

Working Paper

Saving for Post-Secondary Education in Individual Development Accounts

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Abstract

Low-income people have less access to opportunities for post-secondary education, and the welfare reform in 1996 further limited access for welfare recipients. Since welfare reform, there has been an increasing interest in strategies meant to enhance the well-being of low-income people through education and the development of human capital. In this study, we examine how low-income people saved for post-secondary education in Individual Development Accounts (IDAs) in a nationwide demonstration. IDAs are structured accounts that provide matches for savings used for home purchase, microenterprise, retirement savings, and post-secondary education. We examine how savings outcomes differed between participants who intended to use their savings for post-secondary education and other participants.

Results indicate that low-income people can save and build assets for post-secondary education in IDAs. Furthermore, saving for post-secondary education moderates some relationships between savings outcomes and other characteristics of participants and of IDA programs. Finally, we discuss implications for policy and social-work practice for using IDAs to promote the development of human capital by low-income people.

Both theory and empirical evidence suggest that education has a wide variety of positive economic and social effects on individuals, families and society as a whole (Becker, 1993; Beverly & Sherraden, 1997). Furthermore, the returns to education in the labor market have increased since the early 1970s (Mishel, Bernstein & Schmitt, 1997; Mishel & Burtless, 1995). Studies have found that the rise in earnings inequality during the past two decades is closely related to differences in educational attainment (Amott, 1994; Bernhardt & Dresser, 2002). In the meantime, despite the fact that both men and women in general have made steady progress in their levels of education over the years, low-income people and other disadvantaged groups have faced decreasing access to opportunities for post-secondary education (Mortenson, 2000).

Among the many factors related to low access of low-income people to post-secondary education, inadequate financial resources is one of the most important ones (Boldt, 2000; Gittell, Gross, & Holdaway, 1993). In particular, the increasing costs of college and the cuts in need-based financial aid have made post-secondary education less affordable for many low-income people (Mortenson, 2000; Sherraden, 1991). The welfare reform of 1996 has focused on work requirements and has further limited access to post-secondary education for welfare recipients. Low-income people may often be forced to make short-term decisions about investment in their own human capital, and it is important for social policy to help them save and invest for their future education.

Individual Development Accounts (IDAs) is an approach to help low-income people save and accumulate financial assets for post-secondary education. IDAs are targeted to low-income people and provide incentives and an institutional structure conducive to saving (Schreiner, *et al.*, 2001). IDAs provide participants with matches for savings used for home purchase, microenterprise, retirement savings, and post-secondary education. This paper investigates the following questions: Do IDA participants who intend to use their savings for post-secondary education have different savings outcomes than other IDA participants? And if so, what demographic factors and program-design characteristics are associated with the differences? Answers to these questions may provide lessons that will help guide modifications to IDA policy and program design in ways that might improve savings outcomes for those intending to use their IDA for post-secondary education.

Background

Access to Post-Secondary Education for Low-Income People

The rising costs of college and the decline of social investment in higher education since the early 1980s have made post-secondary education less affordable for low-income households. According to Mortenson (2000), in the 1990s, both the federal government and some states have moved from need-based financial aid to merit-based aid. In addition, the federal government has aggressively expanded educational loan programs in the past two decades, with more of the costs of these programs borne by borrowers instead of taxpayers. These factors made college less affordable for low-income people, especially considering that college aid previously had greater impact for the poor than for the non-poor (Dynarski, 2002). Related to these changes, gaps in educational attainment by income level started to widen in the 1980s and 1990s. For example, by the mid-1990s, a student from a family in the top income quartile was 10 to 12 times more likely

than a student from the bottom quartile to have completed a bachelor's degree by age 24, but in 1970 and 1980, the numbers were 6 and 4 (Mortenson, 2000).

Beyond these changes to college costs and the structure of financial aid, welfare reform made post-secondary education—especially four-year college degrees—more difficult for low-income people. The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) replaced Aid to Families with Dependent Children (AFDC) with a Temporary Assistance for Needy Families (TANF) block grant (U.S. Congress, 1996). This law transformed the 60-year-old welfare system into a work-based system which requires states to place increasing percentages of adults in work or work-related activities. Major changes under the PRWORA include work requirements, time limits on receipt of cash assistance, and greater control of program rules by states.

TANF's work-participation mandates have shifted the focus of welfare-to-work programs away from education and training toward immediate job placement. The new system of welfare provision includes a number of regulations that discourage welfare recipients from pursuing post-secondary education. First, TANF is designed to place recipients directly into jobs. States are penalized unless they put a large share of their adult recipients into work programs. This makes states less likely to provide education or meaningful job training. Second, job programs under TANF are narrowly defined, and most post-secondary education and job training do not count as "work". For example, recipients enrolled in post-secondary education for longer than a 12-month period are, for the most part, excluded from a state's calculation of its work-participation rates (Greenberg, Strawn, & Plimpton, 1999). Third, recipients are limited to 60 months of benefits (whether or not consecutive), and states can specify shorter time limits. Poor women with children and limited resources will need more than four years to finish a Bachelor's degree (Mathur, 1998; Naples, 1998). These factors can greatly reduce welfare recipients' access to post-secondary education, especially 4-year college degrees. Jacobs and Winslow (2003) show that in the last few years, the college attendance of welfare recipients has decreased.

The "quick labor-force attachment model" assumes that those who take low-paying or part-time jobs will eventually move up to higher-paying and full-time jobs (Pavetti & Acs, 2001). While welfare reform has decreased welfare caseloads, research has consistently found that those who leave TANF often have unstable jobs and face precarious financial circumstances (Anderson & Gryzlak, 2002; Johnson & Corcoran, 2003; Loprest, 2001). At the same time, studies have consistently found that welfare recipients who had college degrees earned more than those without college degrees (Karier, 1998; Mathur, 2004). This research has sparked an increasing interest in human-capital development strategies to enhance long-term self-sufficiency among welfare recipients (Strawn, 2004). Individual Development Accounts are one approach.

Asset-based Theory, IDAs, and Post-Secondary Education

Asset-based welfare theory was proposed by Sherraden (1991) and highlights the importance of assets rather than income. In this perspective, assets bring security, and maybe more importantly, assets may stimulate and facilitate the development of human capital. Consistent with the notion of social investment in developmentalism (Midgley, 2003; Sen, 1999), asset-based welfare theory emphasizes opportunities to build assets strengthen human capacities.

Based on this theory, IDAs were designed to help low-income people build assets for long-term development, including post-secondary education (Sherraden, 1988; 1991). Deposits are made in IDAs by low-income participants. Others could also make deposits, perhaps related to milestones such as completing a year of schooling or graduating from high school. Withdrawals for post-secondary education would be matched, with higher match rates for poorer participants. In contrast to the current emphasis on loans and debt to pay for college, IDAs would promote a system of savings and assets.

At the state level, asset building and IDAs are already an important policy theme. For example, PRWORA allows states to set up IDA programs with TANF funds and to exclude IDAs balances as countable assets for the purpose of qualifying for benefits. As of this writing, 22 states include post-secondary education as a matchable use of their IDAs (Edwards & Gunn, 2002). IDA programs outside the United States have focused on post-secondary education (Boshara & Sherraden, 2004). For example, Canada has embarked on an asset-building demonstration (called “Learn\$ave”) that provides matches for post-secondary education and microenterprise. In Western Europe, national Individual Learning Accounts (ILAs) resemble IDAs for post-secondary education. Participants in the Saving Gateway, a pilot asset-building program in the United Kingdom, indicated that education and training were the only restrictions on matched withdrawals that they would find acceptable (Kempson, McKay, & Collard, 2003). In sum, matched savings for post-secondary education a new policy theme that is being tested both in the United States and elsewhere.

Purpose of the Study

Can low-income people save for post-secondary education in IDAs? How do their savings outcomes differ from those of participants who are saving for other purposes such as home ownership or microenterprise? Given the rapid development of IDA programs, these are important questions. This study addresses these questions through an analysis of data from the American Dream Demonstration (ADD), a national IDA project. As far as we know, this is the first quantitative research on how low-income people save for post-secondary education in a structured, matched savings program.

Data and Methods

ADD Programs

ADD was a national demonstration of IDAs for low-income people. The 14 IDA programs in ADD were run from 1997–2001 by 13 not-for-profit host organizations (one host had two programs) which include community development organizations, social-service agencies, credit unions, and housing organizations. A consortium of private foundations provided funding. All programs in ADD provided matches for home purchase, microenterprises, and post-secondary education, and some programs also provided matches for job training, home repair, or retirement savings. Match rates ranged from 1:1 to 7:1, with the most common rate being 2:1.

The savings data are unusually accurate, as they come directly from the monthly passbook savings-account records of the depository institutions.

Participants

As of December 31, 2001, ADD had 2,353 participants. A *participant* is defined as an enrollee with at least one account statement, whether or not he or she later dropped out (Schreiner, Clancy & Sherraden, 2002). Important characteristics of ADD participants are presented in Table 1. Most participants were female (80 percent), and nearly half were African-American (47 percent). Almost half were never-married (49 percent). About 58 percent had attended some college or had some type of college degree, and 82 percent were employed (full-time or part-time). Compared with the general low-income population (Schreiner *et al.*, 2001), ADD participants were more educated and more likely to be employed. On the other hand, compared with the general low-income population, a higher proportion of ADD participants were women, African-American, or never-married. These comparisons suggest that ADD participants tended to be somewhat disadvantaged members of the “working poor”.

Measurements

The dependent variable in this study, Average Monthly Net Deposits (AMND), is defined as matchable deposits plus interest minus unmatched withdrawals, divided by the number of months of participation. AMND measures net deposits but also controls for the length of time that a participant has saved. All else constant, greater AMND implies greater saving and asset accumulation in IDAs.

The independent variables include important program-related factors (also known as “institutional” factors) and participant characteristics. Program factors include the match rate, match cap, financial education, and whether participants used direct deposit into their IDAs. Participant characteristics include demographic information (gender, age, marital status, race/ethnicity, number of children, and number of adults), education and employment status, household income, bank-account ownership, home ownership, and receipt of AFDC/TANF. The regression also includes a yes/no variable that indicates whether a given participant was an “education saver” who made a matched withdrawal for post-secondary education or who declared at enrollment that he or she intended to make such a matched withdrawal. There are two major reasons that we include participants who have not made matched withdrawals as “education savers”. First, the time window for the data does not catch participants who made a matched withdrawal after the end of the “savings period”. This group includes a large share of intended “education savers”. Second, further analyses indicate that there are no significant differences between “intended education savers” and “actual education savers” in terms of their demographic and socioeconomic characteristics. Similar yes/no indicator variables are also included to mark participants who declared an intention to save for home purchase, home repair, microenterprise, retirement saving, or job training. Finally, the regression model includes interaction terms between the indicator for “education savers” and all the other independent variables.

Analysis

Multiple regression was used to examine how Average Monthly Net Deposits in IDAs might differ between “education savers” and others in ADD. AMND was regressed on program factors, participant characteristics, and interactions between the indicator for “education savers” and all other independent variables. After list-wise deletion of cases with missing values, the regression sample encompassed 1,979 cases. This model simultaneously estimates how the savings outcome

is associated with program and participant factors, with being an “education saver”, and how being an “education saver” moderates the associations between AMND and other program and participant characteristics. Specifically, the coefficient on the (non-interacted) indicator for “education savers” is an estimate of the link between characteristics that are omitted from the regression that are associated with both “education savers” and AMND. The interaction effects provide estimates of how being an “education saver” moderated the associations between AMND and program and participant characteristics. Overall, the model intends to examine both *whether* “education savers” are different from other savers and, if they are different, *why*.

Researchers often attempt to assess moderating or interaction effects indirectly through subgroup analysis (Coulton & Chow, 1992). The “sub-group” approach runs two regressions, one with only “education savers” and one with all others. The “interaction” model used here is to be preferred over the “sub-group” approach, mostly because there is no rigorous way to compare coefficients between two different regressions because the sample sizes and error terms differ (Coulton & Chow, 1992; Koeske, 1992). The coefficients across the regressions might look similar or different, but there is no straightforward way to test whether the apparent different/similarities are statistically significant. With the “interaction” model used here, in contrast, the p-value on a given coefficient of the interaction term immediately and transparently indicates whether being an “education saver” moderates that characteristic, and an F test for all the interaction terms as a group (along with the stand-alone “education saver” indicator) can be used to see whether “education savers” differ overall from other participants.

Results

Sample Characteristics

There were 377 “education savers” in ADD. Of these, 40 percent had made matched withdrawals as of the cut-off date of the data, accounting for 21 percent of all the ADD participants who had made matched withdrawals at that point. Table 1 compares the characteristics of “education savers” and other participants. Compared with others, “education savers” were younger, more likely to be never-married, and had fewer children at home. They were also less likely to be females and less likely to be African-American. “Education savers” also had less income, were less likely to be working full-time, and were less likely to receive welfare. Overall, these features are consistent with the fact that a larger share (22%) of “education savers” were already students when they opened their IDAs than other savers (6%).

Regression Analysis of Savings Outcomes

The mean value of AMND of “education savers” was \$19.80 (mean AMND for others was \$18.40). Table 2 displays the results from the regression analysis on AMND. The model as a whole was statistically significant ($p \leq 0.01$) and explained about 22 percent of the variance in the dependent variable.

Effects of program and participant factors. Three of the four program factors were related to AMND. Participants who had higher match caps and those who used direct deposit saved more. Hours of financial education was also positively linked with AMND. Higher match rates, however, were negatively associated with AMND. Specifically, participants with match rates 4:1 to 7:1 saved less than those who had match rates ranging from 1:1 to 3:1. Schreiner (2004) finds

similar results, consistent with IDA participants being “target savers” for whom a higher match rate allows reaching a given asset-accumulation target with less saving.

Four demographic characteristics of participants were related to AMND: age, gender, race/ethnicity, and number of adults. Female participants saved more than male participants. Older participants and those having more adults in households had higher AMND. Other factors in the regression constant, AMND was higher for Caucasians than for African Americans.

Among participants’ socioeconomic characteristics, IDA savings were higher for those who attended some college or who had a degree. Also, participants with higher household monthly incomes saved more. This association, however, was weak; a \$1 increase in monthly income was associated with about \$0.003 more AMND. Home owners and bank-account owners also saved more than renters or the unbanked.

Savings for post-secondary education. Variables related to “education savers” (the stand-alone indicator and the interaction terms) explained about 2 percent of the variance in AMND. As a group, the variables related to “education savers” were statistically significant ($p \leq 0.05$), suggesting that savings outcomes were indeed different for “educational savers”.

What factors were related to the differences? Table 3 indicates that being an “education saver” moderated the associations of several program and participant factors on AMND. Among program factors, the interaction with hours of education was positive and statistically significant. While an additional hour of financial education was linked with \$0.49 more AMND for any participant, regardless of whether they were an “education saver”, an additional hour was associated with an additional \$0.71 for “education savers”. Apparently, “education savers” derived greater benefits from financial education than did others. Thus, an additional hour of financial education was associated with \$1.20 (\$0.49 plus \$0.71) more AMND for “education savers” but only \$0.49 more AMND for others.

The interaction of education savers and match rates was also positive and statistically significant. The education savers with match rate of 3:1 saved much more than those with match rates between 4:1 and 7:1. Perhaps “education savers” are more likely than others to be “target savers” for whom higher matches rates are associated with dampened savings.

Among participant demographic factors, savings for post-secondary education moderated the association of gender with AMND. While females in ADD on average saved \$2.56 more than males, female “education savers” saved \$9.05 less than female “non-education savers” and \$6.49 (\$9.05 – \$2.56) less than male participants. Thus, the association of gender with savings flips for “education savers”.

Similarly, although married participants on the whole in ADD had higher AMND than not-married participants (p-value of 0.30), married “education savers” saved \$11.88 less than married “non-education savers” and \$10.02 (\$11.08 – 1.86) less than non-married participants. For whatever reason, married participants and female participants who planned to use their IDAs for post-secondary education saved much less than others.

Turning to the interactions with participant socioeconomic factors, home owners who were “education savers” saved \$7.89 more than home owners who were not “education savers” and \$11.61 (\$7.89 + \$3.72) more than renters. It appears that home ownership promotes saving, especially for post-secondary education. Perhaps unsurprisingly, students who were “education savers” saved \$10.14 more than did students with different asset-accumulation goals. Perhaps the immediate saliency of the use of IDAs helped students to save for post-secondary education. Or perhaps students shifted existing savings or financial aid into IDAs to take advantage of the match. In any case, it is clear that, among “education savers”, students saved more than non-students.

Discussion and Implications

Discussion

We underscore several findings. First, being an “education saver” seems to strengthen the associations of some program factors with savings performance. For example, “education savers” seemed to benefit more from financial education than did others, perhaps because a higher percentage of education savers were students. Being a student might signal a greater motivation to learn and perhaps also better learning skills inasmuch as students are used to classroom learning and homework. The association between higher match rates and lower IDA savings was also stronger among “education savers”. The ADD data cannot reveal the reason for this, but it may be that “education savers” are also more likely to be “target savers” (targeting, for example, tuition).

Second, being an “education saver” also moderates the relationship between several participant characteristics and AMND. Female “education savers” saved much less than other female savers, although female participants who were not “education savers” saved more than males. Why did female “education savers” save less? In ADD, 81 percent of female participants had at least one child at home, and 66 percent of these women were single mothers. These women and single mothers may face unique obstacles (for example, the need for child care) in their pursuit of post-secondary education. If they realize that they face these obstacles only after enrolling in IDAs and declaring their intent to save for post-secondary education, then this may explain their lower savings. Of course, another possible reason is that TANF rules act as limits on the access of welfare recipients to higher education, and low-income women with children are those most likely to be affected by TANF or—even if they are not currently on welfare—those who expect to possibly be affected by TANF rules in the future.

Married “education savers” also saved much less than other married participants. Perhaps married participants who planned for post-secondary education found that going to school (or going back to school) was more difficult than single participants. For example, married participants may face responsibilities (for example, childcare) or barriers within the household (for example, unsupportive spouses) that men or unmarried women do not have.

“Education savers” who were students saved more than “education savers” who were not students. More than half of “education savers” either had some college education (38%) or already had a college degree (22%). Perhaps the pressures of paying for their education make saving for post-secondary education more salient for student savers. They do not have to think

very far into the future to see how IDAs will be useful. In contrast, participants who are not already students are saving for a further-off goal and thus may end up savings less.

As a caveat on the interpretation of these results, note that participants in ADD were both program-selected and self-selected (Schreiner et al., 2001). Therefore, ADD participants are not representative of the general low-income population.

Implications

The findings of this study indicate that low-income people did save for postsecondary education in ADD. Thus, it may be helpful to include more low-income people in the college-finance toolkit. For example, teaming IDAs with State College Savings Plans (“529 plans”) is one strategy to promote more inclusive IDAs for post-secondary education (Clancy, 2003; Clancy & Sherraden, 2003). After-tax contributions to 529 plans accumulate tax-free and are not taxed upon withdrawal if used for expenses for post-secondary education. All states but one sponsor 529 plans, and some states (Rhode Island, Michigan, and Louisiana) encourage savings by low-income households through matching provisions (Clancy, 2003). Given that 529 plans are run by government and that the government is a potential source of match funds, linking IDAs and 529 plans could help include more low-income households in subsidized savings policies aimed at post-secondary education.

Our findings indicate that savings outcomes were different for “education savers” and that being an “education saver” moderated the associations of some other program and participant factors. These findings may help programs design IDAs that help improve outcomes for “education savers”. For example, financial education was associated with greater savings for “education savers” than for others, probably because most of the education savers were already students and thus were better at being students than are non-students. This may imply that financial education in IDAs is not very appropriate for adults and other non-students. Therefore, adopting the principle of adult education more completely in financial education of IDA programs may help address this concern. Hogarth and Swanson (1995) highlight the importance of applying adult education principles to financial education for low-income people, especially the importance of understanding participants’ life context and experiences and bringing them into the teaching and learning process.

We also found that students save better for post-secondary education than non-students. This implies that salient goals may help savings. Therefore, IDA programs may be able to encourage greater savings outcomes by helping to make savings goals salient, for example by role-playing the act of making an asset purchase.

Finally, we found that household roles and household constraints on participants may affect savings for post-secondary education. For example, being married and/or being a woman was associated with lower savings for “education savers”. These participants may benefit from additional help to achieve their savings goals for post-secondary education.

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Table 1. Characteristics of ADD Participants and Comparisons of Education Savers and Non-Education Savers

Variables	Education Savers (N=377)	Non-education Savers (N=1,976)	Comparisons of Education and Non-education Savers	ADD Participants (N=2,353)
Continuous Variables	Mean	Mean	t / χ^2	Mean
Age	30	37	-11.3***	36
Number of adults	1.4	1.5	0.68	1.5
Number of children	1.5	1.8	-3.36**	1.7
Household monthly income	\$1,252	\$1,402	-3.80***	\$1,378
Categorical Variables	Percents	Percents		Percents
Gender				
Female	74	81	8.37**	80
Male	26	19		20
Race/ethnicity				
White	41	37	2.77	37
African-American	35	49	26.4***	47
Others	24	14	22.9***	16
Marital Status				
Never married	66	46	52.18***	49
Divorced, Separated, or Widowed	19	31	24.81***	29
Married	15	23	10.59**	22
Education				
Did not Complete High School	20	15	5.96*	16
Completed High School or GED	20	27	6.82**	26
Some College Education (no Bachelor's Degree)	53	51	0.36	51
Completed 4-year Degree or More	7	7	0.04	7
Employment				
Employed Full-time	41	62	56.43***	59
Employed Part-time	28	22	7.56***	23
Not working or Unemployed	9	10	0.75	10
Students	22	6	100.01***	8
Banked	75	77	0.55	77
Home Owner	14	16	1.39	
Receipt of AFDC/TANF				
Formerly	30	39	11.0***	38
Currently	7	11	3.26	10

* $p \leq .10$, ** $p \leq .05$; *** $p \leq .01$.

Table 2: Regression Analysis on Average Monthly Net Deposits (AMND)

	Main Effects		Interaction Effects	
	Coefficient	p-value	Coefficient	p-value
<u>Institutional Characteristics</u>				
Match Rate (4:1 to 7:1)				
1:1	7.76***	0.003	5.19	0.49
2:1	6.94***	0.003	10.17	0.15
3:1	9.67***	0.001	13.06*	0.08
Monthly Savings Target	0.18***	0.001	0.08	0.21
Use of Direct Deposit to IDAs	3.95*	0.08	6.69	0.35
Hours of General Financial Education	0.49***	0.001	0.71***	0.003
<u>Participant Characteristics</u>				
Age	0.16**	0.01	-0.06	0.72
Female	2.56*	0.09	-9.05**	0.01
Race/Ethnicity (Caucasian)				
African-American	-7.87***	0.001	3.50	0.29
Others	1.68	0.33	6.23	0.11
Marital Status (Never Married)				
Married	1.86	0.30	-11.88**	0.02
Divorced, separated or widowed	0.19	0.89	-0.75	0.85
Number of children	-0.64	0.12	1.11	0.31
Number of adults	2.33**	0.01	-0.85	0.71
Education (No High School Diploma)				
High School Graduates	0.91	0.62	-1.07	0.83
Some College, Less than Bachelor's	2.92*	0.09	3.75	0.41
Degree				
Bachelor's Degree or More	8.96***	0.001	8.96	0.19
Employment (Unemployed or not working)				
Employed, full-time	-1.90	0.34	0.26	0.96
Employed, part-time	0.04	0.98	2.46	0.65
Students, working or not working	1.11	0.70	10.14*	0.09
Household Monthly Income	0.003***	0.003	0.003	0.25
Home Owner	3.72**	0.04	7.89*	0.07
Having Checking or Savings Account	5.27***	0.001	-2.94	0.41
Receipt of Public Assistance (TANF or AFDC Never)				
TANF or AFDC formerly	-2.02	0.13	4.95	0.17
TANF or AFDC currently	-0.14	0.95	-6.30	0.27
Intended Users of education	-10.41	0.55	--	--
Intended users of home purchase	5.88	0.65	--	--
Intended users of home repair	12.83	0.32	--	--
Intended users microenterprises	6.92	0.59	--	--
Intended users of retirement	10.33	0.43	--	--
Intended users of job	5.14	0.70	--	--
F	9.71			
R ²	0.22			
N	1,979			

* $p \leq .10$, ** $p \leq .05$; *** $p \leq .01$.