



## Center for Social Development

GEORGE WARREN BROWN SCHOOL OF SOCIAL WORK

| June 2014 | CSD POLICY BRIEF 14-13 |

# Lack of Emergency Savings Puts American Households at Risk: Evidence from the Refund to Savings Initiative

By Michal Grinstein-Weiss, Blair Russell, Brad Tucker, and Krista Comer

A deficiency of emergency savings is exposing many U.S. households to the risk of disastrous economic, social, psychological, and health consequences. Despite having a desire and an intention to save, nearly half of all American households claim they would not be able to come up with \$2,000 within 30 days to help weather a financial shock (e.g., major illness or job layoff).<sup>1</sup> Without easily accessible emergency funds, Americans often are forced to take high-risk financial actions that threaten their short- and long-term economic outcomes. High-risk financial behaviors include relying on alternative—and often predatory—lending services, such as payday loans or car title loans. While some coping behaviors (i.e., “going without”) might sound reasonable, often this entails not paying rent or skipping necessities like medication and groceries, which can create a cascade of increasingly negative consequences.<sup>2</sup>

The distress involved in not being able to cope with emergency shocks can lead to poor social, psychological, and health outcomes for the entire household.<sup>3</sup> Generalized stress over money can undermine an otherwise healthy, well-functioning family dynamic and negatively affect family members’ relationships and overall family well-being.<sup>4</sup> In contrast, households with emergency savings are better able to manage financial shocks without suffering exorbitant stress. Equally important, savings can facilitate a household’s upward mobility by reducing financial stress and enabling members to focus on future plans and possibilities.<sup>5</sup>

## Refund to Savings (R2S): Innovative Tax-Time Intervention to Encourage Savings

Researchers and policy makers have experimented with numerous approaches to make emergency saving

simpler, and thus, more likely. These efforts have identified tax time as a prime opportunity to promote saving behaviors. Most U.S. taxpayers receive an annual refund from the Internal Revenue Service. For low- and moderate-income (LMI) households, the refund is often sizeable relative to overall income and frequently perceived as an income windfall. Receiving such a large lump sum presents the household with an important decision-making moment: to save all or a portion or not save at all. The *Refund to Savings* (R2S) initiative was designed as an intervention to encourage saving at tax-time among LMI households by making it more automatic.

R2S is a research collaboration between academic, government, and industry partners, including the Center for Social Development (CSD) at Washington University in St. Louis, Duke University, and Intuit, Inc., the makers of the widely used TurboTax program. The ongoing objective of the R2S initiative is to evaluate the effectiveness of low-cost, low-touch scalable interventions to help LMI households improve their financial security by increasing savings at tax time.

During the 2013 tax-filing season, the R2S team conducted a series of experiments to test the ability of specific techniques drawn from behavioral economics to increase the portion of tax refunds designated for deposits into savings accounts or used to purchase U.S. Savings Bonds. In total, these experiments included approximately 684,000 taxpayers who used Intuit’s TurboTax Freedom Edition tax preparation software, which is offered through the Internal Revenue Service (IRS) Free File program. By integrating IRS Form 8888 into the software, TurboTax Freedom Edition allows users to split their refunds and direct how they will receive each portion. For example, Freedom Edition users can choose to have a portion of their refunds direct deposited to a savings account and put the rest into a checking account. Or they can receive a partial

refund through a paper check, while using the rest to purchase a savings bond.

During the first experiment, conducted in the first two weeks of the tax season, the R2S team tested the effectiveness of three motivational messages (i.e., prompts) designed to encourage tax filers to save a portion of their tax refunds. Each of the more than 200,000 tax filers in this experiment were assigned randomly to a group that received one of the three saving prompts—save for an emergency, save for the future, save for your family—or a generic message. Participants also were randomly assigned to see a suggested percentage of their refund to save (i.e., anchor)—either 25% or 50%—unless they were assigned to the control group. The TurboTax software presented prompts and anchors in various combinations. The research team analyzed each combination as a unique intervention to determine the marginal effect of each element or combination of elements.

The R2S team invited TurboTax Freedom Edition users to participate in a comprehensive Household Financial Survey (HFS1) after they completed their tax returns. Six months later, the team contacted individuals who completed the HFS1 and asked them to complete a follow-up survey (HFS2). The R2S team designed the surveys to gain deeper insight into the financial lives and behaviors of LMI households and better understand how they use their tax refunds over time. Throughout the 2013 tax season, 19,568 TurboTax Freedom Edition users agreed to complete the tax-time HFS1. Of those

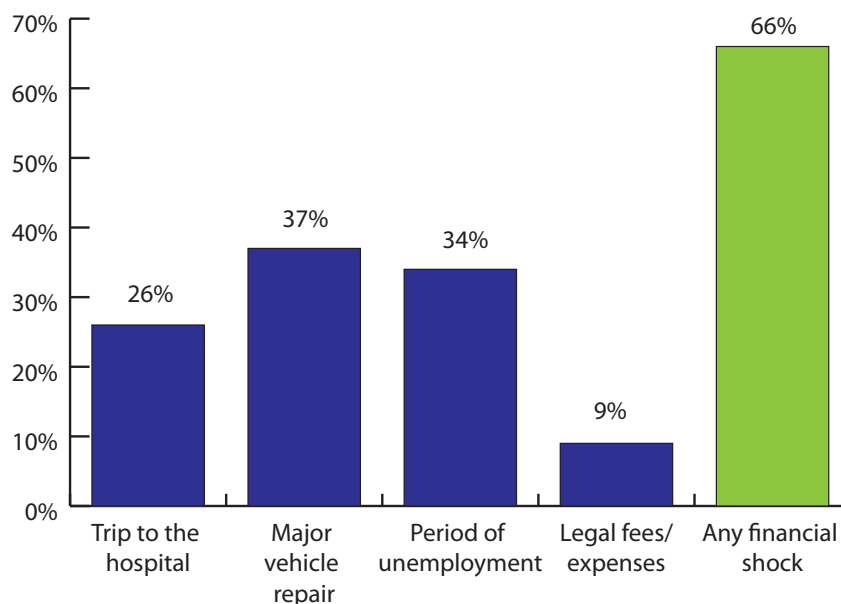
users, nearly 43% (or 8,324 tax filers) completed the follow-up HFS2 six months later. The R2S team used data from the HFS1 and HFS2 and the tax-time experiment to answer three key questions important to policymakers, researchers, and professionals interested in advancing emergency savings among American households:

1. How prevalent are financial emergencies and how do LMI households cope with these events?
2. Is there an association between the decision to save at tax time and key aspects of financial well-being six months later?
3. What is the potential for using low-cost, low-touch behavioral interventions to help LMI households build emergency savings at tax-time?

## The Prevalence of Financial Emergencies and How People Cope

Approximately two thirds (66%) of HFS2 respondents reported that they experienced an unexpected financial emergency in the six months after filing their tax returns. The most commonly experienced emergencies involved a major vehicle repair (37%), a period of unemployment (34%), a trip to the hospital (26%), or some form of legal expense (9%) (Figure 1). The prevalence of these emergencies is important because almost 60% of the 20,000 tax

**Figure 1. HFS2 respondents who experienced unexpected financial emergencies within six months after tax filing (n = 8,253)**

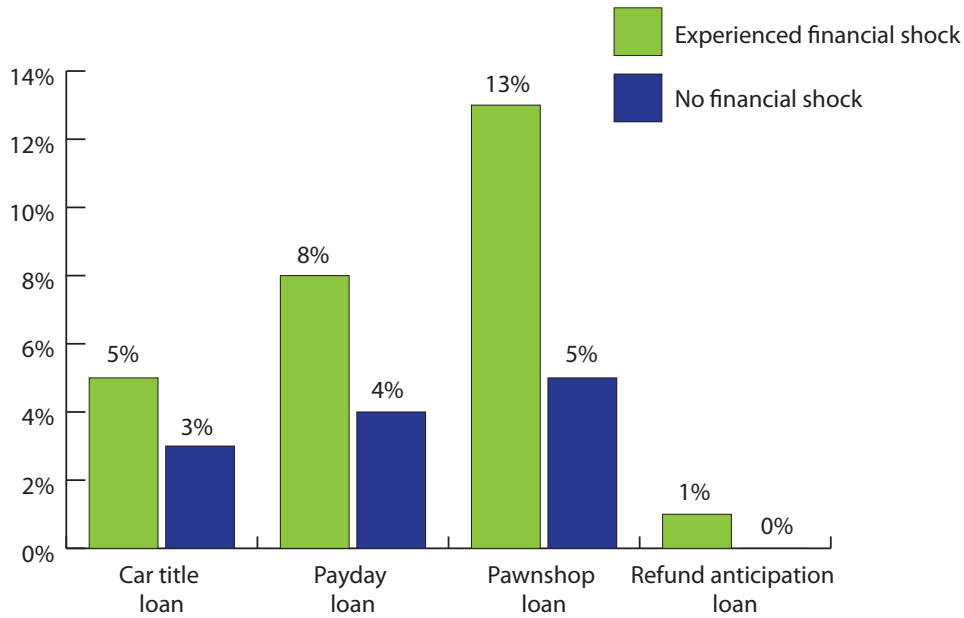


filers who completed the HFS1 at tax time said they could not come up with \$2,000 within 30 days to cover a financial emergency.

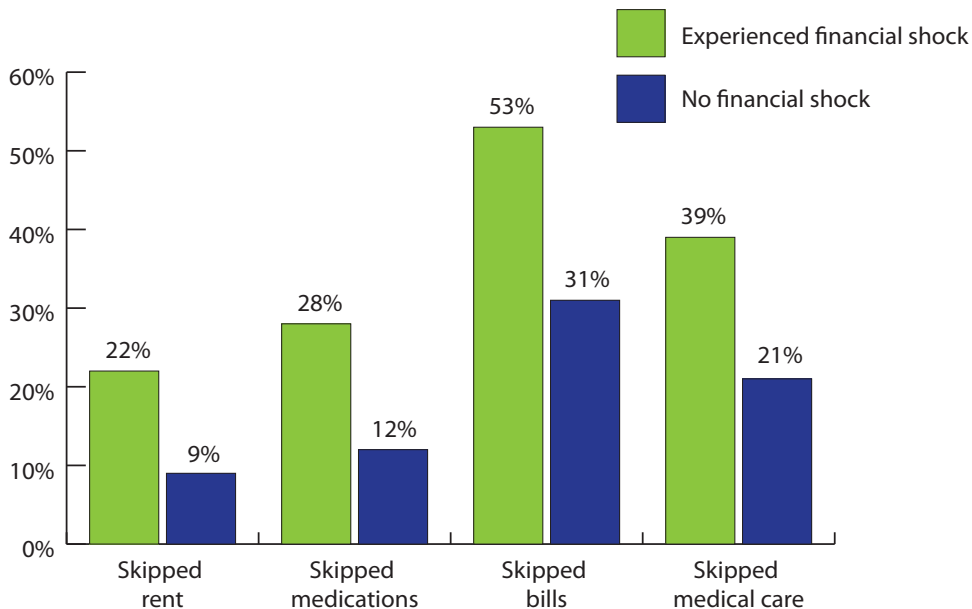
To cope with emergencies that arose, many LMI taxpayers used high-risk, high-cost options—a choice with the potential to negatively impact their short- and long-term financial strength and household well-being. In the six months following tax filing, approximately 5% of tax filers who experienced financial shocks used a car title to obtain a loan, 8% took out a payday loan, 13% pawned personal

property, and 1% used the promise of a tax refund to obtain a loan at a cost an average of 10% of the anticipated total refund amount (Figure 2). The use of alternative financial services is significantly more prevalent than for participants who did not experience financial shocks. Equally troubling is the finding that 80% of survey respondents who experienced a financial emergency said they coped by “going without,” which includes skipping rent payments (22%), needed medications (28%), bill payments (54%), or needed medical care (40%). These behaviors place Americans at high risk for an

**Figure 2. Alternative financial service use by HFS2 respondents, by type (n = 8,224)**



**Figure 3. Payments skipped or items/services not purchased by HFS2 respondents, by type (n = 8,238)**



array of poor outcomes and can trigger a cascade of negative financial consequences (Figure 3).

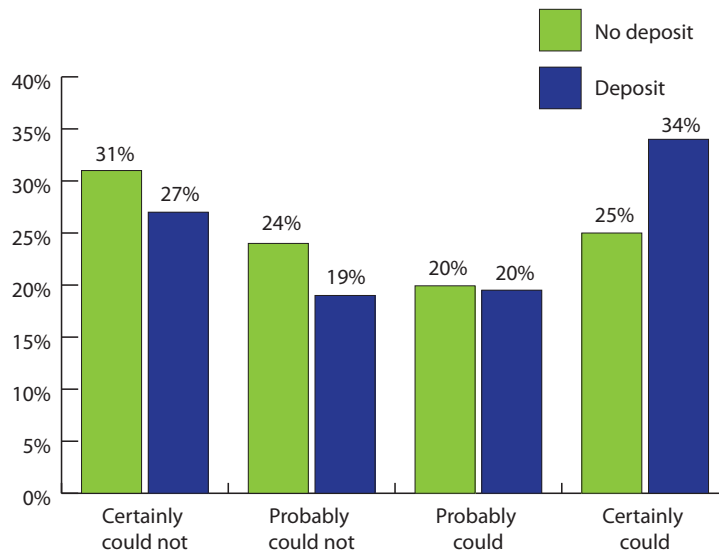
## Tax-Time Saving and Financial Well-Being

In contrast to households without emergency savings who made high-risk decisions, those who saved a portion of their tax refunds were more likely to weather financial emergencies without relying on risky financial behaviors. Specifically, at the six-month follow-up, nearly 55% of those who saved a portion of their refunds in savings accounts or by purchasing savings bonds reported confidence that they “probably” or “certainly” could access

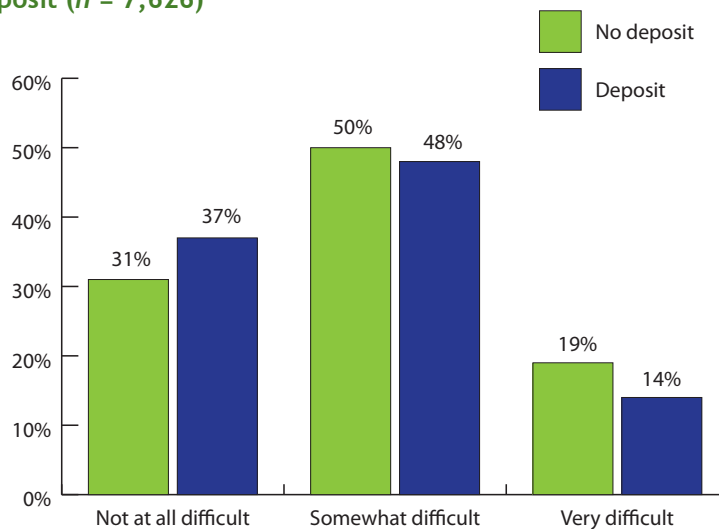
\$2,000 to cover a financial emergency, while 46% of nonsavers reported the same (Figure 4).

In addition, tax-time savers experienced fewer financial hardships than nonsavers. For example, although some households that saved had to skip purchasing necessary food items, savers had significantly fewer reports of food insecurity (43% of savers versus 47% of nonsavers). The R2S team finds a similar rate of improvement between savers and nonsavers who had to skip purchasing necessary prescription drugs (18% of savers versus 23% of nonsavers). The improved financial well-being of tax-time savers was evident six months later in their ability to manage financial obligations. As compared to 31% of nonsavers who said they could meet their

**Figure 4. HFS2 respondents’ perceived ability to obtain \$2,000 for an unexpected emergency, by tax-time savings deposit (n = 7,645)**



**Figure 5. HFS2 respondents’ perceived difficulty covering typical expenses six months after tax filing, by tax-time savings deposit (n = 7,626)**



monthly financial obligations, 37% of savers said it was “not at all difficult” to cover their monthly expenses and pay all their bills (Figure 5).

It should be cautioned that the direction of causality is difficult to establish in this relationship, and there are concerns about selection bias. Some of the improvement in household financial security could be caused by the inclusion of higher income households in the saver group, as those households might be more likely than lower income households to save a portion of their refunds with or without the intervention. Regardless, having access to emergency savings appears to be a critical factor in weathering financial shocks. Among participants who had financial shocks in the six months after tax filing, those who reported not being able to access \$2,000 in the HFS1 were three times more likely to miss a rent or mortgage payment than those who could access \$2,000 (30% to 9%) and more than twice as likely to skip necessary medical care (49% to 23%).

## R2S Interventions Increase Tax-Time and Emergency Saving

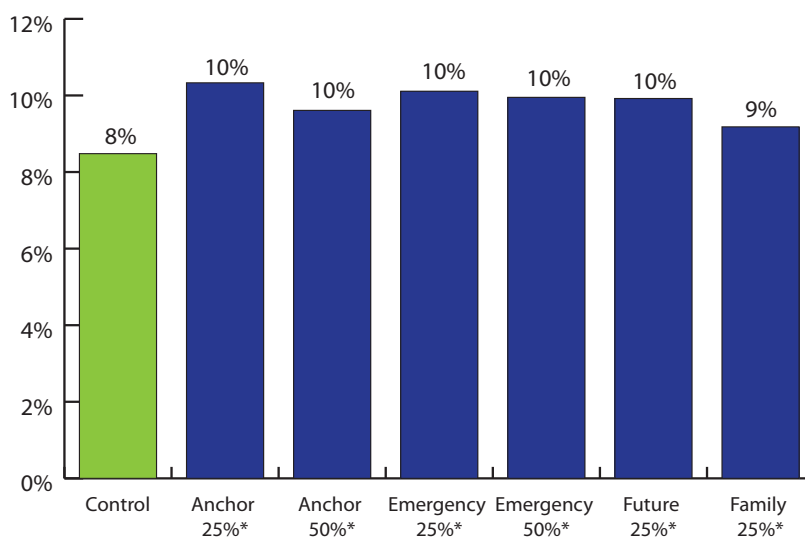
Findings from the 2013 R2S experiment suggest that low-cost, low-touch behavioral interventions consisting of prompts and anchors effectively increased the savings rates among users of TurboTax’s Freedom Edition. Contrasted with 8%

of users randomly assigned to the control group (i.e., those who received no prompts or anchors), 10% of study participants in the treatment groups chose to deposit a portion of their refunds into savings accounts or purchase U.S. Savings Bonds. All combinations of prompts and anchors are associated with a statistically significant increase in the percentage of taxpayers who deposited refunds into savings vehicles. Five of the six combinations are associated with a statistically significant increase in the level of saving as well, with “save for the future” with a 25% anchor being the exception. The average control group deposit into savings is \$197, while the average deposit in some treatment groups is more than \$220 (Figures 6 and 7).

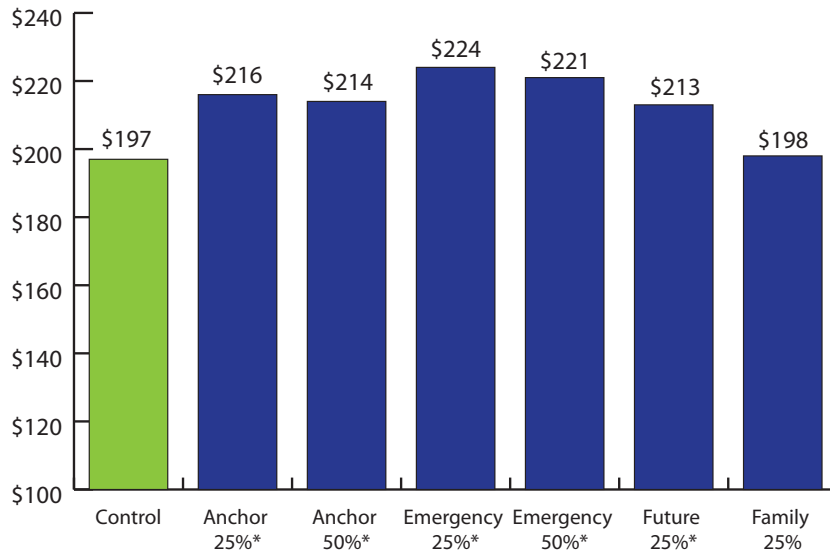
In addition, and possibly more importantly, the intervention has an impact on the level of refund savings six months after tax filing. At the six-month follow-up HFS2, participants in the control group reported having saved roughly 19% of their refunds for six months, while those randomly assigned to groups with 50% or 75% anchors reported having around 22% and 24% still saved, respectively (Figure 8).

When those participants who reported saving for six months were surveyed about their reasons for saving, the majority reported that saving was a way to mitigate the potentially negative effects of a financial shock, as evidenced by the 76% of savers who reported they were “saving for emergencies.”

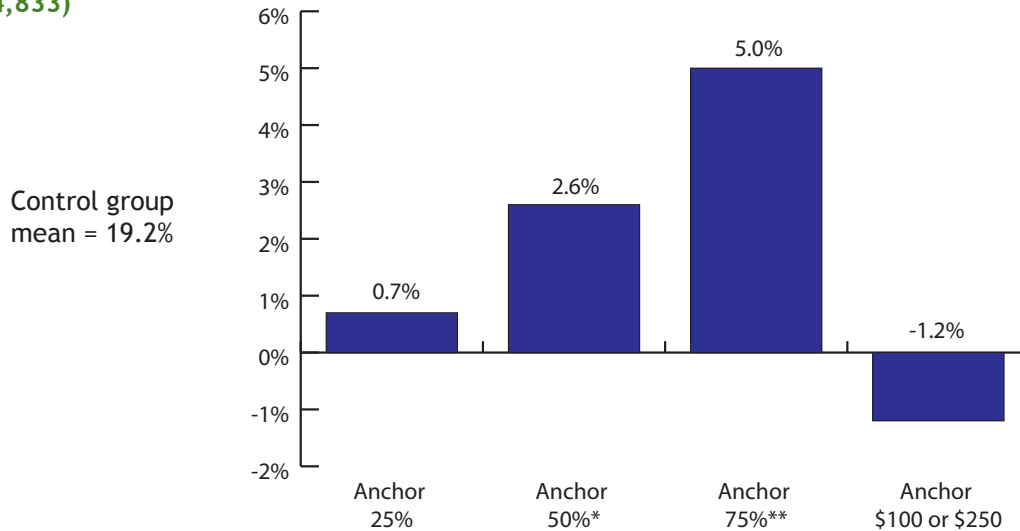
Figure 6. Proportion of tax filers who saved, by intervention (n = 228,828)



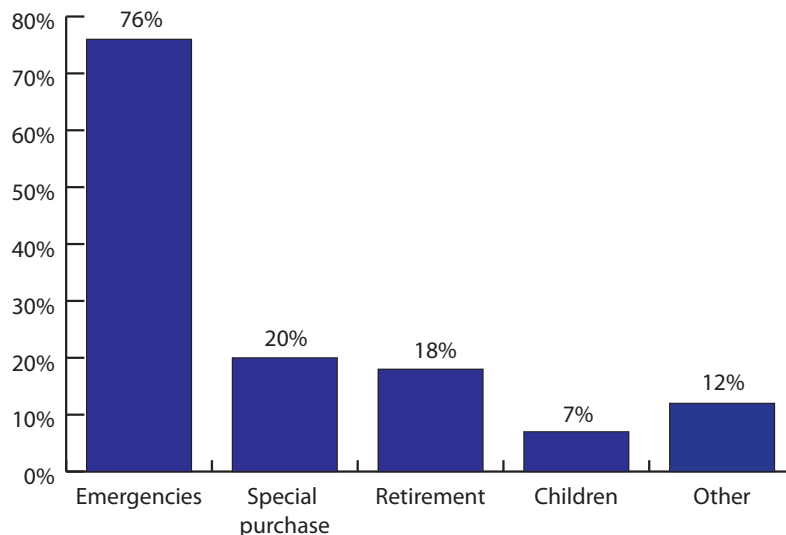
**Figure 7. Average savings amounts, by intervention (n = 228,828)**



**Figure 8. Percentage of refunds still saved six months after tax filing relative to control, by anchor (n = 4,833)**



**Figure 9. HFS2 respondents' reasons for saving (n = 2,225)**



The next most popular answers—participants could choose as many answers as applied—were saving for special purchases (20%) and retirement (18%) (Figure 9).

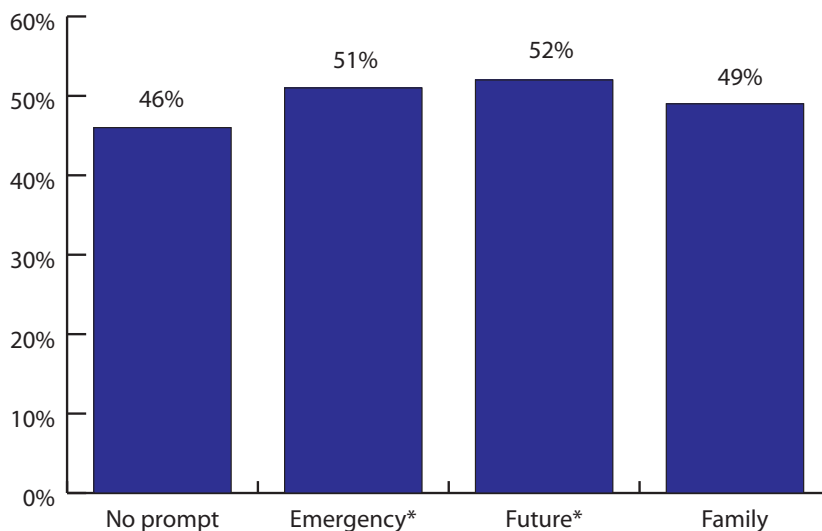
Findings from the six-month follow-up also suggest that saving prompts have positive effects on a household’s perceived ability to cope with a financial emergency. At follow-up, 46% of the control group reported they could access \$2,000 for an emergency, whereas 51% of those who received the “emergency” savings prompt and 52% of those who received the “future” savings anchor said they could access \$2,000 in the event of a financial emergency (Figure 10).

## Conclusion and Policy Considerations

- Refund to Savings interventions are found to positively affect tax-time emergency savings.<sup>6</sup>
- Negative financial shocks occur often in the lives of LMI Americans and are highly correlated with the use of high-cost, high-risk financial services and material hardships (e.g., skipping needed medical care and missing rent or mortgage payments). Those who save at tax time and those who have emergency savings experience fewer hardships and are less likely to use alternative financial services.

- Behavioral economics techniques, such as those used in the R2S initiative, are effective for motivating saving behaviors and should be considered carefully by policymakers as potential low-cost, low-touch interventions that can be taken easily to scale to increase the prevalence of emergency savings among American households.
- Certain combinations of prompts and anchors are more effective than others at encouraging TurboTax Freedom Edition users to save a portion of their refunds. The behavioral economics technique of anchoring a suggested savings amount based on a preset percentage of refund is particularly effective at stimulating saving behavior.
- Popular, widely used financial management software can effectively deliver mechanisms for low-cost, low-touch interventions focused on increasing savings among U.S. households, especially for creating emergency savings.
- As demonstrated by the R2S initiative, innovative collaborations between academic, research, business, and government partners can generate new approaches to long-standing problems (e.g., lack of emergency savings) and provide effective interventions that can significantly improve the financial well-being of American households. Policymakers should explore opportunities to facilitate and fund such collaborations.

**Figure 10. HFS2 respondents’ perceived ability to obtain \$2,000 for an unexpected emergency six months after tax filing, by prompt (n = 4,923)**



## Endnotes

1. Lusardi, Schneider, & Tufano (2011).
2. Rawlings & Gentsch (2008); Chase, Gjertson, & Collins (2011); Couch, Daly, & Gardiner (2011); Heflin, London, & Scott (2011); Barr (2012)
3. Conger et al. (2002); Finke & Pierce (2006).
4. Rothwell (2010), Conger et al. (2002), Finke & Pierce (2006).
5. Mullainathan & Shafir (2009), Shah et al. (2012).
6. See Grinstein-Weiss et al. (2014) for further discussion.

## References

- Barr, M. (2012). *No slack: The financial lives of low-income Americans*. Washington, DC: Brookings Institution Press.
- Chase, S., Gjertson, L., & Collins, J. M. (2011). *Coming up with cash in a pinch: Emergency savings and its alternatives* (Working Paper). Madison, WI: University of Wisconsin-Madison Center for Financial Security. Retrieved from [http://www.cfs.wisc.edu/briefs/ChaseGjertsonCollins2011\\_CashPaper.pdf](http://www.cfs.wisc.edu/briefs/ChaseGjertsonCollins2011_CashPaper.pdf)
- Conger, R., Wallace, L., Sun, Y., Simons, R., McLoyd, V., & Brody, G. (2002). Economic pressure in African American families: A replication and extension of the family stress model. *Developmental Psychology*, 38(2), 179.
- Couch, K., Daly, M., & Gardiner, C. (2011). *Life-cycle shocks and income* (FRBSF Economic Letter 2011-08). Retrieved from Federal Reserve Bank of San Francisco website: <http://www.frbsf.org/publications/economics/letter/2011/el2011-08.pdf>
- Finke, M., & Pierce, N. (2006). Precautionary savings behavior of maritally stressed couples. *Family and Consumer Sciences Research Journal*, 34(3), 223-240.
- Grinstein-Weiss, M., Comer, K., Russell, B., Key, C., Perantie, D. C., & Ariely, D. (2014). *Refund to Savings: 2013 evidence of tax-time saving in a national randomized control trial* (CSD Research Report 14-03). St. Louis, MO: Washington University, Center for Social Development.
- Heflin, C., London, A., & Scott, E. (2011). Mitigating material hardship: The strategies low-income families employ to reduce the consequences of poverty. *Sociological Inquiry*, 81(2), 223-246.
- Lusardi, A., Schneider, D. J., & Tufano, P. (2011). Financially fragile households: Evidence and implications. *Brookings Papers on Economic Activity*,

*Spring*, 83-150. Retrieved from [http://www.brookings.edu/~media/Projects/BPEA/Spring%202011/2011a\\_bpea\\_lusardi.PDF](http://www.brookings.edu/~media/Projects/BPEA/Spring%202011/2011a_bpea_lusardi.PDF)

Mullainathan, S., & Shafir, E. (2009). Savings policy and decision making in low-income households. In R. M. Blank & M. S. Barr (Eds.), *Insufficient funds: Savings, assets, credit, and banking among low-income households* (pp. 121-145). New York, NY: Russell Sage.

Rawlings, L., & Gentsch, K. (2008). *How households expect to cope in a financial emergency* (Opportunity and Ownership Facts No. 9) Washington, DC: Urban Institute. Retrieved from [http://www.urban.org/UploadedPDF/411621\\_financial\\_emergency.pdf](http://www.urban.org/UploadedPDF/411621_financial_emergency.pdf)

Rothwell, D., & Han, C. (2010). Exploring the relationship between assets and family stress among low-income families. *Family Relations*, 59(4), 396-407.

Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. *Science*, 338(6107), 682-685.

## Disclaimer

Statistical compilations disclosed in this document relate directly to the bona fide research of and public policy discussions concerning the use of the IRS “split refund” capability and 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

## Suggested citation

Grinstein-Weiss, M., Russell, B., Tucker, B., & Comer, K. (2014). *Lack of emergency savings puts American households at risk: Evidence from the Refund to Savings Initiative* (CSD Research Brief 14-13). St. Louis, MO: Washington University, Center for Social Development.

## Authors

**Michal Grinstein-Weiss**  
Associate Director  
Center for Social Development

**Blair Russell**  
Senior Statistical Data Analyst  
Center for Social Development



Washington University in St. Louis  
GEORGE WARREN BROWN SCHOOL OF SOCIAL WORK



**Brad Tucker**  
Doctoral Research Assistant  
Center for Social Development

**Krista Comer**  
Project Director  
Center for Social Development

## Contact us

Center for Social Development  
George Warren Brown School of Social Work  
Washington University in St. Louis  
Campus Box 1196  
One Brookings Drive  
St. Louis, MO 63130  
[csd.wustl.edu](http://csd.wustl.edu)