purchase a savings bond. To promote savings bonds as a saving option, the R2S research team revised the customer experience to make the bond option more visible in 2013 (Figure 9).

Figure 9. 2012 user experience without savings bond option vs. 2013 user experience with savings bond option

Would you like to save for a rainy day?

Everyone has unexpected costs throughout the year. Why not put some of your refund away in case of medical expenses, car or home repair, or loss of income?

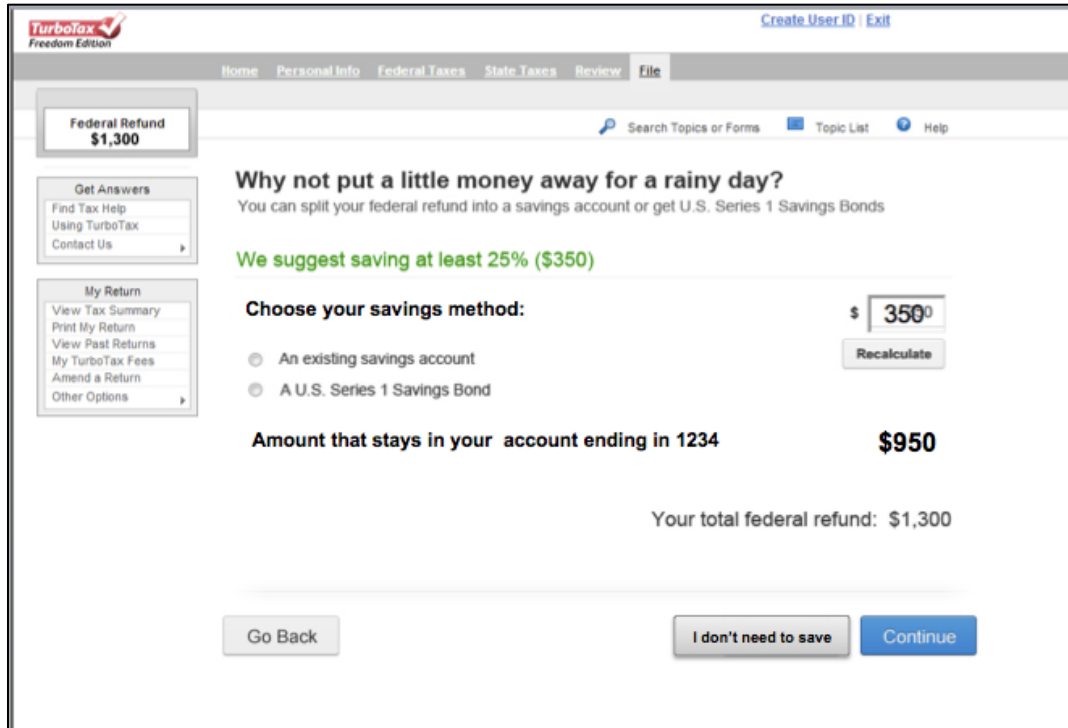
We suggest putting 75% (\$2,300) of your refund in your savings account.

Yes, I'd like to split my refund
 No, I'll put it all in one account

Select the amount you want to save, and enter your direct deposit information.
 You have a federal refund of **\$3,066**.

<p>Savings Account \$ <input type="text" value="2,300"/> <input type="button" value="Recalculate"/></p> <hr/> <p>Name of Bank <input type="text"/></p> <p>Routing Number <input type="text"/></p> <p>Account Number <input type="text"/></p> <p>Where do I find my savings account info?</p>	<p>Checking Account \$766</p> <hr/> <p>Name of Bank <input type="text"/></p> <p>Routing Number <input type="text"/></p> <p>Account Number <input type="text"/></p> <p>Where do I find my checking account info?</p> <p>See Sample Check</p>
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Figure 9 (cont.). 2012 user experience without savings bond option vs. 2013 user experience with savings bond option



Continue investigating the preferences of underbanked and unbanked customers at tax time

Even with insight from R2S and other emerging research, many questions remain regarding financial services needs and preferences of underbanked and unbanked customers at tax time, including the following:

- What product features do the underbanked and unbanked need and want in a tax-time saving vehicle?
- Can access be increased through mobile financial services?
- What level of liquidity in savings products is best?

In 2013, the Refund to Savings research team will incorporate additional questions about alternative financial services into the HFS.

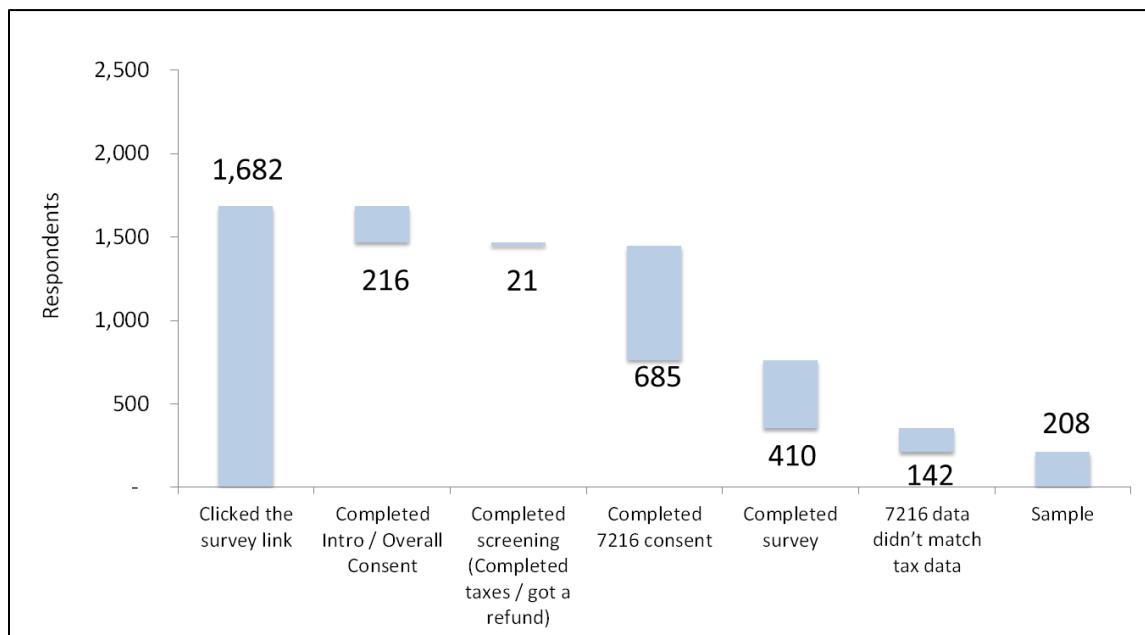
Lesson 2: Plan for and Mitigate Participant Drop-off at Key Stages of the HFS

Key takeaways:

- Invite all TurboTax Freedom Edition users to participate in the study.
- Improve splash page that links tax filers to the survey.
- Refine and improve the survey design.

The HFS is critical for understanding tax filers' financial behaviors, use of and attitudes toward the tax refund, and economic constraints. There are several hurdles to engaging customers in a survey immediately following their often lengthy tax filing process (Figure 10). Of the 148,619 tax filers who were part of the R2S sample, 1,682 clicked the survey link on the final splash page, and about 40% dropped out of the survey during the Federal 7216 consent to disclose tax information question. Another 25% started but did not complete the survey. The final sample included 208 participants.

Figure 10. Respondent drop-off at key stages of the HFS



Invite all Users to Participate in the Study

The 2012 rate of HFS participation demonstrated the need to dramatically increase the number of those invited to complete the survey. With the goal of reaching a 12,000-person sample in 2013, all TurboTax Freedom Edition users who receive a refund—approximately 1.08 million—will be included in the In-Product Savings Offer and subsequently invited to participate in the HFS.

Improve Splash Page that Links to the Survey

Increasing the proportion of participants who click the survey link could be an easy way to increase the number of finished surveys. For the 2013 intervention, several changes will be made to the splash page to encourage participation, including making the link more visible and explaining upfront the \$20 incentive for completing the survey.

Refine and Improve the Survey Design

Knowledge gained from the 2012 intervention will help the R2S research team design a more comprehensive survey. Based on best practices in the field, the team will overhaul the financial questions balancing the need for sensitive personal financial information with the need for a robust picture of participants' financial lives and decision making.

Lesson 3: Help People Act on Intentions to Save

Key takeaways:

- **Use automatic refund splitting.**
- **Explore opportunities to streamline bank account opening during the tax filing process.**

Data from the 2012 Intention Survey shows that people want to save at tax time. On average, respondents indicate they would like to use more than 70% of their refunds for saving and debt clearing. However, as shown by data from the 2012 In-Product Saving Offer, this intention to save does not translate into actual saving in a savings account when filers are given the opportunity to save the tax refund. To respond to this discrepancy, the R2S research team is modifying the intervention and thinking about potential future structural changes that could reduce the burden on the tax filer.

Use Automatic Refund Splitting

A significant challenge is engaging already fatigued tax filers. Intuit's usability testing conducted on the 2012 In-Product Saving Offer revealed that filers simply skip over the In-Product Saving Offer. Sophisticated eye tracking software showed that some test participants quickly scanned each page looking for the "continue" button and did not read the text in which the offer was presented.

The 2013 In-Product Saving Offer will test automatic refund splitting. A portion of each tax filer's refund will split automatically into a saving vehicle, and the filer simply has to choose between saving that portion in an existing savings account or purchasing a U.S. Savings Bond. Those who choose a savings account must enter their account information, which may pose a barrier for some who want to save but do not have information handy. Tax filers who do not want to split their refund must click an "I don't need to save" button in order to opt out and continue to the next screen.

Explore Opportunities to Streamline Bank Account Opening

To take advantage of refund splitting and direct deposit opportunities, people need access to transparent, fair, and secure saving products. Tax-time programs at Volunteer Income Tax Assistance (VITA) sites pioneered helping underbanked and unbanked tax filers open traditional banking accounts and saving vehicles at tax time. Such efforts have assisted hundreds of tax filers gain access to mainstream financial services and establish a relationship with a financial institution. Despite the success of these programs, they are limited due to their one-on-one nature and cumbersome procedures required for account opening.

Several obstacles (e.g., regulations) must be resolved to facilitate and streamline bank account opening during the tax filing process. The R2S research team will continue to explore opportunities to facilitate and streamline bank account opening during the electronic tax filing process and help people act on their intentions to save.

IV. Conclusion

People across the income distribution in the U.S. are at risk of financial insecurity and material hardship due to lack of savings. About half of households do not have the resources in savings to replace one month's income, and the same proportion do not think they could locate \$2,000 to pay for an unexpected expense. R2S's innovative approach—a low-touch, low-cost scalable intervention using behavioral economics techniques—aims to transform the tax-refund windfall into savings to improve financial security and mobility of American households.

In the immediate term, this brief is intended to inform the field, help describe the initiative, and discuss implementation challenges so other organizations and policy advocates can use our experiences to guide their own efforts. Ultimately, R2S has numerous implications for ongoing policy discussions at state and federal levels. First, the findings will show whether (a) the use of behavioral economics-inspired interventions can increase saving at tax time and (b) saving-promotion efforts yield increased financial security and improved household balance sheets. Second, the project could provide evidence on the effect of supply- and demand-side constraints to saving and thus inform policy discussions regarding financial access, financial knowledge, and consumer protection. Third, the design and operation of the R2S initiative may be of interest to those considering policy innovations that leverage private-sector resources or incorporate public-private partnerships to achieve public policy objectives.