



Building Savings, Ownership, and Financial Well-Being

First- and Third-Year Assets for Independence Program Randomized Evaluation Findings in Context

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April 2020 (updated August 2020)

OPRE Report #2020-30

Building savings is key for individuals and families to protect and improve their financial well-being. Even small amounts of savings can increase financial security; households with a savings cushion of only \$250 to \$749 are less likely to be evicted, miss a housing or utility payment, or receive public benefits after an income shock (McKernan et al. 2016).¹ And savings can help families build additional wealth, making it possible for them to invest in assets such as a home or small business. Many families with low incomes, however, lack savings or good opportunities to save, leaving them financially vulnerable and with limited ability to invest in their futures. To address this disadvantage, a range of policies and programs, including incentivized savings and asset-building programs, seek to support savings, reduce hardship, and build assets for families with low incomes.

This brief summarizes findings from the randomized evaluation of the Assets for Independence (AFI) program—particularly AFI’s short-term (first-year) and medium-term (third-year) impacts. AFI is a federally supported individual development account (IDA) demonstration program authorized under

¹ Additional research supports the importance of emergency savings (Despard et al. 2018; Gjertson 2016; Farrell, Greig, and Yu 2019; Farrell, Bhagat, and Zhao 2018; Sabat and Gallagher 2019). For example, research finds that families need a savings buffer of \$2,467 (roughly four weeks of income for an average low-income household; Sabat and Gallagher 2019) or roughly six weeks of income to weather simultaneous income and expense shocks (Farrell, Greig, and Yu 2019).

the Assets for Independence Act of 1998 and last funded in fiscal year 2016. IDAs help low-income families save by matching their personal savings for specific investments, such as a first home, business capitalization, or higher education and training. The brief contextualizes the evaluation findings with research on other programs and policies that incentivize saving and aim to help families with low incomes build wealth.

The evaluation finds the following:

- In the short term, AFI increased participants' savings.
- In the short and medium terms, AFI participants had fewer hardships (e.g., the number of times they could not pay for housing, utilities, or needed medical care) and used alternative (nonbank) check-cashing services less. Participants also experienced improved financial well-being.
- In the medium term, AFI increased the future-orientation of participants' time preferences.
- In the medium term, AFI did not increase homeownership, business ownership, or postsecondary education or training among the full sample of study participants; however, exploratory subgroup analyses provide suggestive evidence that AFI participation increased homeownership among renters and increased business ownership among non-business owners.

By encouraging families with low incomes to build assets, AFI eased economic hardship and increased asset ownership while giving participants a foundation for long-term upward mobility.

Placing the AFI evaluation's results in the broader context of policies and programs that promote the financial well-being of families with low incomes, we identify the following insights:

- Matched savings programs work to help families with low incomes save.
- IDAs can help people with low incomes acquire assets, such as a home or business, particularly among those who have yet to own such an asset purchase.
- Incentivized savings programs can allow people with low incomes to save without reducing public benefits.
- Incentivized savings programs can help connect people with low incomes to mainstream financial services.

The rest of this brief summarizes the AFI program and its short- and medium-term impacts in the context of other studies on IDAs. We then place AFI's findings within the broader evidence on incentivized savings interventions and other policies and programs that support families with low incomes. The AFI evaluation provides rigorous results that can inform the next stage of incentivized savings programs that benefit people earning low incomes.

Assets for Independence Program and Evaluation

Individual development accounts (IDAs) help families with low incomes save by matching their personal savings held in custodial accounts for specific investments, such as a first home, business, or higher education and training. The Assets for Independence (AFI) program, last funded in fiscal year 2016, is a federally supported IDA grant program authorized under the Assets for Independence Act of 1998. AFI used IDAs, coupled with financial education, to help families with low incomes improve their economic self-sufficiency.

Assets for Independence Program Details and Context

The AFI program is directed by the Office of Community Services, within the Administration for Children and Families at the US Department of Health and Human Services. Federal fiscal year 2016 was the final year of five-year grant awards under the program, as no funds were appropriated for the AFI program for 2017 or 2018. Organizations operating AFI projects with 2016 (or earlier) grants continued the projects for the funded period.

All AFI projects have three key elements:

- **Individual development account:** the personal savings account where the participant makes deposits, and where they withdraw funds for authorized asset purchases or allowed emergency expenses (medical expenses, rent or mortgage payments, or living expenses following job loss).
- **Potential match funds:** funds offered as a direct payment for a participant's asset purchase that match the amount the participant withdraws for the allowable asset purchase (first-home purchase, business capitalization, and postsecondary education or training). These matched dollars are provided at a specified rate, with a maximum savings amount allowed.
- **Assistance for participants in getting the skills, information, and other support to help them make asset purchases:** this usually includes financial education (i.e., instruction in basic financial management), financial coaching (i.e., support in setting and achieving financial goals), asset-specific training, and other supportive services. In determining a participant's eligibility for other federal means-tested benefits, AFI account balances are not counted as assets.

All three elements of AFI aim to promote participant savings. Financial education, training, and coaching provide useful information about budgeting, credit building and repair, and pursuing asset-specific strategies (homebuying, business planning, and educational advancement). The IDA is the financial tool clients can use to build their savings. Potential match funds encourage saving by multiplying participants' deposits when used for allowable asset purchases.

The main hypothesized early effect (i.e., one year after participants enroll) is increased savings, and the main hypothesized medium-term effects (i.e., three years after participants enroll) are increased homeownership, business capitalization, and postsecondary education or training.

Assets for Independence Program Evaluation

The AFI evaluation randomly assigned study participants at two AFI project sites to a treatment group, which could receive AFI services, and a control group, which could not, allowing differences in outcomes between the two groups to be attributed to the AFI program. This evaluation was the first large-scale, multisite study to evaluate the AFI program using a randomized design.

AFI EVALUATION SITES

The two participating AFI evaluation sites were in Albuquerque and Los Angeles: Prosperity Works in Albuquerque—with its partner at Central New Mexico Community College (CNM), the student support department known as CNM Connect—and RISE Financial Pathways in Los Angeles. CNM served AFI participants in a student center that offers academic and financial coaching and connects students to other college and community resources. RISE Financial Pathways is a nonprofit community-based organization in South Central Los Angeles focused on local economic development.

TABLE 1
Major AFI Project Features

	Albuquerque	Los Angeles
Site	Prosperity Works (grantee) and CNM Connect of Central New Mexico Community College (partner)	RISE Financial Pathways, formerly Community Financial Resource Center (grantee)
Geographic area for sample recruitment	Metropolitan Albuquerque, NM, and surrounding vicinity	Los Angeles County, CA
Allowable asset types	First-time home purchase, business capitalization, and postsecondary education or training	First-time home purchase, business capitalization, and postsecondary education or training
Maximum personal savings amount eligible for match	\$1,000	\$1,000 (required savings amount before any matched withdrawal)
Match rate	4:1	2.5:1
Minimum savings period	6 months	6 months
Maximum savings period	24+ months ^a	24 months
Financial education	One-semester CNM credit course (21 classroom hours) or self-paced online option	Multisession on-site classes offered on weekday evenings or Saturdays (10 hours)
Homeownership training provider	Homewise	Several external agencies
Small business training provider	Small Business Development Center at CNM	RISE staff
Postsecondary education training provider	CNM Connect academic coaches (worked to develop an education plan)	RISE staff (reviewed information on financial aid)

^a Staff encouraged participants to save for no more than 24 months (or less if they enrolled later in the enrollment period) to complete saving by the end of the AFI grant supporting this evaluation (October 2015). Participants who needed more time could take it because Prosperity Works won another AFI grant during the evaluation, which could fund these participants' matches.

AFI STUDY PARTICIPANTS

Study participants in both sites were required to meet the AFI program’s eligibility requirements. Key eligibility requirements included that a household must (1) be eligible for Temporary Assistance for Needy Families or (2) have adjusted gross income equal to or less than 200 percent of the federal poverty level or within the income limits of the federal earned income tax credit, and have net worth—excluding their primary residence and one vehicle—not exceeding \$10,000. To enroll in AFI, participants needed to have earned income (or parental earned income in Albuquerque) to make their savings deposits. For the evaluation, participants needed to be at least age 18.

BOX 1

AFI Study Participants

- The majority (61 percent) of study participants were under age 40 at study enrollment.
- Participants were predominantly female, people of color, and unmarried at the time of study enrollment.
- About half of participants had annual household incomes below \$15,000.

How study participants’ characteristics compare with other AFI project participants nationwide speaks to the evaluation’s external validity (i.e., how well the AFI evaluation findings can be generalized to the nationwide AFI population). The study participants (enrolled 2013–14) are similar to other AFI participants who enrolled in FY 2014. Nationwide, AFI participants were mostly younger than 40, female, people of color, and unmarried at enrollment.² But there are differences: a larger share of study participants were Hispanic (not surprising, given geographical locations), and study participants were more likely to have completed some college coursework (a result of the Albuquerque site’s community college setting) compared with the AFI participants enrolled nationwide.

EVALUATION METHODOLOGY

Using the AFI evaluation’s experimental design, we estimate early (first-year) and medium-term (third-year) AFI program impacts as the difference between the outcome (e.g., savings, homeownership) for the treatment group and the corresponding outcome for the control group.³

Assets for Independence Program Impacts in the Context of IDA Research

We synthesize first-year (Mills et al. 2016) and third-year (Ratcliffe et al. 2019) experimental evidence from the AFI randomized evaluation. The AFI evaluation builds on previous nonexperimental analyses evaluating AFI IDAs (McKernan et al. 2011; Mills, Lam et al. 2008) and earlier IDA evidence from the American Dream Demonstration, implemented from 1999 to 2003 in one experimental site (Tulsa,

² Office of Community Services’s (OCS) AFI grantee data from fiscal year 2014.

³ Results reported show regression-adjusted impact estimates, which control for measurable differences between the treatment and control groups at study enrollment, including baseline measures of the outcome variable.

Oklahoma) and several nonexperimental sites. A growing body of literature looks to IDAs both in the US and other developed countries to increase higher education (Azzolini et al. 2018).

AFI INCREASED SAVINGS IN THE SHORT TERM AND ASSETS IN THE MEDIUM TERM

The main hypothesized effects of the AFI program are that participants increase savings in the short term (first year, Mills et al. 2016) and asset purchases in the medium term (third year, Ratcliffe et al. 2019). In the first year, the IDA account, offer of a match, and financial education helped participants increase their savings—the first step they must take before they can use match funds to invest in allowable asset purchases (figure 1). By the third year, AFI helped participants who did not yet own assets translate their increased savings into asset ownership (figure 2).

Savings in the First Year

- AFI increased the share of participants with savings by 9 percent (7.4 percentage points).
- AFI increased participant savings by \$657 at the median (participants saved \$881 before receiving match funds compared with \$224 for nonparticipants) and \$799 at the mean.

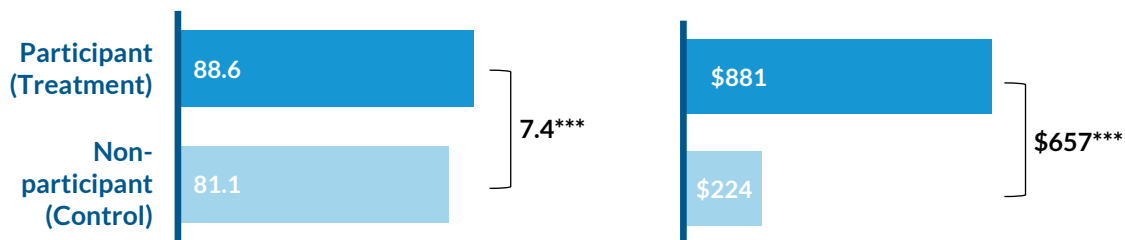
FIGURE 1

AFI Increased Savings in the Short Term

AFI's impact on savings at one-year follow-up, as measured by liquid assets

Share of participants with savings

Median savings (not including match)



Source: Mills et al. 2016. AFI first-year follow-up and baseline surveys.

Notes: Liquid assets do not include matched funds and are measured at the first-year follow-up survey (roughly 12 months after study enrollment). We present regression-adjusted impact estimates. The difference between the shares may not equal the impact estimate because of rounding. Sample sizes for specific outcomes may vary because of missing values. The maximum sample consists of 622 respondents who completed the baseline and follow-up surveys and did not have missing data for key variables.

* $p < 0.10$; *** $p < 0.01$

Because Mills and colleagues (2016) examined all personal savings (liquid assets including savings, checking, money market, and retirement accounts plus stocks and bonds, but excluding matched funds) in their evaluation of AFI's early impacts, the results show that participants did not simply shift savings from other accounts into their IDAs but instead created new savings.

AFI and other IDA programs demonstrate that families with low incomes save when provided a savings account, financial incentives, and financial education (Mills, Lam et al. 2008; Mills et al. 2016; Schreiner and Sherraden 2007a; Stegman and Faris 2005). But the few studies that examine net worth,

or a worker's assets minus their debts, do not find that IDA program participation increases net worth (Mills, Gale et al. 2008; Mills, Lam et al. 2008; Schreiner and Sherraden 2007b).⁴

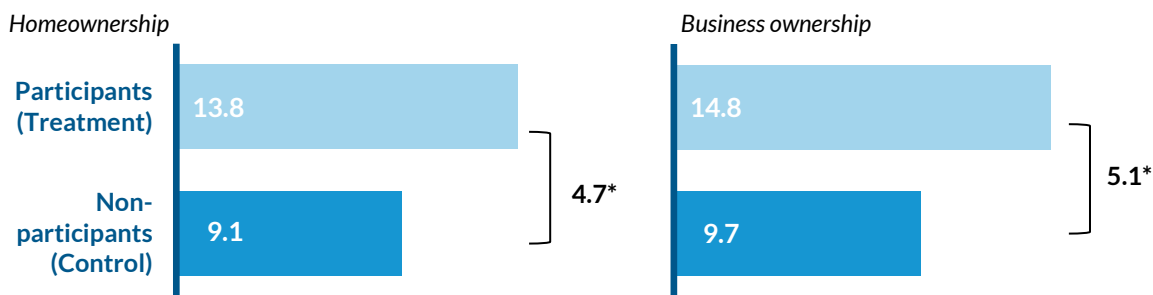
Asset Ownership in the Third Year

In the medium term, enough time has passed for AFI participants to save, receive matched funds, and complete their allowable asset purchases, so AFI participation is hypothesized to increase homeownership (among renters), business ownership (among non-business owners), and postsecondary education or training (Ratcliffe et al. 2019).

Among all study participants, AFI had no statistically significant effect on homeownership, business ownership, or postsecondary education or training in the medium term (Ratcliffe et al. 2019). But exploratory subgroup analyses provide suggestive evidence that AFI increased homeownership among renters at study enrollment and increased business ownership among non-business owners at study enrollment (figure 2).

- AFI increased the homeownership rate 52 percent (4.7 percentage points) among renters at study enrollment.
- AFI increased the business ownership rate by 53 percent (5.1 percentage points) among non-business owners at study enrollment.

FIGURE 2
AFI Increased Homeownership among Renters and Business Ownership among Non-Business Owners in the Medium Term
AFI's impact on homeownership and business ownership at the three-year follow-up



Source: Ratcliffe et al. 2019. AFI third-year follow-up and baseline surveys.

Notes: Home and business ownership is measured at the third-year follow-up survey (roughly 36 months after study enrollment). We present regression-adjusted impact estimates. Sample sizes for specific outcomes may vary because of missing values. The maximum sample consists of 621 respondents who completed the baseline and third-year follow-up surveys and did not have missing data for key variables.

* $p < 0.1$.

⁴ Net worth is the sum of nonretirement financial assets, retirement savings, and real assets (such as vehicles, property, and business assets) minus liabilities or debts; which include mortgages, car loans, home equity loans, business loans, credit card balances, student loans, medical bills, past-due bills (phone, utility, in-collections), and other installment loans.

The AFI evaluation three-year impact findings are consistent with fourth-year impact findings from the American Dream Demonstration experimental site in Tulsa, Oklahoma. The American Dream Demonstration evaluation did not find statistically significant increases in asset ownership among the full sample of study participants but did find statistically significant increases in homeownership among renters (Grinstein-Weiss et al. 2008). Unlike the AFI three-year impact findings, the American Dream Demonstration evaluation did not find statistically significant increases in business ownership among non-business owners (Grinstein-Weiss et al. 2012).

AFI REDUCED HARDSHIPS EXPERIENCED IN BOTH THE SHORT AND MEDIUM TERM

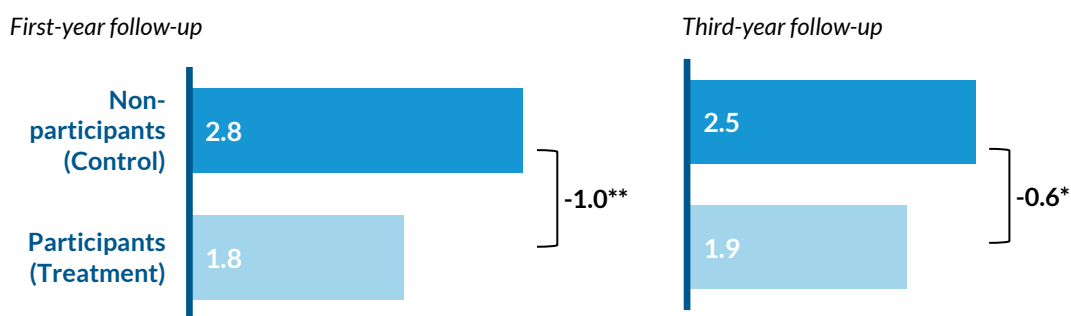
AFI is hypothesized to reduce material hardship by improving participants' financial well-being (Ratcliffe et al. 2019). AFI resulted in sustained reductions in material hardship, both one and three years after program enrollment (figure 3). These findings suggest that AFI participation helped families better meet their daily financial needs in addition to promoting asset ownership.

- AFI led to a 34 percent reduction (1 less hardship) in the total number of hardships experienced in the first year and a 25 percent reduction (0.6 hardships) in the number of times participants could not pay for housing, utilities, or needed medical care in the third year.

FIGURE 3

AFI Reduced Number of Hardships Experienced in the Short and Medium Terms

AFI's impact on number of hardships at the first- and third-year follow-ups



Source: Mills et al. 2016; Ratcliffe et al. 2019. AFI first-year follow-up, third-year follow-up, and baseline surveys.

Notes: Material hardship is measured in the 6 months before the first-year follow-up survey (roughly 6 to 12 months after study enrollment) and again 6 months before the third-year follow-up survey (30 to 36 months after study enrollment). We present regression-adjusted impact estimates. Sample sizes for specific outcomes may vary because of missing values. The maximum sample consists of 622 respondents who completed the baseline and follow-up surveys at the first-year follow-up and 621 at the third-year follow-up and did not have missing data for key variables.

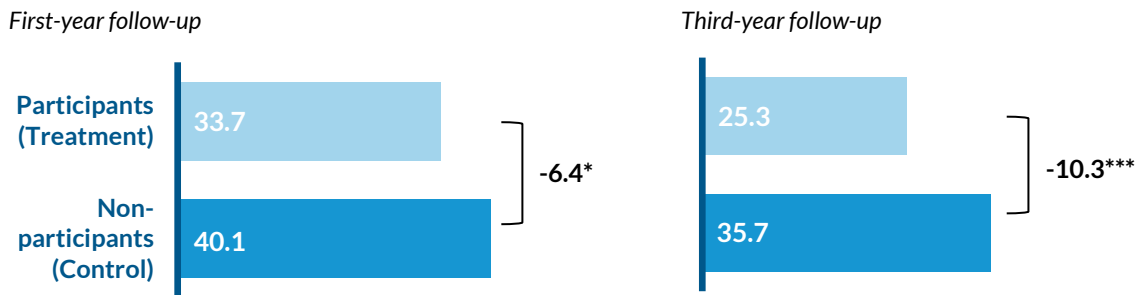
** $p < 0.05$; * $p < 0.1$.

AFI reduced the share of participants who experienced medical hardship where they could not afford to see a doctor or dentist or purchase prescription drugs in both the short and medium term.

- AFI led to a 16 percent (6.4 percentage points) and 29 percent (10.3 percentage points) reduction in the likelihood of experiencing a medical hardship in the first- and third-year follow-ups, respectively (figure 4).

- AFI also led to a 41 percent reduction (0.5 hardships) in the number of medical hardships (i.e., could not afford to see a doctor or dentist or purchase prescription drugs) experienced at the third-year follow-up.

FIGURE 4
AFI Reduced Share with Medical Hardship in the Short and Medium Terms
AFI's impact on share with medical hardship at the first- and third-year follow-ups



Source: Mills et al. 2016; Ratcliffe et al. 2019. AFI first-year follow-up, third-year follow-up, and baseline surveys.

Notes: Medical hardship is measured in the 6 months before the first-year follow-up survey (roughly 6 to 12 months after study enrollment) and again in the 6 months before the third-year follow-up survey (30 to 36 months after study enrollment). We present regression-adjusted impact estimates. The difference between the shares may not equal the impact estimate because of rounding. Sample sizes for specific outcomes may vary because of missing values. The maximum sample consists of 622 respondents who completed the baseline and follow-up surveys at the first-year follow-up and 621 at the third-year follow-up and did not have missing data for key variables.

*** $p < 0.01$; * $p < 0.1$.

AFI also reduced the number of utility hardships participants experienced where they could not make a utility payment or had their gas, electricity, or phone turned off in the short term (figure 5).

- AFI led to a 38 percent reduction (0.4 hardships) in the number of utility hardships (i.e., the number of times participants were unable to pay bills or had services shut off) in the first-year follow-up.

FIGURE 5

AFI Reduced Number of Utility Hardships Experienced in the Short Term

AFI's impact on number of utility hardships at the first-year follow-up



Source: Mills et al. 2016. AFI first-year follow-up and baseline surveys.

Notes: Utility hardship is measured in the 6 months before the first-year follow-up survey (roughly 6 to 12 months after study enrollment). We present regression-adjusted impact estimates. Sample sizes for specific outcomes may vary because of missing values. The maximum sample consists of 622 respondents who completed the baseline and follow-up surveys and did not have missing data for key variables.

*** $p < 0.01$.

The first-year (6 to 12 months after study enrollment) and third-year (30 to 36 months after study enrollment) findings show that AFI reduced material hardship in three of nine hardship measures (number of hardships experienced, share with medical hardship, number of utility hardships).

AFI's reduction of material hardship and improved financial well-being for participants, in both the short and medium terms, bring important new insights to IDA research. Neither the short- or medium-term American Dream Demonstration evaluations nor the national AFI nonexperimental impact evaluation examined participants' material hardship. The experimental American Dream Demonstration evaluation examines material hardship only 10 years after participation and finds no visible effect (Grinstein-Weiss et al. 2012).

Behavioral economics research on economic scarcity and cognitive depletion (Mullainathan and Shafir 2013) shows that financial stress and worry tend to drain families' cognitive resources during urgent economic need, when families can least afford to make poor choices. And reduced material hardship and improved financial well-being are important in the context of toxic stress and its impact on children. Toxic stress in early childhood can lead to permanent changes in brain structure and function and "create a weak foundation for later learning, behavior, and health" (Shonkoff et al. 2012, e236).⁵ Our findings that AFI reduced material hardship and improved financial well-being for participants become even more salient in these contexts.

⁵ Toxic stress is a stress response that "can result from strong, frequent, or prolonged activation of the body's stress response systems in the absence of the buffering protection of a supportive, adult relationship" (Shonkoff et al. 2012, e236).

AFI REDUCED NONBANK CHECK-CASHING USE IN THE SHORT AND MEDIUM TERMS

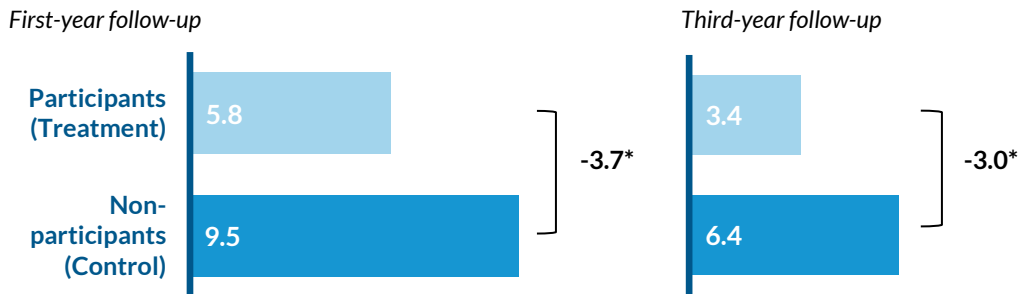
AFI is hypothesized to reduce participants' use of alternative financial services, such as nonbank check-cashing stores, by providing them with a savings account, which connects them to the financial mainstream. AFI resulted in sustained reductions in participants' use of alternative (nonbank) check-cashing services over the short and medium terms (figure 6).

- AFI led to a 39 percent (3.7 percentage point) decline in participants' use of alternative (nonbank) check-cashing services in the first-year follow-up and a 47 percent (3.0 percentage point) decline in the third-year follow-up.

FIGURE 6

AFI Reduced Use of Alternative Financial Services in the Short and Medium Terms

AFI's impact on the use of nonbank check-cashing services at the first- and third-year follow-ups



Source: Mills et al. 2016; Ratcliffe et al. 2019. AFI first-year follow-up, third-year follow-up, and baseline surveys.

Notes: Use of nonbank check-cashing services is measured in the 12 months before the first-year follow-up survey (roughly the year after study enrollment) and again in the 12 months before the third-year follow-up survey (24 to 36 months after study enrollment). We present regression-adjusted impact estimates. Sample sizes for specific outcomes may vary because of missing values. The maximum sample consists of 622 respondents who completed the baseline and follow-up surveys at the first-year follow-up and 621 at the third-year follow-up and did not have missing data for key variables.

* $p < 0.1$.

By connecting people to a bank or credit union, incentivized savings programs help people with low incomes stay out of the alternative financial services market. Because alternative financial services products tend to be more expensive, no longer using them can have long-term benefits.

AFI IMPROVED PERCEIVED FINANCIAL WELL-BEING IN THE SHORT AND MEDIUM TERMS

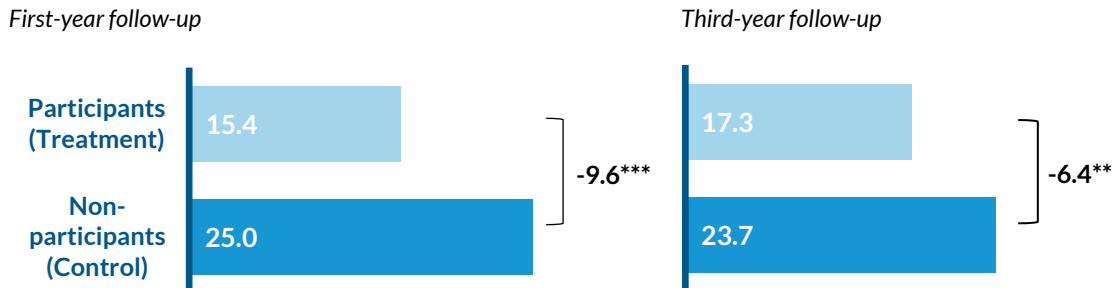
Through improved financial stability, AFI participation is hypothesized to improve personal financial outlook. AFI improved participant's financial outlook on three of four financial well-being outcomes in the short term and one of four financial well-being outcomes in the medium term (Mills et al. 2016; Ratcliffe et al. 2019). For example,

- AFI led to a 38 percent (9.6 percentage point) decline in the share of participants who reported that their financial situation worsened at the first-year follow-up and a 27 percent (6.4 percentage points) decline at the third-year follow-up.

FIGURE 7

AFI Participants Were Less Likely to Report Being Worse Off Financially in the Short and Medium Terms

AFI's impact on perceived financial well-being at the first- and third-year follow-ups



Source: Mills et al. 2016; Ratcliffe et al. 2019. AFI first-year follow-up, third-year follow-up, and baseline surveys.

Notes: Perceived financial well-being is measured at the first-year follow-up survey (roughly 12 months after study enrollment) and again in the 12 months before the third-year follow-up survey (24 to 36 months after study enrollment). We present regression-adjusted impact estimates. Sample sizes for specific outcomes may vary because of missing values. The maximum sample consists of 622 respondents who completed the baseline and follow-up surveys at the first-year follow-up and 621 at the third-year follow-up and did not have missing data for key variables.

** p < 0.05.

AFI MADE PARTICIPANTS MORE FUTURE ORIENTED IN THE MEDIUM TERM

Through increasing savings and building assets, AFI is hypothesized to help participants become less present oriented and more future oriented. By the third-year follow-up, AFI shifted people's time orientation so they are more willing to pay a given cost today rather than a higher cost later (i.e., they become more future oriented; Ratcliffe et al. 2019).

- AFI led to a 35 percent (4.8 percentage point) decrease in the share of people willing to accept an interest rate of 25 percent or more on a major purchase (e.g., refrigerator) in the medium term (figure 8).

By shifting this behavior, AFI can improve participants' long-term financial well-being, as high-interest-rate products can lead to financial difficulties later.

FIGURE 8

AFI Reduced the Interest Rate Participants Were Willing to Pay for a Major Purchase in the Medium Term

AFI's impact on willingness to accept a 25 percent interest rate on a major purchase at the three-year follow-up



Source: Ratcliffe et al. 2019. AFI third-year follow-up and baseline surveys.

Notes: Willingness to accept an interest rate of 25 percent or more is measured at the third-year follow-up survey (roughly 36 months after study enrollment). We present regression-adjusted impact estimates. Sample sizes for specific outcomes may vary because of missing values. The maximum sample consists of 621 respondents who completed the baseline and follow-up surveys and did not have missing data for key variables.

* $p < 0.1$.

AFI HAS NO SIGNIFICANT EFFECT ON EDUCATION AND TRAINING IN THE MEDIUM TERM

In the medium term, AFI is hypothesized to increase participants' homeownership (among renters), business ownership (among non-business owners), and postsecondary education or training, as enough time has passed for participants to save, receive matched funds, and complete their allowable asset purchases. Ratcliffe and colleagues (2019) do not find any effects of AFI participation on education or training outcomes at the three-year follow-up, even among those without a college degree at study enrollment. One possible explanation is that AFI IDAs could be used for only certain postsecondary education or training needs: tuition, fees, and books and supplies bought directly from an eligible educational institution. A second possibility is that educational interventions should start earlier than age 18, as done in Arizona's Earn-to-Learn program and Italy's ACHAB/Percorsi matched savings program, which began working with students in high school. For example, the randomized controlled evaluation of the ACHAB/Percorsi program found increased postsecondary education participation, measured with college enrollment (i.e., the likelihood of enrolling in college right after high school), and persistence (i.e., the likelihood of still being enrolled in the second year) (Azzolini et al. 2018).

Another possible explanation for no visible effect of AFI on education and training outcomes after three years is that impacts on education and training may take longer to materialize. Compare the AFI findings, for example, with those from the American Dream Demonstration, which found a significant positive impact on education enrollment at a 10-year follow-up (Grinstein-Weiss et al. 2012). It finds that treatment group members with a baseline education level of high school or less are likely to gain "some college" compared with the control group. This suggests that the AFI program could increase education in the long term (10 years), but not the medium term, which this evaluation measures.

SUMMARY

AFI increases savings in the short term and increases homeownership among renters and business ownership among non-business owners in the medium term, all while reducing economic hardship and use of alternative (nonbank) check-cashing services in both the short and medium terms. These findings show that savings and wealth-building opportunities can promote economic well-being.

The AFI randomized evaluation provides rigorous results that can inform the next stage of incentivized savings programs benefiting workers with low incomes. By encouraging families with low incomes to build assets, AFI eased economic hardship and increased asset ownership while providing a foundation for long-term upward mobility.

AFI in the Context of Other Policies and Programs

In addition to comparing the AFI experimental evaluation findings with the research on other IDA programs, the AFI results can also be interpreted in the context of research and experimentation with a broader set of related policies and programs. This includes other incentivized savings programs that support asset building or emergency savings. It also includes other policies or programs that may assist families with low incomes in achieving similar goals by other means, such as job-training programs or financial aid that directly invests in education and training. Considering the AFI results together with research on other programs gives more context for interpreting the AFI findings, identifies more lessons from AFI for the broader field, and suggests promising directions for future innovation and research.

AFI and Other Incentivized Savings Programs

One goal of IDA programs is to help working families with low incomes save and build assets they can use to achieve economic self-sufficiency. Although IDAs offer matching contributions to savings specifically to support asset purchases, they belong to a broader group of programs and policies that aim to support saving among families with low incomes. These programs incentivize savings in various ways, including matched funds, seeded deposits, tax preferences, and lotteries, for a range of goals, including saving for emergencies, retirement, and asset purchases. Incentivized savings programs for families with low incomes can include the following:

- *Children's Savings Accounts (CSAs)*: structurally similar to IDAs, CSAs support saving but are targeted toward funding children's postsecondary education.
- *The Saver's Credit*: the Retirement Savings Contributions Credit, or Saver's Credit, provides a nonrefundable tax credit to filers with low incomes to support retirement savings.
- *Tax-time savings incentives*: recent programs have tested incentives for tax-time savings among families with low incomes to encourage saving from income tax refunds.
- *Employer-based savings programs*: employer-based savings products operate in the workplace to help employees with low incomes save for emergencies.

- *Prize-linked savings accounts:* prize-linked savings accounts offer participants an opportunity to win prizes instead of paying standard interest rates.

ASSET-BUILDING PROGRAMS

Children's Savings Accounts

Similar in form to IDAs, Children's Savings Accounts (CSAs) incentivize saving and asset building for educational investments for children (a variation of CSAs, child development accounts (CDAs) allow a broader set of approved purchases, such as a first home or small business capitalization). Although CSAs vary in design, most are savings accounts established in a child's name with an initial "seed" deposit from a sponsor—such as a community organization or local government—that provide matches for additional savings. CSAs have become popular asset-building policies at the state and local levels, with current programs including San Francisco's Kindergarten to College (K2C) program, Maine's Harold Alfond College Challenge, and the Mississippi College Savings Account Initiative.

Much of the evidence on CSAs comes from the Saving for Education, Entrepreneurship, and Downpayment for Oklahoma Kids (SEED OK) demonstration. Participants received a *state 529* plan account with a seed deposit of \$1,000, a \$100 incentive to open an *individual 529* account, and, for the first few years of the program, a progressive savings match for contributions to the individual account. Early results from a random-assignment evaluation of SEED OK are promising (Beverly, Clancy, and Sherraden 2016). Roughly seven years after the program started, participants' seeded, state-owned accounts had grown to an average value of nearly \$1,900. Average savings in the individual accounts was \$261 among participants and \$59 among nonparticipants. **Consistent with findings from AFI and other IDA evaluations, CSAs provide more evidence that matched savings programs are effective in helping families with low incomes save.**

To date, little evidence exists on CSAs' effects on educational attainment, mostly because of the long follow-up period required to observe any effects. However, **by helping families build savings early in children's educational careers, CSAs may be a promising approach to improving educational attainment through asset building.** Having a CSA account has also been hypothesized to raise educational expectations or inform educational decisions and planning and improve eventual educational outcomes. Some evidence suggests that CSAs may, for example, raise parental expectations of their children's educational attainment (Kim et al. 2015).

The Saver's Credit

Although matched savings programs such as IDAs and CSAs are promising approaches for building assets among households with low incomes, the largest and longest-standing federal subsidies for individual saving and asset building come through the tax code. For example, many forms of retirement savings contributions are excluded from taxable income, and they are estimated to represent more than \$125 billion in annual tax expenditures (Joint Committee on Taxation 2018). These tax benefits are often limited for households with lower incomes, however, because such families face lower marginal tax rates.

An important exception is the Retirement Savings Contributions Credit, known as the Saver's Credit. The Saver's Credit provides tax filers with lower incomes a nonrefundable tax credit of up to \$1,000 for individual contributions to IRAs and similar retirement savings vehicles. Because of the credit's limited size and low utilization—only 5 percent of all tax filers claim the credit at an average value of \$175—its overall effect on asset building for qualifying individuals is estimated to be relatively low (Brown and John 2017; Harris et al. 2014). People may not use the Saver's Credit in part because a tax credit might not be a strong incentive to save (Duflo et al. 2007). One field experiment found that an equivalent savings match led to higher take-up rates and contributions than a tax credit (Saez 2009).

AFI's positive effects on savings can be interpreted as more evidence suggesting that matched savings are an effective incentive to save.

EMERGENCY SAVINGS PROGRAMS

Tax-Time Savings

Other incentivized savings programs focus on helping families with low incomes build emergency savings. One such approach includes tax-time savings initiatives, which provide savings matches or other incentives to tax filers who choose to direct some or all of their tax refund into a savings account. These efforts leverage what may be a “savable moment” created by receiving income tax refunds, which can be sizeable for many tax filers with low incomes, in part because of the Earned Income Tax Credit (EITC) (Tufano, Schneider, and Beverly 2005).

Recent evidence on tax-time savings comes from a random-assignment evaluation of SaveUSA, a tax-time savings account offered through Volunteer Income Tax Assistance (VITA) sites. SaveUSA provided a 50 percent match of up to \$1,000 in savings if participants saved for one year. Most SaveUSA program participants opened an account and received a savings match, and after 18 months participants had increased their emergency savings by \$512 on average (Azurdia et al. 2014). The SaveUSA evaluation found no effects on net worth (assets minus nonhousing debts) or financial hardship (Azurdia and Freedman 2016). These results show that **matched savings are effective at helping families with low incomes save for emergencies, in addition to asset building, as suggested by AFI.**

More recent tax-time savings proposals focus on the opportunities to build savings created by the EITC specifically, which, like the AFI program, is targeted to earners with low incomes. The “Rainy Day EITC” proposal, for example, would defer a portion of EITC refunds into savings, where after six months participants would receive a 50 percent savings match (Halpern-Meeekin et al. 2018).

A related set of tax-time savings demonstrations draws on behavioral economics to encourage saving from tax refunds using nonfinancial incentives, or nudges. The Refund to Savings experiments, for example, have tested the effectiveness of including, for example, short messages in online tax-filing software to encourage savings and have found positive effects on the share of filers with low incomes who save and on the amount they save from their refund (Roll et al. 2018). While the effects are typically modest in size—among those who save, effects on savings deposits average about \$50—

because they do not require financial incentives, such interventions can be a relatively inexpensive way to encourage saving.

Employer-Based Savings Initiatives

A newer area of innovation in incentivized savings programs is employer-based emergency savings programs, which aim to build on the successful model of employer-sponsored retirement savings plans. Emergency savings programs are now offered by a small but growing number of employers, and recent years have brought new financial products for offering and matching employee savings developed by financial technology firms, along with new proposals for workplace-based emergency savings programs put forward by academic researchers (Beshears et al. 2019). Because these programs are new, there is still little empirical evidence of their effectiveness. **Findings from AFI showing that matched savings help working adults with low incomes build savings suggest the promise of testing matched savings opportunities in new contexts like the workplace**, and rigorous experimentation with new approaches would build on AFI's evidence base.

Prize-Linked Savings Accounts

Prize-linked savings accounts, which offer participants the opportunity to win prizes when they make deposits, are a recent innovation in incentivized savings in the United States. More commonly offered and evaluated internationally, prize-linked savings are grounded in research from behavioral economics suggesting that lotteries may be a particularly effective incentive. One recent example is the Save to Win program, which offers savers an entry into prize drawings of \$25 to \$5,000 for each deposit they make of \$25 or more (up to a specified limit). An analysis of the Michigan Save to Win program found that over a period of about one year, 11,600 accounts were opened. Among surveyed account holders, 56 percent reported that they did not previously save regularly (Kearney et al 2010). Other research suggests that prize-linked savings participants may fund savings by decreasing lottery expenditures and other spending instead of shifting money from other savings (Atalay et al. 2013). Innovations like prize-linked savings highlight the value of continued experimentation with types of savings incentives in asset-building programs, and **as the field begins to build rigorous evidence on prize-linked savings, results from AFI can provide important lessons and points of reference.**

AFI and Other Financial Well-Being Programs for Working Families with Low Incomes

Because the objective of IDAs is to help earners with low incomes build savings they can invest in assets—to purchase homes, invest in businesses, and obtain educational opportunities—it can be informative to consider the AFI evaluation results in the context of research findings on programs that support these same investments in other ways. These other programs include the following:

- *Homebuying assistance, small business assistance, and education and training programs*: unlike incentivized savings programs, these programs subsidize homebuying, business ownership, and education directly.

- *Safety net programs*, including the *EITC*: safety net programs support families, including their ability to make investments, but provide various incentives to build assets.
- *Financial capability interventions*: financial education, financial coaching, and financial counseling interventions aim to improve the financial knowledge and capability of people.

SUPPORTS FOR HOMEBUYING, BUSINESS CAPITALIZATION, AND EDUCATION AND TRAINING

Homebuying Assistance

A set of policies and programs at the federal, state, and local levels provide families with low incomes with funded borrowing opportunities, down-payment assistance, and other supports for homebuying, often targeted at first-time homebuyers. For example, federal programs such as the HOME Investment Partnerships Program and Community Development Block Grants (CDBG) provide funds to state and local governments for housing affordability services, including down-payment assistance to help families with low incomes cover closing costs. Given the little savings held by many families with low incomes, research suggests that low levels of down-payment assistance, up to \$1,000, increase the likelihood that renters with low incomes will purchase a home (Herbert and Tsen 2005). **This evidence is consistent with AFI results finding that increases in savings of a roughly similar amount are associated with increased homeownership among renters.**

Housing counseling programs seek to boost homeownership by providing homebuyers with guidance on homebuying and helping evaluate housing affordability, establishing loan eligibility, and identifying homebuying assistance programs. One study of HUD’s housing counseling program found that 18 months after seeking assistance, 35 percent of participants had become homeowners (Turnham and Jefferson 2012). Evidence that mortgage counseling may reduce mortgage delinquencies also suggests positive effects of housing counseling (Mayer and Temkin 2013). **These results reinforce that the financial education and matched savings pieces of AFI and other IDA programs together can promote homebuying.**

Small Business Assistance

Among programs and policies that support business capitalization, few focus on the needs of earners with low incomes. Exceptions include programs such as Microenterprise Assistance (MEA) Programs, which are supported through Community Development Block Grants (CDBG) and provide small-dollar loans to small businesses. Similarly, the Small Business Administration (SBA) microloan program targets lending to small businesses that include owners with low incomes. A key difference between these programs and IDAs is that small business assistance programs provide access to credit while IDAs build savings. Limited rigorous evidence exists on the effectiveness of small business assistance programs in supporting business formation or outcomes for people with low incomes, in general. Existing research on MEA programs finds little evidence of positive impacts (Cooney and Shanks 2010; Sanders 2002). In contrast, the rigorous evidence in the AFI evaluation found that **the combination of matched savings, financial education, and other AFI program elements—after gaining access to an IDA—are associated with increased business ownership among non-business owners.**

Education and Training Programs

Direct supports for postsecondary education or job training for workers with low incomes come from various sources. One of the largest is federal Pell grants, which are targeted to students with low incomes without a four-year degree. Pell grants provide recipients with up to \$6,195 a year that can be used toward tuition and fees as well as books, supplies, and other expenses. Research finds that additional Pell grant aid is effective at promoting college completion and increasing later earnings (Denning, Marx, and Turner 2019). **Unlike Pell grants and other sources of college aid, AFI narrowly targeted working adults and covered a more limited set of education expenses. AFI did not show impacts on educational attainment in the medium term.**

Another source of funding for educational investments for economically disadvantaged adults is job training provided through the public workforce system and funded under the Workforce Investment Opportunity Act (WIOA), or provided through the employment and training components of Temporary Assistance for Needy Families (TANF) or the Supplemental Nutrition Assistance Program (SNAP). **These job-training programs, like AFI, target working adults with low incomes. Research finds that job-training programs targeting economically disadvantaged adults often significantly increase earnings** (Card, Kluve, and Weber 2017). However, a recent evaluation of Workforce Investment Act (the predecessor to WIOA) training programs for adults and dislocated workers found inconclusive results (Fortson et al. in 2017).

SAFETY NET PROGRAMS

The broader set of safety net and income support programs, such as TANF, SNAP, and the EITC, provide general financial support for families with low incomes. To the extent that these programs provide families with additional income or relax financial constraints, they may improve these families' ability to make investments in, for example, postsecondary education or training. For example, recent research finds that the EITC increases college enrollment for high school seniors in families with low incomes who receive the credit (Manoli and Turner 2018).

However, other features of safety net programs might prevent asset building. Asset limits in means-tested programs, which restrict program eligibility to individuals with low levels of savings or other assets, may discourage saving among families with low incomes. Relaxing asset limits in SNAP has been found to increase the likelihood that households with low incomes have a checking or savings account and the likelihood that they have at least \$500 in their bank accounts, but have little effect on overall wealth or asset ownership (Ratcliffe et al. 2016). Means-tested programs that consider income from savings and investments can also potentially discourage saving and asset building among families with low incomes. For example, EITC benefits phase out more quickly for filers with interest and investment income, which creates a disincentive for EITC-eligible individuals and families to save in interest-bearing accounts (Weber 2016). This body of research suggests that **AFI's exclusion of IDA savings from counting against asset limits for determining means-tested program eligibility may have been important for achieving and sustaining the program's effects on savings and material hardship and suggestive effects on asset building.**

FINANCIAL LITERACY INTERVENTIONS

A final set of programs and policies seeks to improve the economic self-sufficiency of people with low incomes by enhancing their financial literacy (Lusardi and Mitchell 2014). Financial literacy interventions take a number of forms: *financial education* includes workshops or classes delivered in schools or as part of other social service programs. Evidence on these programs is mixed, often finding little effect on economic outcomes for participants with low incomes (Collins 2013; Fernandes, Lynch, and Netemeyer 2014; Kaiser and Menkhoff 2017). However, recent evidence suggests that financial education requirements in high schools are associated with some positive outcomes such as higher credit scores (Brown et al. 2016, Urban et al. 2018, Harvey 2019). *Financial counseling* interventions are typically one-on-one sessions focused on helping participants achieve particular goals, such as homeownership. The available evidence on financial counseling is promising, with one study finding a decrease in past-due debt, though there have been relatively few rigorous evaluations of these programs (Wiedrich et al. 2014). *Financial coaching* interventions are also one-on-one sessions but with a focus on achieving broader or longer-term financial goals. The newer evidence on financial coaching has been promising, with a recent evaluation finding increases in savings (Theodos, Stacy, and Daniels 2018).

One newer theme from the financial literacy literature is the importance of considering the context in which these interventions are provided for understanding their impact, or lack of impact, on financial outcomes. This includes considering the setting and timing of interventions and the opportunities for participants to act on financial knowledge, such as through access to high-quality financial products (Sherraden 2013). **The positive effects of AFI, which combined IDAs with access to financial education, on financial well-being are consistent with newer evidence that pairing financial literacy with financial products may be more valuable than providing either in isolation**, although the AFI evaluation did not directly test this hypothesis.

Conclusion and Discussion

The AFI randomized evaluation found that AFI increases participants' savings in the short term and homeownership among renters and business ownership among non-business owners in the medium term. It also reduces economic hardship and use of alternative (nonbank) check-cashing services in both the short and medium terms. These findings show that matched savings programs such as IDAs can effectively support savings and wealth-building among families with low incomes and promote economic well-being. Considered in the context of the broader evidence base on incentivized savings programs, along with other programs that support economic opportunity for families with low incomes, the AFI evaluation results both support a few important themes for the asset-building field and highlight areas for innovation, experimentation, and additional research.

Themes from the Assets for Independence Evaluation Findings in Context

- **Matched savings programs work to help families with low incomes save.** AFI's effectiveness in increasing savings adds rigorous evidence to a growing body of research that generally finds matched savings programs are effective at helping families with low incomes save. This holds true across asset-building programs that offer matched savings, such as AFI, other IDAs, or CSAs, as well as emergency savings programs, such as tax-time savings programs that offer to match savings from income tax refunds. And newer evidence suggests that matched savings might be relatively effective at encouraging savings compared with other forms of incentives more common in current policy, such as tax credits.
- **IDAs can help people with low incomes build assets, particularly among those who have not made an asset purchase.** The AFI results provide additional, suggestive evidence that IDAs not only help families with low incomes save, but also that their savings translate into asset ownership. Exploratory subgroup analyses provide suggestive evidence that AFI participation increased homeownership among renters and increased business ownership among non-business owners. These findings are consistent with other research on IDAs, such as rigorous evaluations of the American Dream Demonstration IDA program, which also found increases in homeownership among renters (Grinstein-Weiss et al. 2008). AFI's suggestive evidence on homeownership and business ownership compare favorably with available evidence on other forms of homebuying assistance and small business assistance. Finally, while AFI did not show positive effects on education outcomes after three years, the American Dream Demonstration showed positive impacts on enrollment after 10 years (Grinstein-Weiss et al. 2012).
- **Incentivized savings programs can allow people with low incomes to save without reducing their public benefits.** An important feature of AFI was the stipulation that there be no reduction in public benefits from saving in an AFI IDA and that savings in AFI IDAs were disregarded when determining means-tested program eligibility (see SEC. 415. No Reduction in Benefits). Other research on asset limits in means-tested programs finds evidence that they may disincentivize saving for individuals and families with low incomes (Ratcliffe et al. 2016).
- **Incentivized savings programs can help connect people with low incomes to mainstream financial services.** By connecting people to a bank or credit union—so they cash checks at a bank rather than a nonbank check-cashing outlet—incentivized savings programs help people with low incomes stay out of the alternative financial services market. Because alternative financial services products tend to be more expensive, no longer using them can have long-term benefits.

Promising Areas for Innovation, Experimentation, and Research Highlighted by the Assets for Independence Evaluation

- **Consider more systematically how IDAs fit with other programs and interventions intended to support similar investments and outcomes for families with low incomes.** For example, the

AFI evaluation finds no visible effects on education or training outcomes, at least in the medium term, even among those without a college degree at study enrollment. At the same time, Pell grants make community colleges affordable for many students with low incomes; some safety net programs appear to promote college attendance; and job-training programs are often effective at raising skills and earnings for economically disadvantaged workers. Similarly, many other programs support homeownership and small business formation. Additional experimentation and research focused on understanding how asset-building programs interact with, complement, and compare with other programs would build valuable knowledge for policymakers and practitioners seeking to provide the most effective and efficient support for families with low incomes.

- **Build rigorous evidence on newer innovations in incentivizing and supporting saving for families with low incomes.** As the asset-building field continues to evolve, innovations in incentivized savings point to new directions for experimentation and evidence building that draw from and expand on AFI's findings. These include programs that build saving incentives into new contexts, such as the workplace, when workers with low incomes might have greater capacity to save or be more receptive to savings incentives. New forms of savings incentives such as lotteries build on international experiences and research from behavioral economics. But the experiences with and evidence on these approaches remains limited. AFI has advanced the literature on supporting saving for families with low incomes, but further research is needed to understand new incentives and what may be most effective in this area.
- **Understand the relationships between asset-building programs and emergency savings programs and their effects on financial well-being and hardship.** AFI reduced economic hardship for participants, but the AFI findings do not identify what led to this effect—whether it was increased public benefit receipt, relying on unrestricted or emergency savings, or participants depositing less into their AFI IDAs in some months than their intended monthly savings target to meet current needs. Understanding how AFI reduced economic hardship could be important for future program design and for understanding the roles of asset-building programs and emergency savings programs in supporting the financial well-being and economic stability of families with low incomes.
- **Learn how to make matched savings work on a larger scale.** The overall body of evidence on savings programs suggests that matched savings programs work to help families with low incomes save. However, matched savings programs such as IDAs and CSAs remain small—in terms of both the total number of participants and the overall level of assistance they provide—relative to other forms of savings incentive policies, such as tax incentives. An important direction for future research is to investigate how matched savings might work, and what its effects might be, if implemented on a larger scale. For example, because the features of a matched savings program that could realistically be offered on a national scale are likely to differ in key ways from the AFI model, an important direction for research might be to determine the effects of the AFI program's various elements. This would generate evidence on any differences in program impacts that might be expected using larger-scale program models

and on the nature and magnitude of any tradeoffs associated with different ways of serving more families.

The AFI evaluation provides results that can inform the next stage of incentivized savings programs to benefit working people with low incomes. Findings from other incentivized savings and asset-building policies and programs suggest that AFI's findings align with other outcomes achieved for earners with low incomes and that AFI's model holds promise in features of program design including matched savings, removal of savings penalties, and financial education paired with savings products. However, emerging research suggests that more could be done to effectively build on and extend knowledge and practice.

Authors' Note

This brief was updated August 4, 2020. We updated the description of our findings to clarify that our exploratory analysis *suggests* that, in the medium term, AFI increased homeownership among renters and increased business ownership among non-business owners.

References

- Atalay, Kadir, Fayzan Bakhtiar, Stephen L. Cheung, and Robert Slonim. 2013. "Savings and Prize-Linked Savings Accounts." Economics Working Paper 2013-12. Sydney: University of Sydney.
- Azurdia, Gilda, and Stephen Freedman. 2016. *Encouraging Nonretirement Savings at Tax Time: Final Impact Findings from the SaveUSA Evaluation*. New York: MDRC.
- Azurdia, Gilda, Stephen Freedman, Gayle Hamilton, and Caroline Schultz. 2014. *Encouraging Low- and Moderate-Income Tax Filers to Save: Implementation and Interim Impact Findings from the SaveUSA Evaluation*. New York: MDRC.
- Azzolini, Davide, Alberto Martini, Barbara Romano, and Loris Vergolini. 2018. "Testing a Social Innovation in Financial Aid for Low-Income Students: Experimental Evidence from Italy." IZA Discussion Paper, No. 11625.
- Beshears, John, James J. Choi, J. Mark Iwry, David Laibson, and Brigitte C. Madrian. 2019. "Building Emergency Savings through Employer-Sponsored Rainy-Day Savings Accounts." In *Tax Policy and the Economy*, Volume 34, edited by Robert Moffitt, NBER.
- Beverly, Sondra, Margaret Clancy, and Michael Sherraden. 2016. *Universal accounts at birth: Results from SEED for Oklahoma Kids*. CSD Research Summary No. 16-07. St. Louis, MO: Washington University, Center for Social Development.
- Brown, Meta, John Grigsby, Wilbert Van Der Klaauw, Jaya Wen, and Basit Zafar. 2016. "Financial Education and the Debt Behavior of the Young." *The Review of Financial Studies* 29 (9): 2490–522.
- Brown, Jennifer Erin, and David C. John. 2017. "Improving the Saver's Credit for Low-and Moderate-Income Workers." AARP Public Policy Institute *Insight on the Issues* 132.
- Card, David, Jochen Kluge, and Andrea Weber. 2017. "What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations." *Journal of the European Economic Association* 16 (3): 894–931.
- Collins, J. Michael. 2013. The Impacts of Mandatory Financial Education: Evidence from a Field Study. *Journal of Economic Behavior and Organization* 95(0): 146 –158.
- Cooney, Kate, and Trina R. Williams Shanks. 2010. "New Approaches to Old Problems: Market-Based Strategies for Poverty Alleviation." *Social Service Review* 84 (1): 29–55.

- Denning, Jeffrey T., Benjamin M. Marx, and Lesley J. Turner. 2019. "ProPelled: The Effects of Grants on Graduation, Earnings, and Welfare." *American Economic Journal: Applied Economics* 11 (3): 193–224.
- Despard, Mathieu R., Shenyang Guo, Michal Grinstein-Weiss, Blair Russell, Jane E. Oliphant, and Anna deRuyter. 2018. "The Mediating Role of Assets in Explaining Hardship Risk among Households Experiencing Financial Shocks." *Social Work Research* 42(3): 147–158.
- Duflo, Esther, William Gale, Jeffrey Liebman, Peter Orszag, and Emmanuel Saez. 2007. "Savings Incentives for Low- and Moderate-Income Families in the United States: Why Is the Saver's Credit Not More Effective?" *Journal of the European Economic Association* 5 (2–3): 647–61.
- Farrell, Diana, Fiona Greig, and Chenxi Yu. 2019. *Weathering Volatility 2.0: A Monthly Stress Test to Guide Savings*. New York: JPMorgan Chase Institute.
- Farrell, Diana, Kanav Bhagat, and Chen Zhao. 2018. "Falling Behind: Bank Data on the Role of Income and Savings in Mortgage Default." New York: JPMorgan Chase Institute.
- Fernandes, Daniel, John G. Lynch Jr., and Richard G. Netemeyer. 2014. "Financial Literacy, Financial Education, and Downstream Financial Behaviors." *Management Science* 60 (8).
- Fortson, Kenneth, Dana Rotz, Paul Burkander, Annalisa Mastro, Peter Schochet, Linda Rosenberg, Sheena McConnell, and Ronald D'Amico. 2017. "Providing Public Workforce Services to Job Seekers: 30-Month Impact Findings on the WIA Adult and Dislocated Worker Programs." Washington, DC: Mathematica Policy Research.
- Gjertson, Leah. 2016. "Emergency Saving and Household Hardship." *Journal of Family and Economic Issues* 37(1): 1–17.
- Grinstein-Weiss, Michal, Jung-Sook Lee, Johanna K. P. Greeson, Chang-Keun Han, Yeong H. Yeo, and Kate Irish. 2008. "Fostering Low-Income Homeownership through Individual Development Accounts: A Longitudinal, Randomized Experiment." *Housing Policy Debate* 19 (4): 711–39.
- Grinstein-Weiss, Michal, Michael Sherraden, William M. Rohe, William Gale, Mark Schreiner, and Clinton Key. 2012. *Long-Term Follow-Up of Individual Development Accounts: Evidence from the ADD Experiment*. Chapel Hill: University of North Carolina.
- Halpern-Meehin, Sarah, Sara Sternberg Greene, Ezra Levin, and Kathryn Edin. 2018. "The Rainy Day Earned Income Tax Credit: A Reform to Boost Financial Security by Helping Low-Wage Workers Build Emergency Savings." *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 4 (2): 161–76.
- Harris, Benjamin H., C. Eugene Steuerle, Signe-Mary McKernan, Caleb Quakenbush, and Caroline Ratcliffe. 2014. "Tax Subsidies for Asset Development: An Overview and Distributional Analysis." Washington, DC: Urban Institute.
- Harvey, Melody. 2019. "Impact of Financial Education Mandates on Younger Consumers' Use of Alternative Financial Services." *Journal of Consumer Affairs* 53 (3).
- Herbert, Christopher E., and Winnie Tsen. 2005. "The Potential of Downpayment Assistance for Increasing Homeownership among Minority and Low-Income Households." Washington, DC: US Department of Housing and Urban Development (HUD).
- Joint Committee on Taxation. 2018. *Estimates of Federal Tax Expenditures for Fiscal Years 2018-2022*. Report JCX-81-18. Washington DC: Joint Committee on Taxation.
- Kaiser, Tim, and Lukas Menkhoff. 2017. "Does Financial Education Impact Financial Literacy and Financial Behavior, and If So, When?" Working Paper WPS8161. Washington, DC: World Bank Group.
- Kearney, Melissa Schettini, Peter Tufano, Jonathan Guryan, and Erik Hurst. 2010. *Making Savers Winners: An Overview of Prize-Linked Savings Products*. NBER Report Number w16433. Cambridge, MA: National Bureau of Economic Research.
- Kim, Youngmi, Michael Sherraden, Jin Huang, and Margaret Clancy. 2015. "Child Development Accounts and Parental Educational Expectations for Young Children: Early Evidence from a Statewide Social Experiment." *Social Service Review*, 89(1): 99–137.

- Lusardi, Annamaria, and Olivia S. Mitchell. 2014. "The Economic Importance of Financial Literacy: Theory and Evidence." *Journal of Economic Literature* 52 (1): 5–44.
- Manoli, Day, and Nicolas Turner. 2018. "Cash on Hand and College Enrollment: Evidence from Population Tax Data and the Earned Income Tax Credit." *American Economic Journal: Economic Policy*, 10 (2): 242–71.
- Mayer, Neil S., and Kenneth Temkin. 2013. "Pre-Purchase Counseling Impacts on Mortgage Performance: Empirical Analysis of NeighborWorks® America's Experience." Albany, CA: Neil Mayer & Associates.
- McKernan, Signe-Mary, Ida Rademacher, Caroline Ratcliffe, Kasey Wiedrich, and Megan Gallagher. 2011. "Weathering the Storm: How Have IDA Homebuyers Fared in the Foreclosure Crisis?" *Housing Policy Debate* 21 (4): 605–25.
- McKernan, Signe-Mary, Caroline Ratcliffe, Breno Braga, and Emma Kalish. 2016. "[Thriving Residents, Thriving Cities: Family Financial Security Matters for Cities](#)." Washington, DC: Urban Institute.
- Mills, Gregory, William G. Gale, Rhiannon Patterson, Gary V. Engelhardt, Michael D. Ericksen, and Emil Apostolov. 2008. "Effects of Individual Development Accounts on Asset Purchases and Savings Behavior: Evidence from a Controlled Experiment." *Journal of Public Economics* 92 (5–6): 1509–30.
- Mills, Gregory, Ken Lam, Donna DeMarco, Christopher Rodger, and Bulbul Kaul. 2008. *Assets for Independence Act Evaluation, Impact Study: Final Report*. Cambridge, MA: Abt Associates.
- Mills, Gregory, Signe-Mary McKernan, Caroline Ratcliffe, Sara Edelstein, Michael Pergamit, and Breno Braga. 2019. "First-Year Impacts on Savings and Economic Well-Being from the Assets for Independence Program Randomized Evaluation." *Journal of Consumer Affairs Special Issue* (2019): 1–21.
- Mills, Gregory, Signe-Mary McKernan, Caroline Ratcliffe, Sara Edelstein, Michael Pergamit, Breno Braga, Heather Hahn, and Sam Elkin. 2016. *Building Savings for Success*. OPRE Report #2016-59. Washington, DC: Urban Institute.
- Mills, Gregory, Rhiannon Patterson, Larry Orr, and Donna DeMarco. 2004. *Evaluation of the American Dream Demonstration: Final Evaluation Report*. Cambridge, MA: Abt Associates.
- Mullainathan, Sendhil, and Eldar Shafir. 2013. *Scarcity: Why Having Too Little Means So Much*. New York: Macmillan.
- Ratcliffe, Caroline, Signe-Mary McKernan, Gregory B. Mills, Mike Pergamit, and Breno Braga. 2019. *From Savings to Ownership: Third-Year Impacts from the Assets for Independence Program Randomized Evaluation*. OPRE Report #209-106. Washington, DC: Urban Institute.
- Ratcliffe, Caroline, Signe-Mary McKernan, Laura Wheaton, Emma Kalish, Catherine Ruggles, Sara Armstrong, and Christina Oberlin. 2016. "[Asset Limits, SNAP Participation, and Financial Stability](#)." Washington, DC: Urban Institute.
- Roll, Stephen, Genevieve Davison, Michal Grinstein-Weiss, Mathieu R. Despard, and Sam Bufe. 2018. *Refund to Savings 2015–2016: Field Experiments to Promote Tax-Time Saving in Low- and Moderate-Income Households*. Research Report 18–28. St. Louis: Washington University in St. Louis, Center for Social Development.
- Sabat, Jorge and Emily Gallagher. 2019. "Rules of Thumb in Household Savings Decisions: Estimation Using Threshold Regression." SSRN.
- Saez, Emmanuel. 2009. "[Details Matter: The Impact of Presentation and Information on the Take-up of Financial Incentives for Retirement Saving](#)." *American Economic Journal: Economic Policy* 1 (1): 204–28.
- Sanders, Cynthia K. 2002. "The Impact of Microenterprise Assistance Programs: A Comparative Study of Program Participants, Nonparticipants, and Other Low-Wage Workers." *The Social Service Review* 76:321–340.
- Schreiner, Mark, and Michael Sherraden. 2007a. *Can the Poor Save? Saving and Asset Building in Individual Development Accounts*. New Brunswick, NJ: Transaction Publishers.
- . 2007b. *Detecting Effects on Net Worth Is Nettlesome Work: Evidence from a Randomized Experiment with Individual Development Accounts in Tulsa*. Washington, DC: Association for Public Policy Analysis and Management.

- Sherraden, Margaret S. 2013. "Building Blocks of Financial Capability." In *Financial Capability and Asset Building: Research, Education, Policy, and Practice*, edited by Julie Birkenmaier, Margaret Sherraden, and Jami Curley, 1–43. New York: Oxford University Press.
- Shonkoff, Jack P., Andrew S. Garner, Benjamin S. Siegel, Mary I. Dobbins, Marian F. Earls, Laura McGuinn, John Pascoe, David L. Wood, Committee on Psychosocial Aspects of Child and Family Health, and Committee on Early Childhood, Adoption, and Dependent Care. 2012. "The lifelong effects of early childhood adversity and toxic stress." *Pediatrics* 129(1): e232–46.
- Stegman, Michael A., and Robert Faris. 2005. "The Impact of IDA Programs on Family Savings and Asset Holdings." In *Inclusion in the American Dream: Assets, Poverty, and Public Policy*, edited by Michael Sherraden, 216–37. New York: Oxford University Press.
- Theodos, Brett, Christina Plerhoples Stacy, and Rebecca Daniels. 2018. "Client-Led Coaching: A Random Assignment Evaluation of the Impacts of Financial Coaching Programs." *Journal of Economic Behavior & Organization* 155: 140–58.
- Tufano, Peter, Daniel Schneider, and Sondra Beverly. 2005. *The Retirement Security Project: Leveraging Tax Refunds to Encourage Saving*. Boston: Commonwealth.
- Turnham, Jennifer, and Anna Jefferson. 2012. "Pre-Purchase Counseling Outcome Study: Research Brief; Housing Counseling Outcome Evaluation." Washington, DC: HUD.
- Urban, Carly, Maximilian Schmeiser, J. Michael Collins, and Alexandra Brown. 2018. "The Effects of High School Personal Financial Education Policies on Financial Behavior." *Economics of Education Review*.
- Weber, Caroline. 2016. "Does the Earned Income Tax Credit Reduce Saving by Low-Income Households?" *National Tax Journal* 69 (1): 41–76.
- Wiedrich, Kasey, Nathaniel Gons, J. Michael Collins, and Anita Drever. 2014. *Financial Counseling & Access for the Financially Vulnerable: Findings from the Assessing Financial Capability Outcomes (AFCO) Adult Pilot*. Washington, DC: CFED.

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Acknowledgments

This brief was funded by the Office of Community Services (contract HHSP233201500064I) and overseen by the Office of Planning, Research, and Evaluation within the Administration for Children and Families (ACF) and US Department of Health and Human Services (HHS). We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine the research findings or insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at urban.org/fundingprinciples.

This brief reflects the contributions and support of many people. The staff at RTI International collected the survey data crucial to this evaluation and have been long-term partners: Suzanne Triplett, Craig Owen, Melissa Hobbs, and Anupa Bir. Sam Elkin at MEF Associates gathered and analyzed important project data from Albuquerque. Heather Hahn led program implementation and data-collection efforts. We are also grateful to Tiffany McCormack, Gretchen Lehman, and Sharon Henderson of ACF, as well as Erica Zielewski, formerly of ACF, for their essential support of the evaluation. We are especially grateful to the individuals participating in the Assets for Independence (AFI) evaluation as members of our research sample, who have allowed us to learn from their experiences. The brief also would not have been possible without the work and dedication of our organizational partners, in particular the nonprofit agencies that administered AFI individual development account projects in Albuquerque and Los Angeles. In particular, we thank Monica Cordova, Sarah Stinnett, and Ona Porter of Prosperity Works (and Sharon Henderson before her joining ACF); AnnLyn Hall, Chioma Heim, and Eric-Christopher Garcia of Central New Mexico Community College; and Forescee Hogan-Rowles, Veronica Lopez, Hassan Nicolas, Lisette Rojo, and Donnicus Cook of RISE Financial Pathways. At the Urban Institute, we thank Caleb Quakenbush for managing this complicated project, Emma Kalish and Andrew Karas for excellent assistance processing and analyzing survey data for the first-year impact evaluation, Hannah Hassani for excellent assistance processing and analyzing the survey data for the third-year impact evaluation, and Alex Carther for research assistance on this brief.