CSD Working Papers

Asset-building in Rural Communities: The Experience of Individual Development Accounts

Michal Grinstein-Weiss and Jami Curley

CSD Working Paper

2005

Wealth Building in Rural America Project



Center for Social Development



Asset Building in Rural Communities: The Experience of Individual Development Accounts

Michal Grinstein-Weiss Assistant Professor University of North Carolina michalgw@email.unc.edu

Jami Curley School for Social Service Saint Louis University curleyjc@slu.edu

CSD Working Paper 2005

Center for Social Development
George Warren Brown School of Social Work
Washington University
One Brookings Drive
Campus Box 1196
St. Louis, MO 63130
tel 314-935-7433
fax 314-935-8661

e-mail: csd@gwbmail.wustl.edu http://gwbweb.wustl.edu/csd

ACKNOWLEDGEMENTS: The authors wish to thank the foundation funders of ADD, especially the Ford Foundation, Charles Stewart Mott Foundation, FB Heron Foundation, and Metropolitan Life Foundation for funding ADD research; the IDA program staff at the 13 research sites of the American Dream Demonstration (ADD); the Corporation for Enterprise Development for implementing ADD; Lissa Johnson, ADD research project manager; Margaret Clancy, for ensuring quality of the monitoring data; and Mark Schreiner for data management and preparation.

Asset Building in Rural Communities: The Experience of Individual Development Accounts

Similar to the beginning of many new eras, the dawning of the 21st century has brought new opportunities as well as new challenges to the stability of our economy. New technology offers more efficient methods of production while the continuing influence of globalization increases market availability for our goods. Yet, when a region has a hard time transitioning to a new economy, the challenges produced by these changes are often overwhelming and can create hardship. Rural America is currently facing many of the difficulties associated with these changing economies, thus affecting their current economic sustainability and development. The industry base change from manufacturing to service in the late half of the 20th century produced high unemployment rates from the loss of factory jobs and although the new service base created jobs, most were low-wage with minimal or no benefits (Falk and Lobao, 1995). Furthermore, because of the differences in economic resources, population and geography, rural areas are highly diverse (Oakerson, 1995).

These conditions only added to the rising poverty rates for rural areas. While the rural poverty rate, as well as the national poverty, began to decline after reaching a high of 17.3 percent in 1993, it has since began to rise again and in 2002 stood at 14.2 percent. Furthermore, rural poverty rates have historically been higher than urban poverty rates, leaving rural communities at even more of a disadvantage (Economic Research Service, 2004). One policy approach being discussed in current dialogues is wealth creation (asset building). Some researchers have suggested that asset building in rural areas might be a

1

viable solution to help reduce poverty and increase economic assets in these regions (Dorward, Anderson, Clark, Keane, & Moguel, 2001; Curley & Grinstein-Weiss, 2003).

The purpose of this study is to examine the performance of rural participants in an assets building program – the Individual Development Account (IDA). IDAs are matched savings accounts for low-income households, where the savings are used for specific purposes including home purchase, post-secondary education, and microenterprise.

Literature Review

Asset Building Policy

The idea of asset building as a policy option has evolved over the last several decades out of discussions concerning alternative methods to the social and economic development of particular populations and geographic regions as opposed to a strategy based primarily on income support (Sherraden, Curley, & Grinstein Weiss, 2003). This philosophy is based on what Sen (1985, 1993, 1999) identifies as strengthening human and economic capabilities. In the past, this strategy has most often been utilized in underdeveloped nations in an effort to go beyond simply maintaining a certain level of consumption and engage in increasing capacity building for greater long-term sustainable outcomes, thus, affecting many aspects of individual and household welfare, including increasing knowledge, resources, and functioning skills (Sherraden, Curley, & Grinstein Weiss, 2003).

This asset building approach, referred to as capacity building, can be examined in a variety of dimensions. One of the most important areas is the development of human assets or capital. According to Becker (1964), human capital is the range of personal

assets and resources belonging to an individual, such as skills, education, and intellectual ability that influence future monetary and psychological outcomes. He maintains human capital represents an estimated 75 percent of total wealth. Another form of capacity building concerns social capital. Social capital involves social relationships between individuals and the resources gained from these experiences. Coleman (1998) and Putman (1995) are the major contributors to this area of knowledge.

Still another dimension of capacity building is through the growth of tangible and financial capital. Sherraden (1988, 1991), whose work has been instrumental in advancing this concept, proposes that building assets in these areas have far-reaching effects on the current well-being of individuals as well as the well-being of their future generations. Based on these ideas, Sherraden (1991) put forth a welfare-based asset policy designed to increase the tangible and financial assets of low-income households by, first, making already existing asset-building policy more inclusive, thereby increasing the opportunities for low-income households to participate and second, providing subsidies to low-income households to assist and encourage participation in these programs.

Rural Policy Development

Although asset building as a policy option for low-income households is relatively new to the United States, government policies that encouraged asset building for the general population date back to the frontier period when rural America was strong and prosperous. In 1776, over 90 percent of the U.S. population lived in rural areas where farming was the primary economic resource (Economic Research Service, 1997). With the Jeffersonian vision of a country of individual farm and business owners and

limited government, much of the policies enacted reflected these sentiments. The Homestead Act of 1862 was one of the most influential pieces of legislation to be ratified during this period. This Act granted U.S. citizens parcels of land at a minimum cost if they would adhere to a small number of requirements over the course of five years. It was designed to facilitate population and economic growth in the new territory. Other policies during this time also echoed the importance of rural life by encouraging the expansion and exportation of agricultural goods such as developing infrastructure and establishing trade policies (Danbom, 1995).

However, with the onset of industrialization and the out-migration of people moving to the cities in the 2nd half of the 20th century, rural policies shifted away from land ownership and expansion to natural resource conservation (Castle, 1992). The value and future economic use of natural resources found in many rural regions was capitalized upon and extraction industries, as they were called, prospered. Following this period, the economic devastation of the Great Depression ushered in another set of rural polices. The government, for the first time, became actively involved in the economy. The rural polices coming out of the New Deal, brought financial assistance to farmers and stronger support to natural resource conservation (Castle, 1992). As the 1970s emerged, environmentalist began to complain about the depletion of natural resources and the pollution caused by the use of some of the extracted resources, thus, causing government to reevaluate current polices on natural resource conservation. In 1980, once again trying to downsize government involvement, Reagan transferred rural issues responsibility to state and local governments while also cutting funding in this area (Browne, and Swanson. 1995).

As the population in rural areas decreased overtime and rural people became less influential in politics, government policies addressing their needs also decreased. Many of the national policies were inadequate because they were blanket policies that did not adjust to regional differences. Moreover, although, farmers became less and less of the workforce in rural areas, it was agricultural policies that historically dominated governmental action in rural areas (Freshwater, 2000).

Today, for rural policy to be effective, it has to address the diverse needs of the communities and the people who live in them by investing in the people, infrastructure, and economy. Asset building in terms of increasing tangible and financial assets in rural households is one policy option that could address the diverse needs of many rural areas and benefit both the households and the communities. As mentioned above, the purpose of this study is to examine the experience of rural IDA participants. Specifically, the following questions are addressed: (a) What are the individual characteristics associated with savings outcomes among rural IDA participants? (b) What are the institutional characteristics associated with savings outcomes among rural IDA participants (c) What are the program and policy implications for supporting asset building in rural areas?

Methods

Data and Sample

The data come from the "American Dream Policy Demonstration" (ADD), the first large-scale test of IDAs designed to study the merits of IDAs as a community development and public policy tool. Beginning in 1997, ADD research followed more than 2,000 participants at 14 community-based program sites across the United States for

four years (1997 - 2001). IDA programs in ADD are operating in community-based organizations that are working together with financial institutions. In most cases, participants in ADD are at or below 200% of the federal income-poverty guidelines, with a median value of 100% poverty level. IDA savings are used for specific purposes, usually home purchase, post secondary education, and microenterprise.

ADD employed a multi-method research design to gather information on many aspects of IDA programs and participants including eight different research methods such as cross-sectional survey of participants, in-depth interviews, and an experiment site with random assignment. This study used data created from the monitoring all the participants' savings transactions. Program staff collected both program and participant data with the Management Information System for Individual Development Accounts (MIS IDA). The data were checked for data entry errors, outliers, missing cases, and inconsistencies in the data using the MIS IDA quality control software. The missing cases in this study ranged from 0% to 7%, with the majority of cases having no missing cases. This may be the best available data set on savings patterns among low income families (Sherraden, 2002).

Participants in this analysis consist of IDA enrollees from rural areas only, including those who have dropped out of the program without a matched withdrawal. The regression analyses use the participants' characteristics that were recorded at time of enrollment to avoid issues of two-way causation between income and savings.

The MIS IDA data are complemented by an additional data set gathered from the 14 ADD sites through a program survey. The survey data were collected using face-to-face and telephone interviews with administrative personnel at the 14 ADD sites. The

survey instrument was designed based on constructs offered by institutional theory (Ssewamala, Forthcoming).

Measurement

Dependent variables. Two dependent variables, the Average Monthly Net Deposit (AMND) and deposit frequency, are used in order to measure savings in IDA programs, trying to capture the two major aspects of savings: amount and regularity. These variables were constructed and used in previous reports on ADD programs (Schreiner, Clancy, & Sherraden, 2002). AMND is defined as net deposits per month and is calculated as deposits plus interest minus unmatched withdrawals, divided by the number of months of participation. Thus, AMND controls for the length of participation in the program. The variable net deposits that is used to calculate AMND is defined as deposits plus interest (net of fees) minus unmatched withdrawals. Net deposits include matched withdrawals, but exclude deposits in excess of the match cap (maximum amount that can be matched) or after the time cap. Excess deposits, late deposits, and unmatched withdrawals are savings in IDA accounts, but they cannot be matched and therefore are not considered net deposits. AMND is the key measure of savings outcomes in this study because greater AMND implies greater savings and assets accumulation (Schreiner et al., 2001). Deposit frequency is defined as the number of months with a deposit divided by the number of months of participation. It shows how regularly a participant saves.

Independent variables. The independent variables include participant and program characteristics. Participants' demographics include gender (1 = female, 0 = male); age (in years); a set of dummies that measures marital status: single, divorced/separated and married (the reference group); number of children (under 18 yrs);

and number of adults (18 yrs and older) in the household. We also include a set of dummy variables indicating whether the participants identify their race as African American, Latino or Hispanic, Other category, or Caucasian (the reference category). Another set of dummies measures the educational attainment of participants: do not have a high school diploma (reference group), have a high-school diploma, some college but no degree, and graduated from college. Finally, employment status of a participant is measured by whether he or she was employed full time (> 35 hours per week), employed part time (< 35 hours per week), unemployed (reference group) or a student.

Participants' financial characteristics include a dummy variable for whether a participant has ever received TANF or AFDC; monthly household income; car ownership (1 = yes, 0 = no); home ownership (1 = yes, 0 = no); and having either a checking or savings account (1 = banked, 0 = unbanked). For the purpose of interpretation, we divide the household income by 100 for the regression analyses.

Several program characteristics are included: direct deposit (1 = yes, 0 = no); 4 dummies for match rate, 1:1 (reference group), 2:1, 3:1, and 4:1 to 7:1; financial education received (in hours); monthly saving target and peer group meetings. IDA participants are required to attend free financial education and asset-specific classes as part of the program. The financial education classes cover material regarding financial management and saving strategies, and include topics such as how to create a budget, how to manage money, and how to fix and establish credit records. The asset specific classes provide specific information on the desired asset. In our analysis we include a measure of general financial education, which depicts the number of financial education hours a participant has taken. The monthly savings target measure included in our

analysis is the total match cap (that is, the limit on the amount of deposits that can be matched) divided by the time cap (that is, the number of months after opening an account in which a participant may make matchable deposits). Finally, the peer group meeting variable asks whether programs offer informal peer group meetings of IDA participants in addition to financial education.

Analysis

This study focuses on the experiences of IDA participants living in rural areas (n=315). In the analysis phase, some descriptive statistics are produced to characterize this group. Then, in order to answer the first question, "What individual characteristics are associated with saving performance for rural IDA participants?" and the second question, "What institutional characteristics are associated with saving performance for this group?" a hierarchical Ordinary Least Squares (OLS) regression analysis is conducted. The first step of the hierarchical regression explores what individual characteristics are associated with saving among rural IDA participants. The second and third steps of the hierarchical regression answer two additional questions: (1) Controlling for the effects of individual characteristics, what institutional characteristics are associated with saving for this group? (2) Controlling for the effects of individual characteristics, do institutional characteristics [measured (step 2) and unmeasured (step 3)], as a block, affect the saving performances of rural IDA participants?

Results

Table 1 shows the sample characteristics of rural IDA participants.

Individual Characteristics

Most of the participants in this group were female (79%). Ages ranged from 13 to 70 years, with a mean age of 35 years, and a standard deviation of 10.74. The majority of the participants were single (40%), 30% were divorced, separated, or widowed, and 30% were married. The average number of children in the household was 1.8, and the average number of adults in the household was 1.6. The majority of the participants were Caucasian (80%), 12% were African American, 1% Latino, and 6% Other ethnicity.

Approximately 18% of the participants did not complete high school, 27% had a high school degree, 30% attended some college but did not graduate, and 25% had a college degree (either 2 year or 4 years). Fifty percent were employed full time (35 hours per week or more), while 35% worked part time. Eight percent were unemployed or not working and 7% were students (see Table 1).

About 63% reported that they never received AFDC or TANF. The mean monthly household income was \$1,240, and the median was \$1,360. In annual terms, the average income was \$14,880 a year. The majority (81%) of the rural participants had either a checking or savings account (other than their IDA). Thirty six percent owned a home, and 78% owned a car (see Table 1).

Institutional Characteristics

Only 6% of the participants had direct deposit. Twenty-three percent of the rural participants had a match rate of 1:1. Twenty nine percent had a match rate of 2:1, another 29% had a 3:1 match rate, and 16% had between 4:1 to 7:1 match rate.

IDA participants are required to attend free financial education and asset-specific classes as part of the program. Rural IDA participants received, on average, 13 hours of general financial education. Monthly savings target is defined as the amount which, if saved each month and not removed in unmatched withdrawals, will be matched. The average monthly saving target for the homeownership group is \$34.37. Slightly more than half of the programs (56%) offered peer group meetings (See Table 2).

Saving Performance of Rural Participants

The results of the Hierarchical OLS regression analyses when AMND was regressed on the individual characteristics and measured institutional characteristics is significant [F(26, 220) = 5.53, p = .000] and explained approximately 40% of the variance in AMND ($R^2 = .40$, Adjusted $R^2 = .32$). Likewise, significant results appear when deposit frequency was regressed on the individual characteristics and measured institutional characteristics [F(26, 220) = 5.32, p = .000] and explained approximately 39% of the variance in AMND ($R^2 = .39$, Adjusted $R^2 = .31$) (see Table 3).

The regression results indicate that two individual variables and all of the institutional variables are associated with savings performances for rural IDA participants. First, marital status is statistically associated with deposit frequency. Specifically, compared with married participants, single participants is associated with 11-percentage points lower deposit frequency. Second, home ownership is associated with both AMND and deposit frequency for rural IDA participants. Specifically, rural participants who are homeowners are associated with an \$8.21 higher AMND, and 9-percentage points higher deposit frequency than rural participants who are not homeowners.

Turning to institutional characteristics, direct deposit is statistically associated with deposit frequency. Compared to participants who do not have direct deposit, having direct deposit is associated with a 23-percentage point increase in deposit frequency.

Match rate is statistically associated with deposit frequency. IDA participants with a match rate of 3:1 are associated with 19-percentage points higher deposit frequency, and participants with a match rate of 4:1 to 7:1 are associated with 13-percentage points higher deposit frequency compared to the participants with a 1:1 match rate.

Hours of financial education attended by IDA participants is statistically related to both AMND and deposit frequency. Each additional hour of financial education is associated with a \$0.63 increase in AMND, and 1-percentage point increase in deposit frequency.

Monthly saving target is significantly related to both AMND and deposit frequency. Each additional dollar in the monthly saving target is associated with a \$0.23 increase in AMND. In addition, a dollar increase in the monthly saving target is associated with a .005 increase in deposit frequency.

Finally, peer group meetings are statistically associated with the two measures of savings: AMND and deposit frequency. Participants in programs that offer peer group meetings in addition to regular financial education meetings are associated with a \$16.53 higher AMND, and 9-percentage points higher deposit frequency compared with participants in programs that do not offer these additional peer group meetings.

Effect of Institutional Characteristics as a Block

In order to determine the specific amount of variance that the institutional variables (measured and unmeasured) can be accounted for, above and beyond what has been explained by the individual variables, when predicting AMND and deposit frequency for rural IDA participants, hierarchical regressions are used.

Table 4 indicates that controlling for individual characteristics, the measured institutional characteristics as a block significantly (P<.001) increase the variance explained in AMND for this group. As can be seen in Table 4, individual characteristics alone account for 13% of the variance explained in AMND (R^2 =.13). Adding the measured institutional characteristics to the model as a block increases the variance explained in AMND in 27% (R^2 =.40), and adding the program dummies (unmeasured factors linked with programs) as a block accounts for an additional 3% increase in AMND of the variance (R^2 =.43).

Similar results were obtained when adding measured and unmeasured institutional characteristics to the model with deposit frequency as the dependent variable (see Table 4). Controlling for individual characteristics, the measured institutional characteristics as a block significantly (P<.001) increase the variance explained in deposit frequency for the rural IDA participants. As can be seen, individual characteristics alone account for 13% of the variance explained in deposit frequency (R^2 =.13). Adding the measured institutional characteristics to the model as a block increases the variance explained in deposit frequency in 26% (R^2 =.39), and adding the program dummies (unmeasured factors linked with programs) as a block accounts for an additional 10% increase in deposit frequency of the variance (R^2 =.49).

Limitations

Some limitations of this study are important to note. First, the data analysis phase uses individual characteristics that were collected on the participants at time of enrollment in the IDA programs. It might be that some individual characteristics have changed during the time an individual spends in the program and that might have some relationship to the saving outcome; however, these changes have not been recorded (Ssewamala, 2003). Second, this study assumes that deposits in IDAs come from new savings. However, it may be the case that some participants in IDAs are transforming money from other assets they have, and as a result, deposits are coming from assets that have been shifted and not from new savings (Schreiner et al., 2001; Zhan, Sherraden, & Schreiner, 2002). This seems unlikely given participants are low-income and do not have many assets to redirect. Finally, since the ADD data were not collected using randomized assignment techniques, there is lack of control in the data, which means that it is hard to attribute the effects of participating in IDAs on the saving outcomes. It is hard to determine how the participants would have saved if they were not participating in IDAs. The experimental design in ADD will be able to test this; however, the data are not available yet.

Discussion and Implications

This study examines the unique experiences of low-income rural participants in a matched saving program -- IDA. IDAs provide institutional mechanisms to rural participants to save and accumulate assets and may improve the livelihood in rural areas by creating opportunities for economic solvency. Results from this study indicate that low-income rural participants can save toward the accumulation of assets in IDAs. The

AMND for this group is \$18.79 with a match rate of 2:1, rural participants can accumulate \$56.37 a month or approximately \$2,029 over an average of three years in the program, and higher amounts with higher match rates. In addition, this study suggests that institutional characteristics, not merely individual characteristics, are important in explaining saving performance for this group.

Home ownership seems to be an important predictor of savings among rural IDA participants. Home ownership may be a proxy to the fact that participants already have some experience with savings. In addition, this study finds that single participants are saving less frequently compared with married participants. These results are in line with other studies that examine the impact of marital status on savings and family wealth accumulation which finds that marriage can enhance wealth accumulation (Hao, 1996; Lupton & Smith, 2003; Seigel, 1993). For example, through the analysis of data from the Health and Retirement Survey and the Panel Study of Income Dynamics, Lupton and Smith (2003) find that married couples save significantly more than other household types. Additional ways to help single rural participants to save in IDAs should be explored.

Turning to institutional characteristics, this study uses the institutional theory that claims that institutional characteristics other than individual characteristics may play an important role in explaining and promoting savings (Beverly & Sherraden, 1999; Sherraden, 1991; Sherraden, Schreiner, & Beverly, 2003). In order to assess the amount of variance that institutional variables (as a block) accounted for, beyond what has been explained by the individual variables, this study uses hierarchical regressions analyses. The results indicate that controlling for individual variables, institutional variables

(financial education, peer group meetings, match rate, direct deposit, and monthly saving target) and unmeasured institutional variables (program dummies) lead to a significant and considerable increase in the variance explained in both of the dependent variables.

These results support the argument that institutions have an important role in shaping savings behavior and may explain a significant part of the variance in personal savings, thus implying that policies and program design can have a positive effect on savings among low-income rural participants.

Financial education classes in IDAs teach low-income participants different aspects of financial literacy such as how to establish credit, how to cut down on expenses, how to set goals for saving and overcoming barriers in savings. This study suggests that financial education is an important predictor of saving performances for rural IDA participants. Participants who received more hours of financial education are associated with higher savings. It might be the case that IDA classes are not only successful because of the material taught in them but are also successful due to other aspects of the workshops. First, they are taught by community organizations which can bring the level of understanding to its constituents, individuals go to the workshops with others in the same situation, counseling is provided, and empowerment and self-sufficiency are constantly reinforced.

Using direct deposit into IDA accounts is associated with more frequent deposits among rural IDA participants. This result supports the proposition suggested by the institutional theory that argues that individuals who are receiving some kind of saving facilitation which makes saving more manageable and convenient will increase their willingness to save (Beverly & Sherraden, 1999; Sherraden et al., 2003). By utilizing

direct deposit and transferring money from one account into another, individuals are more likely to save and less likely to use the money for consumption (Beverly & Sherraden, 1999). Based on these results, program administrators should encourage participants to use direct deposit and provide them with the means to do so. This is especially important due to the fact that only 6% of the rural participants have direct deposit.

Match rate is also associated with more frequent savings. Rural IDA participants with a match rate of 3:1 saved more frequently than those with a match rate of 1:1. Similarly, rural IDA participants with a match rate of 4:1 to 7:1 save more frequently than those with a match rate of 1:1. A match rate of 3:1 is associated with higher increase in deposit frequency than a match rate of 4:1 to 7:1. It might be that a match rate of 3:1 is the optimal match rate for this group and further studies should look into it. Match rate is not associated with the savings amount. This may indicate that higher match rates may encourage people to save more frequently, but might not affect the amount they save.

Monthly savings target is defined as the amount which, if saved each month and not removed in unmatched withdrawals, will be matched. The monthly saving target is viewed in this study as expectations of the IDA programs from their participants regarding the saving amount. The results suggest that monthly saving target is an important predictor of saving performances, and higher monthly saving target leads to higher and more frequent savings. Therefore, it is suggested that program administrators could raise the limits on matchable deposits for rural IDA participants.

Finally, peer group meetings, other than the financial education meeting, are another way for rural participants to share information, tips, encouragement and ideas among themselves. This study finds that peer group meetings appear to be an important predictor of savings performance for this group. Therefore, it is suggested that more IDA programs establish peer groups meetings.

In conclusion, this study finds that rural participants in IDA programs can save.

This suggests that IDAs may be an effective tool to help low-income people in rural areas to save and accumulate assets. Public policies that aim at promoting social and economic development in rural areas and in helping rural communities to do better, should include more asset based policies and programs such as IDAs.

References

- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis*. New York and London: Columbia University Press.
- Beverly, S., & Sherraden, M. (1999). Institutional determinants of saving: Implications for low-income households and public policy. *Journal of Socio-Economics*, 28, 457-473.
- Hao, L. (1996). Family structure, private transfers, and the economic well-being of families with children. *Social Forces*, 75(1), 269-292.
- Lupton, J., & Smith, J. P. (2003). Marriage, assets and savings. In S. Grossbard-Shecht (Ed.), *Marriage and the economy: Theory and evidence from advanced industrial societies* (pp. 129-152). NY: Cambridge University Press.
- Schreiner, M., Clancy, M., & Sherraden, M. (2002). Saving performance in the American Dream Demonstration. St. Louis: Washington University in St. Louis, Center for Social Development.
- Schreiner, M., Sherraden, M., Clancy, M., Johnson, L., Curley, J., Grinstein-Weiss, M., Zhan, M., & Beverly, S. (2001). Savings and asset accumulation in IDAs:

 Downpayments on the American Dream Policy Demonstration, a national demonstration of Individual Development Accounts. St. Louis, MO: Washington University in St. Louis, Center for Social Development.
- Seigel, J. S. (1993). A generation of change: A profile of America's older population.

 New York: Russell Sage Publication.
- Sherraden, M. (1991). Assets and the poor: A new American welfare policy. Armonk, NY: M.E. Sharpe, Inc.

- Sherraden, M. (2002). *Individual Development Accounts (IDAs): Summary of research*(Research Report). St.Louis, MO: Washington University in St. Louis, Center for Social Development.
- Sherraden, M., Schreiner, M., & Beverly, S. (2003). Income, institutions, and saving performance in Individual Development Accounts. *Economic Development Quarterly*, 17(1), 95-112.
- Ssewamala, F. (Forthcoming). Integrating saving into microenterprise programs for the poor: Do institutions matters? *Social Service Review*.
- Ssewamala, M. F. (2003). Saving for microenterprise in Individual Development

 Accounts: Factors related to performance. Unpublished doctoral dissertation,

 Washington University, St.Louis.
- Zhan, M., Sherraden, M., & Schreiner, M. (2002). Welfare recipiency and savings outcomes in Individual Development Accounts (Working Paper No. 02-8). St. Louis, MO: Center for Social Development, Washington University.

Table 1: Descriptive Statistics for Individual Characteristics of the Sample

Independent variables	N	Mean
Gender (1 = female)	315	.79
Age	315	35
Marital status		
Single	313	.40
Divorce/Separated/ Widowed	313	.30
Married	313	.30
Household composition		
Number of Children	313	1.8
Number of Adults	312	1.6
Race/ Ethnicity		
African American	315	.12
Latino/ Hispanic	315	.01
Other ethnicity	315	.06
Caucasian	315	.80
Education		
No high school	312	.18
Completed high school	312	.27
Attended some college	312	.30
Graduated from college	312	.25
Employment		
Unemployed	315	.08
Working student	315	.07
Employed part-time	315	.35
Employed full-time	315	.50
Household income	298	12.4
Asset ownership		
Home ownership	314	.36
Car ownership	313	.78
Bank account	313	.81

Table 2: Descriptive Statistics for Institutional Characteristics of the Sample

Independent variables	N	Mean
Direct deposit	272	.06
Match rate		
1:1	315	.24
2:1	315	.29
3:1	315	.29
4:1 to 7:1	315	.16
Financial education	310	13
Monthly saving target	315	34.37
Peer group meetings	315	.56

Table 3: Hierarchical Regression Analysis: Individual and Institutional Characteristics and Saving Performance

	AMND		Deposit Frequency	
Independent variables	b S.E		В	S.E
Gender				
Female	-0.72	2.68	-0.05	0.04
(Male)				
Age	0.04	012	0.00	0.002
Marital status				
Single	-1.15	3.14	-0.11	0.05
Divorce/Separated/ Widowed	1.67	3.14	-0.04	0.05
(Married)				
Household composition				
Number of Children	-0.63	0.83	-0.01	0.01
Number of Adults	1.63	2.04	0.001	0.03
Race/ Ethnicity				
African American	0.15	3.41	0.01	0.05
Latino/ Hispanic	7.89	9.23	-0.07	0.14
Other ethnicity	2.16	4.59	-0.04	0.07
(Caucasian)				
Education				
(No high school)				
Completed high school	1.49	3.31	0.06	0.05
Attended some college	-1.24	3.46	0.03	0.05
Graduated from college	5.95	3.99	0.04	0.06
Employment				
(Unemployed)				
Working student	7.29	5.19	0.05	0.08
Employed part-time	3.20	3.95	0.09	0.06
Employed full-time	3.21	3.83	0.04	0.06
Household income	0.80	0.19	-0.004	0.003
Asset ownership				
Home ownership	8.21	2.63	0.09	0.04
Car ownership	-2.39	2.72	-0.05	0.04
Bank account	-2.18	2.80	0.07	0.04

Table 3: Hierarchical Regression Analysis: Individual and Institutional Characteristics and Saving Performance

	1	AMND		Deposit Frequency	
Independent variables	b	S.E	В	S.E	
Direct deposit	3.03	4.21	0.23	0.06	
Match rate					
(1:1)					
2:1	2.30	3.05	0.03	0.05	
3:1	4.66	3.29	0.19	0.05	
4:1 to 7:1	0.56	4.07	0.13	0.06	
Financial education	0.63	0.18	0.01	0.003	
Monthly saving target	0.23	0.09	0.01	0.001	
Peer group meetings	16.53	2.93	0.09	0.04	
\mathbb{R}^2	.40		.39		
F	5.53		5.32		
N	246		246		

^{*} $p \le .05$; ** $p \le .01$; *** $p \le .000$

Table 4: Hierarchical OLS - Influence of Institutional Characteristics on AMND

Model	\mathbb{R}^2	Adjusted R ²	$R^2\Delta$
Model 1: Individual Characteristics: [gender, age, marital status, household composition, race/ethnicity, education, employment, household income, asset ownership]	.13	.06	
Model 2: Measured Institutional Characteristics: [direct deposit, match rate, financial education, monthly savings target, peer group meetings]	.40	.32	.27***
Model 3: Unobserved factors linked with program/site dummies: ADVOCAP Near Eastside IDA Program Heart of America Family Services Human Solutions MACED Community Action Project of Tulsa (2 sites) Shorebank Corporation Women's Self-Employment Project Alternative Federal Credit Union Central Texas Mutual Housing Association Central Vermont Community Action Council Bay Area IDA Collaborative CAAB	.43	.34	.03

^{***}p<.01

Table 5: Hierarchical OLS - Influence of Institutional Characteristics on Deposit Frequency

	2	2	
Model	R ²	\mathbb{R}^2	$\mathbf{R}^2\Delta$
Model 1: Individual Characteristics: [gender, age, marital status, household composition, race/ethnicity, education, employment, household income, asset ownership]	.13	.06	
Model 2: Measured Institutional Characteristics: [direct deposit, match rate, financial education, monthly savings target, peer group meetings]	.39	.31	.26***
Model 3: Unobserved factors linked with program/site dummies: ADVOCAP Near Eastside IDA Program Heart of America Family Services Human Solutions MACED Community Action Project of Tulsa (2 sites) Shorebank Corporation Women's Self-Employment Project Alternative Federal Credit Union Central Texas Mutual Housing Association Central Vermont Community Action Council Bay Area IDA Collaborative CAAB	.49	.41	.10***

^{***}p<.01