## Center for Social Development

# Does unsecured debt decrease savings? Evidence from the Refund to Savings Initiative 

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In the wake of the Great Recession, low- and moderateincome (LMI) households continue to face significant obstacles that prevent them from developing healthy balance sheets. ${ }^{1}$ One proposed step toward enabling financial health in these households is to encourage saving at tax time, ${ }^{2}$ when tax refunds bring many LMI households the year's largest influx of cash. However, high debt may prevent many of these households from saving at tax time. This brief summarizes findings on household debt and saving from the Refund to Savings (R2S) Initiative, which provides detailed information on the financial lives of LMI households.

## Background

The R2S Initiative seeks to enhance saving at tax time. As described in detail in the 2013 final report, ${ }^{3}$ R2S is an ongoing collaboration among Washington University in St. Louis, Duke University, and Intuit, Inc., the makers of TurboTax. Users of TurboTax Freedom Edition participated in a randomized controlled trial testing the effect of behavioral interventions on savings decisions. The experiment was embedded in the taxfiling software experience. After finishing the TurboTax portion of the initiative, participants were invited to
complete the Household Financial Survey (HFS). They completed the first wave of the HFS at the time of tax filing and the second wave 6 months later.

With two waves of survey data from $8,484 \mathrm{LMI}$ households, the 2013 R2S Initiative provides insights into the burden of debt owed by LMI Americans. The average age of survey respondents was approximately 35 years, the average adjusted gross income among respondents' households was $\$ 17,520$, and the average federal refund was $\$ 2,179$. Sixty-one percent of HFS respondents were female, $64 \%$ were single, $43 \%$ were college educated, and $20 \%$ were non-White. A third of respondents' households included dependent children.

Using data from the 2013 R2S, this brief reviews the results of an analysis of debt. It also reviews findings on the relationship between financial hardship and saving behavior in the financial lives of the 2013 R2S sample. This work is motivated by the assumption that some households may postpone saving in order to pay down debt. Indeed, the growth of household debt has caught the attention of researchers and policymakers in recent years. ${ }^{4}$ Analyses from the 2013 R2S Household Financial Survey (HFS) showed that, within 6 months of filing their taxes, LMI participants used 43\% of their tax
» Levels of unsecured debt were high among these LMI tax filers.
» Perceived and experienced levels of financial instability were respectively correlated with having both secured and unsecured debt.
» Although the LMI tax filer's level of unsecured debt was negatively associated with the portion of the refund he or she set aside in savings, it was positively correlated with the portion allocated to pay down debt: As the level of unsecured debt rises, the portion saved declines and the portion spent on debt repayment grows.
refund to pay down debt and set aside $14 \%$ of it for savings. ${ }^{5}$ Evidence from an ethnographic study of Earned Income Tax Credit recipients confirms that many expend a sizable share of their refunds to pay down debt but that some also save a portion or make investments (e.g., in education) intended to enhance their chances of upward mobility. ${ }^{6}$

## Debt Owed by R2S Participants: Secured and Unsecured

Two categories of debt are commonly used to characterize household obligations. Secured debt, such as debt owed for a home mortgage or car loan, is linked to a specific collateral asset, which the borrower agrees to surrender if he or she cannot repay the debt. In contrast, unsecured debt, such as debt from a credit card or a payday loan, is not linked to specific collateral. Because the price of debt is tied to the risk of lending, the interest or fee charged for unsecured debt is generally higher than that charged for secured debt. For example, the rate of interest on credit-card debt is generally higher than that on a mortgage.

## The HFS asked

 participants about three types of secured debt: debt from home loans, car loans, and property loans. It posed questions about nine types of unsecured debt: obligations from credit-card balances, student loans, medical expenses, past-due bills, loans by friends or family, nonmortgage bank loans, payday loans, negative balances on accounts, and other sources.Of the 8,484 HFS
respondents, $93 \%$
reported that their
households owed some debt. Among those who reported having debt, just under $3 \%$ had only secured debt, $42 \%$ reported having both types, and $55 \%$ reported having unsecured debt but no secured debt. As Figure 1 illustrates, the most common debt, reported by over two-thirds of respondents, was debt from credit cards. Other commonly reported sources of debt include obligations from

> A substantial proportion (64\%) indicated that they did not know the rate they were charged for their highest-interest-rate debt. On average, those who could specify the highest interest rate reported that it was $24 \%$


Figure 1. Percentage of HFS respondents who owed debt by type ( $n=8,344$ )
student loans (56\%), medical expenses (38\%), and car loans (32\%). Payday-loan debt is often the subject of policy debate because of the high average interest rates, but only $7 \%$ of respondents reported such debt.

The survey also asked participants to report interest rates, and a substantial proportion (64\%) indicated that they did not know the rate they were charged for their highest-interest-rate debt. On average, those who could specify the highest interest rate reported that it was 24\%.

Whereas participants were more likely to have unsecured than secured debt, the average amount of secured debt was higher. Across the assessed categories of secured debt, the highest average was for debt on property $(\$ 87,211)$, followed by debt on home mortgages $(\$ 80,562)$ and on vehicles $(\$ 9,732)$. The highest average balance for unsecured debts came from education loans $(\$ 34,185)$, though respondents reported substantial debt from other loans
( $\$ 10,738$ ), other types of bank loans $(\$ 7,373)$, credit-card balances ( $\$ 4,391$ ), and medical bills $(\$ 4,281){ }^{7}$

## Debt and Financial Security

The most recent data from external sources show that $44 \%$ of the U.S. population does not have enough savings to live without income for 3 months. ${ }^{8}$ The HFS also investigated access to contingency funds, asking respondents about their ability to come up with $\$ 2,000$ in an emergency: $56 \%$ of respondents said that they probably or certainly could not come up with $\$ 2,000$ if an emergency arose. Interestingly, respondents' perception of their financial security is associated with the type of debt they owed. As Figure 2 shows, we found no significant difference between respondents who did and did not report having secured debt: those with secured debt were not significantly more likely to indicate that they could come up with $\$ 2,000$ in an emergency. However, we observed significant differences between respondents who did and did not report unsecured debt: those who reported unsecured debt were less confident in their ability to come up with $\$ 2,000$. These findings suggest that unsecured debt may be a major cause of financial stress for LMI households.

We observed a similar pattern in responses to a question about the respondent's ability to cover all expenses and bills each month: $32 \%$ reportedly had


Figure 2. Ability to come up with $\$ 2,000$ in an emergency, by type of debt ( $n=8,329$ ). Note: difference is significant at the $95 \%$ confidence level.


Figure 3. Respondents who reported having no difficulty in covering expenses and bills each month by type of debt ( $n=5,316$ ). Note: Difference is significant at the $95 \%$ confidence level.


Distribution of unsecured debt by quartile
Figure 4. Respondents who reported difficulty in covering expenses each month by amount of unsecured debt ( $n=1,519$ )
no difficulty in covering typical expenses and bills. As Figure 3 shows, however, the ability to cover such obligations varies significantly by whether one owes debt: $33 \%$ of those with no secured debt reported that they are able to meet typical monthly expenses, but only 30 of respondents with secured debt reported this. So too, 29\% of respondents with unsecured debt reported that they are able to pay all typical expenses in a month, but $56 \%$ of those without unsecured debt reported the same.

As Figure 4 shows, the amount of unsecured debt held by participants was also predictive of whether respondents reported difficulty in covering monthly expenses. Nearly a quarter of those in the highest
quartile of unsecured debt said that expenses are very difficult to cover, and $14 \%$ of households in the first debt quartile reported the same.

## Type of Debt and Savings Behavior

Results from the HFS revealed that having unsecured debt was also associated with a decreased likelihood of saving part of the tax refund for 6 months. Approximately $27 \%$ of the sample reported that at least some of their refund remained saved after 6 months. The likelihood of saving some of it for that period is slightly but statistically significantly lower among those who owe secured debt (25\%) than among those who did not owe it (28\%); however, the difference between participants with and without unsecured debt was much more pronounced. Whereas $46 \%$ of those without unsecured debt reported having some of their refund saved, only $25 \%$ of filers with unsecured debt reported the same.

The results shown in Figure 5 provide additional insight into the associations between debt and savings. Whereas home and property debt seemed to have no impact on saving behavior, people with a car loan were somewhat less likely to report that some of their refund remained in savings 6 months after filing. However, in every category of unsecured debt, respondents who owed debt differed significantly from those who did not in the likelihood of having some of their refund left in savings 6 months after filing.


Figure 5. Percentage of participants with some of the refund saved at 6 months, by type of debt ( $n=8,197$ ). Note: Difference is significant at the $95 \%$ confidence level.


Figure 6. Percentage of tax refund allocated by amount of unsecured debt $(n=8,344)$

As mentioned, the 2013 results show that whether respondents had a portion of the refund saved after 6 months varied by whether one owed unsecured debt. But the findings also reveal that the likelihood of having the savings varies across types of unsecured debt. For example, there is a 2 -percentage-point difference between those who have and lack creditcard debt but a 21-percentage-point difference between those who have and lack past-due bills.

Further, Figure 6 shows that the percentages of the refund allocated to savings and to debt 6 months later were associated with the amount of unsecured debt owed. ${ }^{9}$ Whereas spending was relatively similar across all unsecured debt groups, the LMI tax-filers with no unsecured debt or between $\$ 1$ and $\$ 4,150$ in unsecured debt had more of their refund saved 6 months after filing taxes than did households with greater amounts of unsecured debt. The difference in the percentage of refund allocated toward debt was even bigger between people with less in unsecured debt and those with more unsecured debt. Although participants with no unsecured debt put an average of $19 \%$ of their refund toward debt, people with $\$ 38,301$ or more in debt put an average of $49 \%$ of their refund toward debt repayment.

## Conclusions and Policy Implications

For many LMI households, debt-especially unsecured debt-represents a significant barrier to building savings and increasing financial stability. Results from R2S show that high amounts of unsecured debt were negatively associated with the
ability to cover normal expenses and to come up with $\$ 2,000$ in a financial emergency. Unsecured debt was also negatively correlated with saving at tax time for an emergency. These findings do not mean that LMI households make bad decisions about the use of their refunds. In fact, eliminating expensive debt may be an important step in building a healthy balance sheet and achieving financial stability.

Asset-building initiatives must reflect the reality that LMI households are often saddled with expensive debt. Similarly, efforts to increase saving at tax time may see smaller than expected impacts if households think of the tax refund windfall as a chance to clear debt rather than as an opportunity to begin saving. From a full balance-sheet perspective, ${ }^{10}$ however, paying down expensive debt must be seen as a success. Given the many positive social and economic outcomes associated with saving, it would be ideal if families accumulated savings (even if only in modest amounts) while paying down debt.

Research and policy discussions should take note of the finding that different types of debt are associated with different outcomes. Secured debt was generally not associated with negative experiences or outcomes, but unsecured debt was almost always associated with these negative consequences. Lumping all debt together in analyses may mask true relationships, and the R2S results suggest useful ways of examining distinctions.

Practitioners, researchers, policymakers, and others may want to consider offering solutions for the types of debt that are the greatest barriers to building savings and a healthy balance sheet; efforts should especially focus on enabling families to avoid accumulating or to repay debts that do not lead to productive assets. Several promising federal programs, such as the Department of Education's Income-Based Repayment Plan and Public Service Loan Forgiveness Program, already ease the burden of education debt for qualified borrowers. Smaller-scale debt renegotiation programs, such those offered through the Financial Empowerment Center by the Office of Financial Empowerment in New York City, also provide regional examples of how local, state, and national leaders can help families reduce their debt burdens.

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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 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.

## End Notes

1. Bricker et al. (2014).
2. Beverly et al. (2008).
3. Grinstein-Weiss et al. (2015).
4. Freedman \& Schwenninger (2014); Zinman (2014).
5. Grinstein-Weiss (2015).
6. Halpern-Meekin, Edin, Tach, \&\& Sykes (2015); Sykes, Križ, Edin, \& Halpern-Meekin (2014).
7. The top $1 \%$ outliers were dropped in the calculation of these means.
8. Brooks, Wiedrich, Sims, \& Rice (2015).
9. Six months after filing their taxes, the R2S team asked HFS respondents what they did with their refund. There were four possible response options: spent it within 1 month, spent it at some point after 1 month, used it to pay down debt, and saved it and still had it at the time of the survey.
10. Boshara \& Emmons (2015).

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