Savings Matches, Small Dollar Accounts, and Childcare Workers' Decisions to Save

2012-2015 Appalachian Savings Project

A REPORT FOR THE WOMEN's INSTITUTE FOR A SECURE RETIREMENT

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Collin O'Rourke, corourke@policylabconsulting.com

Executive Summary

The Women's Institute for a Secure Retirement (WISER) recently completed the second year of the Appalachian Savings Project. The project aimed to support the long-term financial security of childcare workers in Ohio and West Virginia. To that end, the project addressed two barriers to savings, first by expanding institutional support for savings through a simulated refundable Saver's Credit and second by connecting workers to a savings product well suited to small dollar savers. This report measures the effects of these efforts on participants' savings outcomes.

The Saver's Credit provides a federal tax credit of up to 50% to low- to moderate-income households that contribute to qualified retirement accounts. Because the Credit is nonrefundable, it is only available to households with positive tax liabilities, greatly limiting the number of households that qualify for it. To simulate a refundable Saver's Credit, WISER provided a 50% savings match for the purchase of Series I U.S. Savings Bonds, up to a $500 match each year.

WISER selected I Bonds to serve as the program's savings product because they are well suited to small dollar savers. Key features include no fees for opening or maintaining an account, a low minimum contribution requirement of $25, universal access, no risk of loss of principal, and inflation protection. Historically, I Bonds have offered interest rates competitive with CD's. Other retirement savings and investment products tend to be less accessible to small dollar savers.

Participant Outcomes

WISER and PolicyLab worked together over the two years of the program to gather information about participant outcomes. Participants completed baseline and follow-up surveys, and were invited to participate in interviews. Twenty participants completed baseline and follow-up surveys, and eight savers from Year 2 participated in interviews. In addition to the participant data, WISER collected surveys on a group of nonparticipants recruited through local events for childcare workers. Key savings outcomes include:

- On average, participants purchased $767 in I Bonds over the course of the program and received a match of $383.
- Participants' total savings including the match averaged $1,150, estimated to be 5.5% of their average annual incomes.
- Respondents reported saving an average of $1,227 due to the program, slightly higher than their savings bond accumulations.
- Nearly all respondents agreed that their total savings and investments had increased compared to 12 months earlier, and only two respondents reported an increase in debt over the same period.
- A majority of respondents reported purchasing savings bonds monthly or more often. About one-half used their most recent tax refund to purchase savings bonds.
- The interviewees had generally earmarked their savings bond purchases for longer-term uses including retirement.

These findings show that participants accumulated significant savings during the program.

Effects of the Savings Match

One of the program's primary goals was to test the effectiveness of the 50% savings match, which was designed to simulate a refundable Saver's Credit. Through the surveys and interviews, it was quite clear that the match was the primary reason why participants signed up for the program and ultimately purchased savings bonds. Although participants enjoyed the support WISER provided during the program and were generally positive about I Bonds, they overwhelmingly cited the match as their reason for taking part in the program.

- Survey respondents reported saving an extra $692 than they otherwise would have without the match, consistent with their average I Bond purchases.
- All but one survey respondent reported the match was "very" or "extremely" important in determining how much to save.

Interviewees were unanimous in highlighting the match as their primary reason for participating in the program. For example, one interviewee who started the program late explained,

"I set it [automated savings bond purchase] a little higher than what I normally would have; however, I really wanted that match. . . I did $40 every two weeks, which was a little much for us, but I really wanted that 50% [match]."

One survey respondent went so far as to say the match "forced" her to save. The interviewees were enthusiastic about the program and the rare opportunity it provided people in their position to receive a savings match. One participant observed,

"I know some companies match what you put into your 401(k), and that's similar to what this was."

Conclusions

The results of this project show that childcare workers are interested in saving and can accumulate significant savings over the relatively short period of one year when they are incentivized to do so. In theory, the federal Saver's Credit should function similarly to the savings match provided through this program. In practice, the fact that the current Saver's Credit is nonrefundable dramatically limits the number of households that benefit from it. The results of this project point to the potential of an expanded Saver's Credit that is refundable to support savings among financially vulnerable households. Going forward, WISER plans to use the knowledge it gained from this project to inform the wider rollout of the new *my*RA accounts and to further support the idea that lower-income workers can save when given support and connected to well-suited savings vehicles.

Acknowledgements

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I. Introduction

This report describes participant outcomes from the first two years of the Appalachian Savings Project, which ran from December 2012 to June 2015.[1] WISER developed the project to support the longer-term financial security of childcare workers in the mid-Appalachian regions of Ohio and West Virginia. To that end, the project provided a 50% savings match to encourage childcare workers from these regions to contribute to savings. The match was intended to simulate a refundable Saver's Credit, a federal tax credit that incentivizes retirement savings for low- to moderate-income households.

Survey data show that many American households of all types struggle to accumulate significant retirement savings. Lower-income households in particular tend to enter retirement with little in the way of savings or investments. Perhaps most starkly, only 9% of households ages 55-64 in the lowest income quintile have retirement savings, compared to 94% in the top quintile.[2] In the context of this project, WISER focused on childcare workers because they earn low wages and are often self-employed, the latter meaning they lack access to employer-sponsored savings plans and contribution matches. A variety of factors may make it difficult for a lower-income family to save. This project aimed to address two barriers to savings, first by expanding institutional support for savings through a simulated refundable Saver's Credit and second by connecting workers to a savings product well suited to small dollar savers.

Existing policies to support savings and investments are generally not well targeted to lower-income workers. One federal policy, the Saver's Credit, is aimed at low- to moderate-income workers, but in its current form provides limited support. The existing Saver's Credit provides a tax credit of up to 50% for qualified savings contributions, but it is nonrefundable and thus only available to households with positive tax liabilities. In addition, the Credit is limited to contributions to qualified retirement accounts, generally employer-sponsored plans and Individual Retirement Accounts (IRAs).[3] These two features combined with a general lack of awareness of the Credit among consumers dramatically limit its use.[4] The information presented in this report points to the potential of an expanded Saver's Credit—one that is refundable and perhaps less restrictive in terms of which savings plans qualify—to promote savings among lower-income working households.

By enrolling in the Appalachian Savings Project, participants earned a 50% savings match for purchasing Series I U.S. Savings Bonds, up to a match of $500 each year. In 2012, WISER selected I Bonds to serve as the program's savings product because they are well suited to small dollar savers. Key features in this regard include no fees for opening or maintaining an account, a low minimum contribution requirement of $25, universal access (e.g., no ChexSystems verification), no risk of loss of principal, and inflation protection.[5] Historically, I Bonds have

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[1] For simplicity, the two rounds of the program are called "years," even though they were not exactly 12 months each.
[2] U.S. Government Accountability Office. 2015. "Retirement Security: Most Households Approaching Retirement Have Low Savings." Available at gao.gov/products/GAO-15-419. The report defines retirement accounts as account-based defined contribution plans such as 401(k)'s and IRAs.
[3] More information about the Saver's Credit is available from the IRS.
[4] Spader, Jonathan, et al. 2011. "Encouraging the Use of the Saver's Credit through VITA Sites: Evidence from a Pilot Demonstration in Two Cities." Center for Financial Security Research Brief FLRC 11-7. Madison, WI.
[5] D2D Fund. 2008. "America's Best Kept Saving Secret: Testing U.S. Savings Bonds to Help Low-Income Tax Filers Begin Saving." Allston, MA.

offered interest rates competitive with CDs.[6] Together, these features make I Bonds accessible to low- to moderate income savers, who may find other retirement savings and investment products less suitable due to their fees, contribution requirements, risk profiles, and other features.

Perhaps the greatest barrier to purchasing I Bonds is navigating the relatively challenging TreasuryDirect.gov website. Outside of tax season, paper savings bonds are no longer available for purchase. Savers must purchase Savings Bonds electronically through TreasuryDirect.gov, either by setting up a direct deposit from a payroll system or by making a one-time or recurring contribution from a bank account.

Going forward, WISER intends to promote the new Treasury-sponsored *my*RA accounts due to the advantages the accounts offer over I Bonds. Importantly, *my*RA contributions are eligible for the Saver's Credit, which I Bond purchases are not. *my*RA accounts are also more liquid, as accountholders faced with a financial emergency can access their contributions without penalty. I Bonds place some restrictions on withdrawals. In addition, *my*RA accounts are not subject to a minimum contribution requirement. I Bonds require a $25 minimum purchase. Appendix A summarizes the key features of I Bonds and *my*RA accounts for small dollar savers.

Despite their differences, across all of the savings and investment products available to consumers, I Bonds and *my*RA accounts remain quite similar. They are both safe, low-cost ways to begin saving. Therefore, the results presented in this report, though focused on I Bonds, are relevant to the effects of savings matches offered in conjunction with *my*RA. To the extent that *my*RA accounts prove to be more appealing and easier-to-use than TreasuryDirect.gov and I Bonds, the findings presented in this report may have been stronger had WISER been able to promote *my*RA rather than I Bonds during the study period.

Program Logistics

The Appalachian Savings Project ran from December 2012 to June 2015 and was broken into two years. Year 1 ran from December 2012 to December 2013. After a short break, the program started enrolling Year 2 participants in March 2014. Year 2 was slightly longer than 12 months to allow more time for recruitment. WISER awarded the Year 2 savings matches in May 2015. Participants from Year 1 had the opportunity to continue onto Year 2 and could thus accumulate twice the total savings match as participants who only participated during the second year.

WISER encouraged participants to set up automatic purchases of I Bonds at regular intervals. Automatic purchases were not required to receive the match, however, and participants could make one-time purchases if desired. At the end of each year, participants provided documentation from TreasuryDirect to WISER showing their total purchases. After receiving this documentation, WISER transferred the matching funds into each participant's TreasuryDirect account via a "Zero-Percent Certificate of Indebtedness." Participants used these funds to purchase additional U.S. Savings Bonds.

[6] Due to the adjustment for inflation that factors into its interest rate, I Bond interest rates have declined sharply in recent years and currently stand at zero. I Bond rates are adjusted every six months, so rates on outstanding bonds may increase in the future. I Bond rates never fall below 0%.

The program differed in two slight respects from Year 1 to Year 2. During the first year, participants were required to attend quarterly financial education workshops. These workshops covered a range of topics around savings, retirement, and other issues relevant to participants (e.g., how to use TreasuryDirect.gov). WISER dropped the workshops from its Year 2 requirements due to the barriers the workshops imposed on potential participants. In addition, while Year 1 was limited to self-employed childcare workers, WISER expanded the program in Year 2 to include childcare workers who worked for employers. This change was also intended to bolster recruitment. The rest of the program remained the same between the two years. For simplicity and to accommodate the small sample size, this report combines data from participants across the two years to measure program outcomes.

Report Outline

Over the two years of the project, WISER and PolicyLab worked together to collect information documenting participant outcomes through surveys and interviews. The rest of this report describes those outcomes. The next section overviews the project's research objectives and data collection efforts. Then, we present data on participant demographics, followed by an analysis of the program's effects on savings outcomes. The analysis pays particular attention to the effects of the 50% match, which was again meant to simulate a refundable Saver's Credit. The report then turns to participants' feedback about the program. The discussion section provides a higher-level synthesis of the survey and interview findings. The report concludes with an overview of next steps in WISER's efforts to promote savings and financial security among lower-income workers and workers without access to employer-provided savings plans.

II. Research Questions and Process

As WISER implemented Years 1 and 2 of the Appalachian Savings Project, WISER and PolicyLab collected data on the program's effects on participants' savings activity and broader financial security. The following subsections describe the research questions and data collection efforts.

Research Questions

The surveys and interviews gathered information on the following research questions:

- What are the demographic and financial characteristics of participating childcare workers and eligible nonparticipants?
- Do participants follow through and purchase I Bonds over the course of the program?
- How does the 50% savings match affect participants' savings patterns? Does this simulated refundable Saver's Credit encourage participants to save?
- How do participants plan to use the savings they accumulate through the program?
- What feedback do participants have about the program as a whole as well as more specific program features including TreasuryDirect.gov and I Bonds?
- Do other aspects of participants' financial behavior and outcomes change over the course of the program?
- What barriers exist to participation?

To answer these questions, we collected data from participants and eligible nonparticipants from three sources: participant surveys, participant interviews, and nonparticipant surveys.

Participant Surveys

PolicyLab and WISER developed a three-page survey to measure participants' financial status before and after the program. The survey questions covered participants' demographics, financial behavior, savings activity, and perceptions of the program. When possible, the survey questions were modeled after existing questions used in national surveys. Appendix B contains the Year 2 follow-up survey. The survey was modified slightly from Year 1 to Year 2, but the core questions remained the same. In Appendix A, an underlined question number indicates that the question was added to the Year 2 survey (e.g., Q13 from the Year 2 survey was not included in Year 1). Within each of the two years, the baseline survey included additional demographic questions instead of the program feedback section that appears at the end of the follow-up survey; otherwise, the financial questions were the same on the baseline and follow-up surveys.

WISER administered the baseline surveys when participants signed up for the program, beginning in December 2012 for Year 1 and March 2014 for Year 2. Participants completed the follow-up survey about one year later, after they had received their savings match. A letter was attached to each survey explaining its purpose. WISER entered the surveys into a database maintained by PolicyLab. The data provided to PolicyLab contained participant identification numbers but no personally identifiable information. The participant identification numbers were used to match the baseline and follow-up surveys.

The participant survey data presented in this report combine individuals who participated in either year of the program. A total of 20 participants completed baseline and follow-up surveys.[7] This total includes two childcare workers who participated in Year 1 only, 14 who participated in Year 2 only, and four who participated in both years. For the four childcare workers who participated both years, this report uses data from the first and last surveys they completed (i.e. the Year 1 baseline and Year 2 follow-up surveys). A previous interim report presents data limited to the Year 1 participants.[8]

In terms of nonresponse, two participants from Year 1 and seven from Year 2 completed a baseline survey, only to later drop out of the program. Another participant from Year 2 returned a follow-up survey but an unusable baseline survey. These 10 participants are excluded from the data analysis because they only completed one survey. Thus, the participant outcomes presented in this report relate only to those individuals who completed the program and received the match. In addition to the survey data, WISER provided administrative data on the savings match each participant received.

Participant Interviews

To supplement the findings of the participant surveys, we interviewed four of the six Year 1 participants in December 2013, after they had received the savings match. The interviews were conducted over the telephone and designed to take 15 minutes. Another round of surveys was

[7] Sample sizes for specific survey questions may be less than 20 because some participants did not respond to certain survey questions or sections.
[8] PolicyLab. 2014. "Appalachian Savings Project: Year 1 Outcomes."

conducted in June 2015 with eight Year 2 participants. These interviews were conducted in-person in West Virginia and Ohio and were designed to take about 45 minutes. WISER coordinated the interviews and accompanied the interviewer on these site visits. As a privacy safeguard, participants' interview responses are not linked to the surveys. This report focuses on the Year 2 interviews, as the previous interim report presented the Year 1 interviews. Together with the survey data, the interview findings provide a rich set of information about participants' experiences in the program. The Year 2 interview prompt is included in Appendix C.

Nonparticipant Surveys

WISER and local partners surveyed childcare workers who did not participate in the Appalachian Savings Project. The survey contained the same core questions as the participant survey. The baseline survey was administered at three events in the program area during the second quarter of 2013. A follow-up survey was mailed to nonparticipants in the summer of 2014. Nonparticipants received $5 for completing the baseline survey, and WISER included a $5 pre-incentive with the follow-up surveys. WISER provided de-identified nonparticipant survey data to PolicyLab using the same database as the participant survey. Twenty-five childcare workers completed the baseline survey, nine of whom completed a follow-up survey. The data used in this report are limited to the nine individuals who completed both surveys.

The "nonparticipant" surveys serve two primary purposes. First, the survey contained additional questions designed to assess why respondents did not sign up for the project's first year and whether they were interested in participating in the future.[9] Second, nonparticipants who completed the survey serve as a comparison group, though the sample sizes are too small for in-depth analysis.

III. Demographics

Wage data shed light on the financial status of childcare workers.[10] Nationally, childcare workers earn a median hourly wage of $9.48, or $19,730 annually. Childcare workers in West Virginia earn a median wage of $8.74 hourly, or $18,180 annually, the sixth lowest wage for childcare workers of any state. Although the median wage for childcare workers in Ohio ($9.37 per hour, $19,500 annually) is close to the national median, statewide averages mask community-level variations. For instance, the average hourly wage for childcare workers in the Parkersburg-Marietta-Vienna WV-OH area, one of the locations with participating childcare workers, is $8.52, or $17,710 annually. As another point of comparison, the median hourly wage for all workers is $14.14 in West Virginia and $16.47 in Ohio. Thus, childcare workers in these two states earn roughly 60% of the median wage of the workforce as a whole.

The survey data collected from program participants and nonparticipants affirm the financial vulnerability of the target population. At baseline, participants' average estimated monthly income was $1,761, which translates into an annual income of about $21,000. Respondents provided their income in ranges, and income can fluctuate significantly from month-to-month. Nonetheless, the $21,000 estimate is close to childcare workers' median annual wage in West Virginia and Ohio. Nonparticipants had lower estimated monthly baseline incomes of $1,426, or

[9] Nonparticipants' reasons for not signing up for the program are covered in the Year 1 interim report.
[10] Wage data are available from the Bureau of Labor Statistics. Childcare workers are coded 399011 in the data.

about $17,000 annually. Incomes increased for both groups from baseline to follow-up to about $1,830 a month or $22,000 annually.

All but one program participant worked full-time, with the other working part-time. Seven of the nine nonparticipants were employed, with a majority working full-time. After limiting the program to self-employed childcare workers in Year 1, WISER opened the program to employees for Year 2. Still, a majority of participants in the data are self-employed. This contrasts with nonparticipants, the majority of whom were employees. This difference likely reflects the attendees at the events where nonparticipants were recruited for the comparison survey. Overall, respondents' income and employment characteristics attest to the target population's status as low-income working adults.

Table 1. Survey Respondent Demographics

	Participants	Nonparticipants
Average Estimated Monthly Income*		
Baseline	$1,761	$1,426
Follow-up	$1,831	$1,826
Employment Status		
Full-time or more	95%	56%
Part-time	5%	22%
Not currently employed	-	22%
Self-employed	70%	22%
Age		
Average	43	47
Range	21-59	27-59
Highest Educational Attainment		
Some high school	5%	-
High school diploma or equivalent	20%	44%
Some college or an Associate's degree	40%	44%
Bachelor's degree	35%	11%
Married	80%	71%
Average Household Size	3.7	2.7

Notes: n=20 participant surveys, n=9 nonparticipant surveys. * Participants provided their income in categories, so midpoints were used to estimate average monthly incomes; $2,801 was used for the highest income category and $401 for the lowest category because these categories lacked upper and lower bounds, respectively.

In terms of other demographic characteristics, participants' ages ranged from 21 to 59 and averaged 43, slightly younger than the comparison group. Three-quarters of participants had attended at least some college, compared to just over one-half of nonparticipants. A majority of respondents in both groups were married, and participants averaged one additional member in their household than nonparticipants.

Overall, the participant and nonparticipant groups appear similar in terms of their estimated monthly incomes but seem to differ in other respects. Given the small sample sizes and lack of random assignment, any differences between the two groups may simply be due to chance. Nonetheless, because nonparticipants were drawn from the same geographic area and work in the same industry, the comparison group provides additional data on the target population and its financial behaviors.

Income Volatility

The monthly income and estimated annual income figures likely mask significant month-to-month variations in childcare workers' pay, especially for self-employed childcare workers with home-based operations. In the interviews, self-employed participants explained that they only receive payments for publically subsidized children the days those children are in their care. Absences result in a drop in income for the pay period. Absences for unsubsidized children may not cause a drop in income, as these parents effectively pay to hold a spot, whether or not their child fills it on a particular day. Of course, monthly incomes may fluctuate for a variety of other reasons aside from day-to-day enrollment figures.

Recent findings from the U.S. Financial Diaries project show that income volatility is widespread among low- to moderate-income families. The project tracked more than 200 low- and moderate-income households over one year. The average household in that study experienced six months out of the year when its income was 20% above or below average. These fluctuations require households to use savings and credit to smooth their incomes from month-to-month. Nonetheless, income fluctuations are often difficult to predict, complicating households' capacity to manage such smoothing.[11] Given the income profiles of the households in the Financial Diaries project, the results of that study lend further evidence that childcare workers experience significant income volatility.

IV. Savings Outcomes and Effects of the 50% Match

This section summarizes participants' savings outcomes and the effects of the 50% savings match. Table 2 displays a variety of data points related to participants' savings outcomes. WISER administrative data show that participants used an average of $767 of their own funds to purchase savings bonds. This figure corresponds to an average match of $383 and average total savings of $1,150. The lowest amount saved among all participants was $500, with a match of $250. Four individuals saved $900 and received $450 matches. On the follow-up surveys, participants reported saving an average of $1,227 due to the program, similar to the $1,150 in WISER's administrative data. In line with these findings, participants' self-reported savings bond balances increased.

Using participants' average income at baseline from Table 1, $1,150 in total savings represents an estimated 5.5% of participants' annual incomes. This percentage is quite significant, particularly in light of data documenting total savings accumulations close to zero for U.S. households in the two lowest income quintiles. Lower income households tend to spend a lower share of their incomes on discretionary items, so they may have less slack in their budgets to devote to savings. The findings in Table 2 show that participants were successful in building savings over the course of the program.

[11] Morduch, Jonathan, Rachel Schneider, Timothy Ogden, Anthony Hannagan, and Julie Siwicki. 2015a. "Emergency Savings." U.S. Financial Diaries Issue Brief.

Table 2. Participant Savings Outcomes

	Average	Range
WISER administrative data*		
Individual savings	$767	$500-900
50% match	$383	$250-450
Total savings	$1,150	$750-1,350
Total savings attributed to the program (including match)*	$1,227	$800-6,000
Self-reported U.S. Savings Bond balances†		
Baseline	$235	$0-$2,000
Follow-up	$1,498	$800-$2,700
Total savings as % of estimated annual income	5.5%	
Frequency of U.S. Savings Bond purchases over the prior year		
Once a month or more often	61%	
Every few months	6%	
One-time purchase	33%	
Purchased savings bonds with most recent tax refund	46%	
% agree total amount of money in savings and investments increased compared to 12 months ago	88%	
% agree total debt increased compared to 12 months ago	12%	

Notes n=20. * These figures only include Year 2 savings for individuals who participated in both years of the program. † Blank responses were recoded as $0. Without such recoding, only five respondents provided savings bond balances on both the baseline and follow-up surveys; limiting the sample to those five respondents, the baseline and follow-up means were $612 and $1,605, respectively. Source: All data aside from WISER's administrative data are from the participant surveys.

Turning to the data points in the latter part of Table 2, 61% of participants purchased savings bonds monthly or more often during the program. One respondent purchased savings bonds every few months, and one-third of respondents made one-time purchases. Data on the exact dates of participants' purchases is not available, so it is unclear whether the one-time purchases occurred right before the match. Nearly one-half of respondents used their most recent tax refunds to purchase savings bonds. In terms of the net impact of the program, a vast majority of participants (88%) agreed that the total amount they held in savings and investments had increased compared to 12 months earlier. Only two participants reported an increase in total debt over the same time period. Together, these findings indicate that the savings participants accumulated through the program represented a net increase in savings, rather than a shift in existing resources to savings bonds or increased use of debt in order to obtain the match.

In terms of the 50% savings match, the surveys and interviews aimed to capture the extent to which the match motivated participants to sign up for the program and follow through on purchasing savings bonds. Table 3 includes two data points about the savings match from the participant follow-up survey. First, participants were asked to report how much money they decided to save due to the match, relative to what they would have saved without it. The mean response was $692, close to the average of $767 participants used in their own funds to purchase savings bonds. This finding indicates that participants believed they would have saved little in the absence of the match. Second, participants overwhelmingly agreed that the match was critical to their decisions over how much to save; all but one survey respondent reported the match was "very" or "extremely" important.

Table 3. Importance of the Savings Match

	Average	Range
Extra savings due to the match	$692	$0-$1,000
% agree savings match "very" or "extremely" important in deciding how much to save	94%	

Notes n=20. Source: Participant follow-up survey.

The findings in Table 3 were echoed throughout the interviews and respondents' written feedback about the program. All of the interviewees cited the match as a primary motivator for getting involved in the program and ultimately purchasing savings bonds. Representative quotes from the interviews include:

"I set it [automated savings bond purchases] a little higher than what I normally would have; however, I really wanted that match. . . I did $40 every two weeks, which was a little much for us, but I really wanted that 50% [match]."

"You're getting rewarded for saving money. How good is that?"

One survey respondent went so far as to describe the match as "forcing" her to save.

In addition, multiple participants touched on a desire for similar programs to be more widely available for childcare workers:

"This is a great program for family childcare providers. This is the only way people in my field would be able to have a matching retirement [account]." (survey response)

"I know some companies match what you put into your 401(k), and that's similar to what this was." (interviewee)

Overall, it is clear that the savings match was the central reason why participants got involved in the program. Despite the challenges lower-income households often face when saving, the match successfully incentivized savings among participants.

Several interviewees attributed spillover effects to the program. For example, one interviewee committed to helping her son who recently graduated from college pay down his student debt in return for him contributing to his employer-based account. As he contributes to his retirement account, she agrees to pay a certain percentage of his monthly student loan payment. Another interviewee successfully encouraged her husband to sign up for TreasuryDirect.gov so he could also start building savings. Finally, the owner of a childcare center started offering a 401(k) so the center's employees could make retirement contributions through the payroll system. These three individuals all attributed their decisions to their involvement in the program and the exposure it provided to the importance of savings.

Table 4 presents the final set of survey data related to savings behavior. The table shows the self-reported behavior and outcomes of participants and nonparticipants. Given the small sample sizes, any differences between the two groups or over time are not statistically significant. Nonetheless, the results provide further evidence of the program's positive effects on savings. Consistent with the requirements of the program, 100% of participants had purchased savings bonds at follow-up. Nonparticipants' purchase of savings bonds stayed constant over time.

Participants were more likely to use automatic deposits to transfer money into savings, though the rate of automatic deposit usage increased for both groups from baseline to follow-up. Participants were more likely than nonparticipants to report an overall increase in savings and investments compared to a year earlier. The groups were similar in terms of a small percentage of respondents reporting increased debt.

Table 4. Comparison of Savings Behavior between Participants and Nonparticipants

	Participants		Nonparticipants	
	Baseline	**Follow-up**	**Baseline**	**Follow-up**
Ever purchased a U.S. Savings Bond for yourself?	18%	100%	22%	22%
Made an automatic deposit or transfer into savings in the past 3 months	44%	89%	11%	44%
Total amount of money in savings and investments increased compared to 12 months ago		88%		25%
Total debt increased compared to 12 months ago		12%		11%
Average satisfaction with potential to meet retirement savings needs (1=not at all, 5=very)		2.9		1.9
Saving more than 3 months earlier	47%	58%	43%	14%
Emergency savings fund sufficient to cover 3 months' expenses	21%	53%	22%	33%

Notes: n=20 participants and 9 nonparticipants. Source: Participant and nonparticipant surveys.

At follow-up, participants' rating of their satisfaction to meet their retirement savings needs averaged 2.9 on a five-point scale, corresponding to "somewhat." Nonparticipants reported lower satisfaction, averaging 1.9, "a little bit," on the scale. This finding is not evidence that the program caused an increase in participants' satisfaction with their retirement savings, but it does indicate moderate satisfaction among participants about their retirement savings, perhaps a higher-than-expected result given their incomes. Participants were more likely to report saving more than they did three months ago than nonparticipants, particularly on the follow-up survey. Finally, a majority of participants at follow-up reported having an emergency savings fund sufficient to cover three months' expenses, though it is unclear what role their savings bond purchases may have played in influencing these responses.

V. Program Satisfaction and Feedback

Participants provided feedback about the program through write-in survey responses and the interviews. Survey respondents and interviewees were overwhelmingly positive about the program and enthusiastic about the savings match, again attributing the match to their decision to join the program and follow through in purchasing savings bonds. One interviewee described being on "cloud nine" about the program, and representative survey responses include:

"I am very glad for the opportunity they gave me to save and make it worthwhile with the savings match."

"This was a very good incentive for me, and I want to thank you very much for offering this to me."

Two survey respondents mentioned that they would like to see the model replicated, with small employers offering savings matches for retirement contributions. Recognizing the lack of infrastructure to support savings among self-employed childcare workers, another respondent observed that this program was the only way she could receive a match for saving for retirement. Multiple respondents explicitly expressed a desire for the program to continue into the future.

The only potential suggestion to emerge from the surveys is one respondent's comment that she missed the workshops that were part of the first year of the program. Another survey respondent indicated she needed some additional information about what would happen to the savings bonds after the program, a topic that multiple interviewees also raised.

VI. Discussion

This project was motivated by the straightforward premise that providing a savings match to childcare workers and connecting them with a safe, low-cost savings product would succeed in helping participants build savings. The childcare workers targeted through this program face a variety of barriers to saving, including limited incomes and a lack of institutional support. The latter barriers include a lack of access to employer-sponsored plans or matches along with savings and investment products that may preclude small dollar savers due to fees, minimum contribution requirements, and other features. A lack of public policy support for small dollar savers is also a barrier.

The results of this project show that childcare workers interested in saving can accumulate significant savings over the relatively short period of one year when they are incentivized to do so. Participants saved an average of $767 of their own funds before receiving the match. With the match, participants accumulated an average of $1,150, an estimated 5.5% of their annual incomes.

The 50% match provided a clear economic incentive to save, but it might have also affected participants in subtler ways such as focusing their attention on savings, serving as a reminder, or giving them a deadline to follow through. In theory, the federal Saver's Credit should function similarly to the savings match provided through this program. In practice, the fact that the current Credit is nonrefundable dramatically limits the number of households that benefit from it. The results of this project point to the potential of an expanded Saver's Credit that is refundable to support savings among financially vulnerable households.

Although an expanded Saver's Credit would require additional federal spending, these costs must be viewed in the context of existing tax expenditures that support household savings and asset accumulation. The current Saver's Credit costs the federal government $1.2 billion annually.[12] Meanwhile, exclusions for pension contributions and earnings cost tens of billions of dollars annually, with an estimated two-thirds of the expenditures accruing to households in the highest income quintile and only 16% going to households in the bottom 60% of the income distribution.[13] Several organizations have developed specific proposals to make the Saver's

[12] Joint Committee on Taxation. 2014. "Estimates of Federal Tax Expenditures for Fiscal Years 2014–2018." Prepared for the House Committee on Ways and Means and the Senate Committee on Finance. Washington, DC.
[13] Congressional Budget Office. 2013. "The Distribution of Major Tax Expenditures in the Individual Income Tax System." Publication No. 4308. Washington, DC. Pension contributions and earnings include defined benefit plans,

Credit refundable and expand its reach, and broader proposals exist that outline ways to restructure federal tax expenditures on asset building to improve the support they provide to lower-income households.[14]

In the context of previous research on the Saver's Credit and savings matches, two issues are particularly relevant to the experiences of the Appalachian Saving Project. First, previous research on the Saver's Credit suggest that its effects are limited by its income limits and households' lack of understanding of the credit. Essentially, household responses to the existing Credit are muted by a lack of understanding of how it works.[15] In contrast, the savings match provided in this project was much more straightforward, without the complexities of an incentive offered through the tax code. Should Congress expand the Saver's Credit in the future, the work of explaining the credit to households and how it affects them will be paramount. Second, auto-enrollment into savings plans is a proven way to increase scale. Although WISER initially reached self-employed childcare workers through this program, in its work with larger centers it may be beneficial to explore auto-enrollment opportunities. For self-employed childcare workers, the ability to enroll in *my*RA and begin regular deposits into it while filing taxes is a potential approach to streamlining enrollment.

VII. Future Directions

WISER will continue to promote savings among lower-income and self-employed workers but will substitute the new *my*RA accounts for I Bonds. Although I Bonds proved to be a suitable product for participants, going forward, WISER intends to promote the recently introduced *my*RA accounts. *My*RA accounts offer similar advantages as I Bonds for small dollar savers but are more liquid, have no minimum contribution requirements, and qualify for the existing Saver's Credit. WISER plans to use the knowledge it gained from this project to inform the wider rollout of *my*RAs and to further support the idea that lower-income workers can save if given support and connected to well-suited savings vehicles.

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defined contribution plans, IRAs, the Saver's Credit, and self-employed plans. Estimates of the total cost of tax expenditures vary by source, and debate exists around what constitutes a tax expenditure and how to calculate expenditures over time. Nonetheless, the CBO's 2013 analysis finds that the top income quintile receives 58% of the benefits of the net pension and earnings exclusion when running an alternative analysis based on the present value of current and future taxes (versus 66% in the standard analysis). Households in the bottom three income quintiles receive 18% of the tax expenditures under the alternative calculation, versus 16% in the baseline analysis. Similarly, the Tax Policy Center calculates that the top income quintile receives 69% of the benefit of retirement savings incentives, versus 2% for the bottom two quintiles combined (http://www.taxpolicycenter.org/numbers/displayatab.cfm?DocID=4309).

[14] For example, Tax Policy Center, "Expand saver's credit and require automatic enrollment in IRAs." Available at www.taxpolicycenter.org/taxtopics/2011_savers_credit.cfm. See also Greer, Jeremie, and Ezra Levin. 2014. "Expanding Retirement Security for All Workers." Corporation for Enterprise Development. Washington, DC.

[15] Duflo, Esther et al. 2005. "Saving Incentives for Low- and Middle-Income Families: Evidence from a Field Experiment with H&R Block." NBER Working Paper No. 11680. Cambridge, MA.

Appendix A. Series I U.S. Savings Bonds and *my*RA Accounts

President Obama announced *my*RA in the 2014 State of the Union address, and *my*RA accounts became available nationwide in 2015. Thus, WISER was unable to promote *my*RA during the period covered in this report. Going forward, WISER will promote *my*RA accounts rather than I Bonds due to the advantages *my*RA accounts offer for small dollar savers. For the purposes of this project, I Bonds effectively served as a stand-in for *my*RA.

Table A1 compares several features of I Bonds and *my*RA accounts relevant to small dollar savers. Neither product charges fees for opening or maintaining an account, again an important point of contrast with many retirement savings and investment products. Whereas I Bonds are subject to a minimum purchase requirement of $25, *my*RA does not impose any such requirement. Savers can contribute any amount to *my*RA, an attractive feature for small dollar savers.

Table A1. Key Features of I Bonds and myRA Accounts for Small Dollar Savers

	Series I U.S. Savings Bonds	*my*RA Accounts
Fees to open or maintain	None	None
Minimum contribution	$25	None
Liquidity	No withdrawals for 12 months; forfeit 3 months' interest for withdrawals before 5 years	No penalties for withdrawing contributions; penalties for non-qualified earnings withdrawals
Tax advantages	Interest is not subject to state or local income tax; interest earnings are tax free for qualified higher education expenses	Interest earnings are tax free when used for qualified distributions
Eligible for the Saver's Credit?	No	Yes
How to contribute	TreasuryDirect.gov (Payroll contributions, recurring or one-time purchases from a checking or savings account, or using a federal tax refund)	Payroll contributions, recurring or one-time deposits from a checking or savings account, or using a federal tax refund
Safety	Backed by the U.S. Treasury; inflation protected	Backed by the U.S. Treasury

Note: More information about I Bonds and *my*RA accounts is available at treasurydirect.gov/indiv/research/indepth/ibonds/res_ibonds.htm and myra.gov, respectively.

Another key distinction between the two types of accounts is access to liquidity, meaning a saver's ability to access funds in an emergency. Potential savers may be reluctant to contribute to a savings account if they will not be able to access their funds in an emergency or will incur a penalty for doing so. Without access to emergency funds, households faced with an emergency may turn to high-cost credit or experience material hardships (e.g., food insecurity, housing instability). Individuals who purchase I Bonds must wait one year before they can cash in their bonds, and they forfeit the last three months' worth of interest if they cash their bonds in one to five years after purchase. In contrast, *my*RA accountholders can withdraw their contributions at any time without penalty, though non-qualified withdrawals of interest earnings are subject to penalties.

The increased liquidity of *my*RA relates to its underlying tax structure. *my*RA is structured as a Roth IRA. Individuals contribute to *my*RA after tax, and interest earnings are tax free when used for qualified purposes (e.g., retirement at age 59 ½ or older, first home purchase). Interest earnings for I Bonds also enjoy tax advantages, but interest earned on I Bonds is subject to federal income tax unless used for qualified education expenses.

Importantly, I Bond purchases are not eligible for the Saver's Credit, but *my*RA contributions do qualify for it. Individuals can purchase I Bonds or contribute to *my*RA accounts in the same ways: setting up a direct deposit from a payroll system, making a one-time or recurring contribution from a bank account, or contributing some or all of their federal tax refund. The latter two funding methods are particularly important for childcare workers, many of whom are self-employed and therefore not part of a payroll system. Finally, I Bonds and *my*RA accounts are both backed by the U.S. Treasury and cannot decline in nominal (face) value, though I Bonds offer protection against inflation.

Going forward, WISER intends to promote *my*RA. WISER's preference for *my*RA accounts is primarily due to the advantages they offer in terms of contribution requirements, liquidity, and eligibility for the Saver's Credit. Nonetheless, across all of the savings and investment products available to consumers, I Bonds and *my*RA accounts are quite similar. They are both safe, low-cost ways to begin saving. Therefore, the results presented in this report, though focused on I Bonds, are relevant to the effects of savings matches offered in conjunction with *my*RA. To the extent *my*RA accounts prove to be more appealing and easier-to-use than TreasuryDirect.gov and I Bonds, the findings presented in this report may have been stronger had WISER been able to promote *my*RA rather than I Bonds through the project.

Appendix B. Year 2 Participant Follow-up Survey

Your Financial Goals

1. What is your main financial goal?

2. How confident are you in your ability to achieve a financial goal you set for yourself today?

○ Not at all confident ○ A little confident ○ Moderately confident ○ Very confident ○ Not sure

3. Over the last 3 months, have you followed a personal budget, spending plan, or financial plan?

○ Yes ○ No ○ Not sure

4. In the last 3 months, did you use an automatic deposit or transfer to put money away for a future use such as saving for retirement or education?

○ Yes ○ No ○ Not sure

5. Have you set aside emergency or rainy day funds that would cover your expenses for 3 months, in case of sickness, job loss, economic downturn, or other emergencies?

○ Yes ○ No ○ Not sure

6. Over the past 3 months, would you say your level of spending was more than your regular income?

○ Yes ○ No ○ Not sure

Paying Bills

7. In the last 3 months, have you paid a late fee on a loan or bill?

○ Yes ○ No ○ Not sure

8. In the last 3 months, have you received a call from a creditor or bill collector?

○ Yes ○ No ○ Not sure

9. Compared to 3 months ago, are you currently saving more today than before?

○ Yes ○ No ○ Not sure

10. How would you rate your current credit record?

○ Very bad ○ Bad ○ About average ○ Good ○ Very good ○ Not sure

11. Currently, how much stress do you feel about your financial situation?

○ None ○ A little ○ Some ○ A lot ○ Extreme

12. On a scale from 1 to 7, where 1 means very low and 7 means very high, how would you assess your overall financial knowledge? 1

Very Low … Very High

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7

13. Overall, how satisfied are you with your potential to meet retirement savings needs?

○ Not at all ○ A little bit ○ Somewhat ○ Quite ○ Very

Using Bank Products

14. Checking account ◯ Yes ◯ No ◯ Not sure

About how much do you have in checking? $

15. Savings account(s) ◯ Yes ◯ No ◯ Not sure

About how much do you have in savings? $

16. U.S. Savings Bond(s) ◯ Yes ◯ No ◯ Not sure

About how much do you have in U.S. Savings Bonds? $

17. Retirement savings or investment account(s) ◯ Yes ◯ No ◯ Not sure

About how much do you have in retirement savings/investments? $

18. Other savings (CD's, non-retirement investments, etc.) ◯ Yes ◯ No ◯ Not sure

About how much do you have in other savings? $

19. Overall, has the total amount of money you have in savings and investments increased, decreased, or stayed the same compared to 12 months ago?
◯ Increased ◯ Decreased ◯ About the same ◯ Not sure

20. Student loans ◯ Yes ◯ No ◯ Not sure

About how much student loan debt do you have? $

21. Medical debt ◯ Yes ◯ No ◯ Not sure

About how much medical debt do you have? $

22. Credit card debt ◯ Yes ◯ No ◯ Not sure

About how much credit card debt do you have? $

23. Overall, has your total debt increased, decreased, or stayed the same compared to 12 months ago?
◯ Increased ◯ Decreased ◯ About the same ◯ Not sure

24. How did you get your most recent income tax refund?
◯ Check by mail ◯ Direct deposit to bank ◯ Direct Express Debit Card ◯ Other ◯ Not sure

25. Did you use any of your most recent income tax refund to purchase Savings Bonds?
◯ Yes ◯ No ◯ Not sure ◯ Did not receive a refund

26. Currently, do you use prepaid or stored value cards?
◯ Yes ◯ No ◯ Not sure

27. Mobile banking allows you to access your bank account, credit card account, or other financial account with a mobile phone. This can be done either by accessing your bank's web page through the web browser on your phone, via text messaging, or by using an application downloaded to your phone.

Have you used mobile banking in the past 12 months?

◯ Yes ◯ No ◯ Not sure

About You

28. Are you currently employed?

◯ Yes, full-time or more ◯ Yes, part-time ◯ No

29. Are you self-employed (file an IRS Schedule C), or are you employed by an employer (receive an annual W-2 Wage statement)?

◯ Self-employed ◯ Employed by an employer

30. Which of the following comes closest to your total monthly take-home income from all sources?

◯ Less than $400
◯ $401-$800
◯ $801-$1,200
◯ $1,201-$1,600
◯ $1,601-$2,000
◯ $2,001-$2,400
◯ $2,401-$2,800
◯ $2,801 or greater

Program Feedback

31. Including the savings match you received, how much money did you save because of your participation in this program? $

32. How much extra of your own money did you choose to save due to the savings match, compared to the amount you would have saved without the match? $

33. Over the past year, how often did you purchase U.S. Savings Bonds through TreasuryDirect.gov?

More than once a month	Once a month	Every few months	One-time purchase only
◯	◯	◯	◯

Other, please specify:

34. When choosing how much money to save, how important was the savings match?

Not at all important	Very unimportant	Neither important nor unimportant	Very important	Extremely important
◯	◯	◯	◯	◯

35. How likely are you to continue to purchase U.S. Savings Bonds on your own after this program?

Very unlikely	Unlikely	Undecided	Likely	Very likely
◯	◯	◯	◯	◯

36. Please share any additional feedback about the program in the space below.

Appendix C. Year 2 Interview Prompt

1. Tell me about your situation right now (work status, type, hours, whether in school and if so what program). How did you get involved in providing childcare?
2. How did you get involved in the Savings Project?
    a. How did you first learn about the program?
    b. Why did you decide to participate?
        i. Did the project appeal to you because it supported your existing saving patterns, or were you interested in starting to save (or increasing savings)? (In other words, did you view the project as rewarding you for what you were already doing, or as an encouragement to save more?)
        ii. Initial barriers to or reluctance in participating?
3. How often did you purchase Savings Bonds over the past year?
    c. Regularly scheduled versus all at once? Automated versus manual purchases?
4. Determining how much to save.
    a. How difficult was it for you to save?
    b. How motivating was the 50% match?
    c. Any instances when you made difficult tradeoffs in order to save and receive the 50% match?
5. What do you think about purchasing Savings Bonds (versus using another savings product)?
    a. How do Savings Bonds compare to other savings options such as bank accounts? Retirement accounts such as 401(k)'s or IRAs?
        i. Access to funds, ease of use and convenience, fees or penalties, interest rates, minimum balances or contributions, other features.
    b. Plan to continue purchasing Savings Bonds after the program? Why or why not?
    c. What support did you need when setting up your TreasuryDirect.gov account?
6. How do you plan to use the Savings Bonds you purchased during the program?
    a. Retirement? As an emergency fund? Something else?
    b. (Especially if second year saver) Have you cashed out any Savings Bonds? For what purpose?
7. How did saving for the program affect your spending and saving patterns, if at all?
    a. Spending less? Saving less in other types of accounts?
8. What are your most important financial goals in the short-term? Long-term?
9. What, if anything, gets in your way of achieving your financial goals?
10. Have you ever tried to figure out how much money you need for retirement? (If yes) What did you do?
11. What do you expect to be the major sources of your retirement income? Social Security, private retirements accounts (tax advantaged plans or not), pension through current or former employer, working part-time, annuities or insurance plans, inheritance, rental income, support from children or grandchildren, support from other family members.
12. How much does your income change from week to week or month to month? What about your expenses?

Appendix D. Additional Survey Responses: Participants and Nonparticipants

Table D1 presents additional survey data for program participants and members of the comparison group. The sample sizes for each group are small, and the groups likely differ from one another. Any differences over time or between the two groups are not statistically significant.

Table D1. Additional Survey Responses for Participants and Nonparticipants

	Participants		Nonparticipants	
Outcomes	Baseline	Follow-up	Baseline	Follow-up
Confidence in ability to achieve a financial goal (1=not at all, 4=very)	3.2	3.5	2.4	2.3
Over the past 3 months, followed a budget or spending plan	60%	75%	63%	50%
Set aside emergency savings to cover 3 months' expenses	21%	53%	22%	33%
Over the past 3 months, spending more than regular income	26%	5%	29%	29%
In the last 3 months, paid a late fee on a loan or bill	20%	10%	14%	43%
In the last 3 months, received a call from a creditor	17%	6%	11%	22%
Compared to 3 months ago, saving more today than before	47%	58%	43%	14%
Self-assessed credit rating (1=very bad, 5=very good)	4.1	4.6	4.1	3.6
Stress about current financial situation (1=none, 5=extreme)	3.2	2.7	3.7	3.4
Self-assessed financial knowledge (1=very low, 7=very high)	4.5	4.8	4.00	4.2
Most recent income tax refund				
Check by mail	0%	5%	0%	-
Direct deposit to bank	84%	84%	100%	-
Other	16%	11%	0%	-
Used mobile banking in the past 12 months	-	61%	-	11%
Use prepaid or stored value cards	-	6%	-	17%

Notes: n=20 participants, n=9 nonparticipants. “Don’t know” responses are excluded. Responses were matched between the baseline and follow-up surveys.