

# Inclusion in Asset Building: Research and Policy Symposium

## Assets and the Poor: Evidence from Individual Development Accounts

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Center for Social Development

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## Introduction

The question of how to help the poor get rich is, in essence, the question of how to help them build assets. Poverty is a trap because resources are needed to produce resources. People with low resources relative to subsistence consumption save few resources and so produce too little to embark on a path of consistent increases in consumption in the long term.

To escape from poverty requires capital, be it human, physical, soial, or financial. To this end, many U.S. policies subsidize asset accumulation. Few of these policies, however, reach the poor because they leverage existing wealth, use tax breaks, or require debt.

A new policy proposal designed to help the poor build assets—Individual Development Accounts (IDAs)—does not require wealth, tax breaks, or debt. Withdrawals from IDAs are matched if used to buy a home, to pay for post-secondary education, or to finance self-employment. Participants in IDAs also receive financial education and support from IDA staff.

Using data from the American Dream Demonstration (ADD), the chapter reports on research on asset accumulation in IDAs by poor people. We find that:

- Poor people can save and build assets in IDAs. We do not know, however, how much of IDA deposits were new savings and how much were reshuffled assets.
- Other observed factors constant, income, gender, and welfare receipt were not linked with net deposits in IDAs. Although members of all racial/ethnic groups saved in IDAs, some saved more than others. Also, the very poor saved a larger share of their income than the less-poor.
- Institutional characteristics mattered. In particular, greater financial education was associated with greater saving, and higher match rates were associated with fewer unmatched withdrawals and with less risk of exit (but not with higher savings).
- IDAs in ADD were costly. A different program structure and a different bundle of services will likely be needed if access to IDAs is to become universal and permanent.

This chapter proceeds as follows. We first present IDAs and ADD, review relevant saving theory, and discuss current asset-subsidization policy. We then discuss evidence from ADD on whether the poor can save in IDAs, how IDAs work, where deposits come from, who saves in IDAs, and what IDAs cost. The final section summarizes the main results.

## IDAs in ADD

Individual Development Accounts (IDAs) subsidize asset accumulation by the poor. Unlike Individual Retirement Accounts (IRAs) or 401(k) plans, IDAs target the poor, provide subsidies through matches rather than through tax breaks, and require financial education. IDAs largely decouple the asset-subsidy mechanism from wealth, taxes, and loans.

People who pass a means test deposit post-tax dollars in insured, interest-bearing passbook savings accounts. They receive monthly statements (both from the bank and from the IDA program), financial education, and support from staff and peers. Withdrawals are matched if

used for home purchase, post-secondary education, or small business.<sup>1</sup> Matches are disbursed directly to vendors, and withdrawals for other purposes are allowed but are not matched. The original proposal for IDAs calls for permanent accounts for all, opened at birth, with greater subsidies for the poor (Sherraden, 1991). Regardless of balances or activity, the poor would not be “on” or “off” IDAs any more than they are “on” or “off” IRAs. Funds for program costs and matches may come from public or private sources. As a simple way to subsidize savings for specific goals, IDAs fit a wide range of community-development and public-policy purposes.

## Intellectual history

Although development economics has long focused on saving as central to long-term improvement in well-being, public policy in the United States somehow overlooked the importance of saving for the poor (Sherraden, 1991). Public assistance aimed to meet subsistence requirements, but it balked at resource transfers in levels and in forms that would encourage people to break free of a poverty orbit.

In 1988, a movement started to include the poor in asset-subsidy policies. Friedman’s *The Safety Net as Ladder* proposed changes to public assistance to encourage development beyond subsistence. Haveman’s *Starting Even* said that “transfer payments are necessary but not sufficient” (p. 149). Sherraden’s “Rethinking Social Policy: Towards Assets” critiqued the subsistence paradigm and proposed IDAs as a step toward a development paradigm.

The movement has gained intellectual momentum (Ackerman and Alstott, 1999; Conley, 1999; Oliver and Shapiro, 1995) and attracted support from many quarters. Bill Clinton—who as governor of Arkansas wrote the foreword to *The Safety Net as Ladder*—supported IDAs in his 1992 campaign and later proposed a large matched-savings program (Wayne, 1999). The Savings for Working Families Act would budget up to \$10 billion for IDAs. Both George W. Bush and Al Gore had billion-dollar IDA proposals in their platforms, and both proposed some form of individual accounts for retirement.<sup>2</sup> Canada plans to sponsor an IDA demonstration in 10 cities, and in the United Kingdom, the New Labour government proposed IDA-like accounts.

## The American Dream Demonstration

The focal point of IDAs and their evaluation in the United States is the American Dream Demonstration (ADD). Run by the Corporation for Enterprise Development with private and public funds, ADD enrolled 2,378 participants in 14 programs across the United States since its start in July 1997. In most cases, deposits are eligible for matches through 2001, and matched withdrawals may be made after that.<sup>3</sup> The evaluation of ADD uses several methods:

- Assessment of the process of program start-up and implementation through interviews with

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<sup>1</sup> Some IDA programs also match for job training, home repair, investment in retirement accounts, or even for the purchase of a car or computer.

<sup>2</sup> Bush proposed a regressive system within Social Security, and Gore proposed a progressive system outside Social Security.

<sup>3</sup> Schreiner *et al.* (2001) describe programs and rules in ADD.

program staff. This component addresses the question “How are IDA programs best set-up?”

- Tracking of savings by participants. This component—the basis of this chapter—asks “What are the savings outcomes in IDAs?”
- Case studies and in-depth interviews with participants. These add depth and context to the question “How and why do people save in IDAs, and what do they see as impacts?”
- Cross-sectional survey of participants. The intent is to inform policy and program design even before ADD is complete (Moore *et al.*, 2001).
- Assessment of community-level effects. This will address the question “How does a concentration of IDAs affect a community?”
- An experimental design with a longitudinal survey of qualified applicants randomly given or denied access to IDAs at one site. This will address the question “What are the economic and non-economic impacts of IDAs?” There will also be a financial benefit-cost analysis.

### **Data for ADD**

The analysis in this chapter uses ADD data from the Management Information System for Individual Development Accounts (MIS IDA), a system designed, sold, and supported by the Center for Social Development at Washington University in St. Louis (Johnson, Hinterlong, and Sherraden, 2000). The software stores data for evaluation as programs use it to manage logistics.

IDA staff record five types of data in MIS IDA: account-structure parameters at the start of the program, demographic and socio-economic data on participants at enrollment, monthly IDA cash-flow data from account statements, monthly program inputs and expenses, and intermittent events such as attendance at financial-education classes or program exit.

The cash-flow data may be the best (or the only) data on high-frequency, subsidized saving by the poor. The cash flows are accurate and complete; they come from records of depository institutions, satisfy accounting identities, and were extensively cross-checked.

Of course, no data set is perfect. IDA staff are not researchers, and, despite a consistent commitment to accurate data and strong support for the evaluation as a whole, data quality varies. Most time-constant demographics are accurate. Time-varying socio-economic data, regardless of accuracy, may change after enrollment, but, to avoid endogeneity issues, the analysis here uses at-enrollment data. Also, fields added to MIS IDA after ADD started were not collected from all already-enrolled participants, especially those who had exited. As in all surveys, income, assets, and liabilities are noisy and probably understated. At the program level, the account-structure parameters in MIS IDA may not always match the rules used in practice. We have no foolproof way to know whether program staff recorded all intermittent events. Finally, program costs are measured with noise. Throughout this chapter, we take care to note when data issues might influence results. Schreiner *et al.* (2001) discuss the data at length.

## Questions that ADD can answer

Participants in ADD were both self-selected (they chose to participate based on expected net benefits) and program-selected (most programs targeted the “working poor”, women, and/or people of color). With data only on participants, we cannot sort out the effects of selection from the effects of use. The MIS IDA data cannot reveal the impact of access to IDAs on eligibles.

In fact, MIS IDA data cannot reveal impact even for participants because there is no credible way to estimate outcomes in the absence of participation. The experimental-design component of ADD will estimate impact for participants, but that data is not yet available, and even the experiment randomizes access not across eligibles but across qualified applicants.

ADD runs for a limited time because it has limited funds. If the goal is long-term improvement in well-being, if assets foster development, and if IDAs increase asset accumulation by the poor, then a permanent program is probably better than a time-limited one. ADD cannot tell us, however, how people would behave if they had permanent access to IDAs.

MIS IDA data show how participants saved in IDAs in ADD. This is not the grandest of questions, but it matters, especially because some believe that the poor cannot save at all.

The MIS IDA data may also address how institutions affect saving. Sherraden (1991) and Beverly and Sherraden (1999) hypothesize that saving—by the poor and non-poor—depends not just on rational choice but also on institutions. Variation in rules across groups of participants in ADD shows how changes in saving behavior were associated with changes with the match rate, the match cap, and financial education.<sup>4</sup>

## Theories of saving and the poor

This section describes theories of saving and asset accumulation and how the institutional structure of IDAs takes advantage of insights from these theories.

### Saving and asset accumulation

*Income* is defined as the inflow of resources in a given period of time. *Assets* are defined as stocks of resources held at a given point in time. Whether seen as assets or income, resources may be *consumed* (changed into forms no longer useful) or moved through time.

*Saving* is an increase in assets (or net worth) in a period. *Dissaving* is a decrease in assets. Savings is due to not consuming income, and dissaving is due to consuming assets.

*Asset accumulation* is a long-lasting increase in assets. Saving that consistently exceeds dissaving leads to asset accumulation; saving balanced soon after by dissaving does not.

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<sup>4</sup> Programs set rules before enrollment, but the rules still depended in part on expected participant behavior, so the results here may be tainted by endogeneity bias to some unknown extent.

The concept of *assets* encompasses far more than financial assets as cash or as balances in bank account. The chief asset of most people—especially the poor—is human capital. People also possess household durables (such as homes, cars, clothes, furniture, and appliances) and producer durables (such as tools for self-employment). People also use social capital (networks, norms, and trust) to produce information, reduce transaction costs, to buffer shocks, and to soothe psyches. Sherraden (1991) lists a typology of assets and their returns.

Asset accumulation matters because resources are required for production (and thus for income and future capacity to consume and/or produce), to smooth consumption, to buffer risk, and to make large purchases. In the absence of constant, massive transfers from government, long-term improvement in individual well-being requires increased productive capacity. Because assets beget assets, the escape from poverty requires asset accumulation.

Beyond these economic effects of resource *use*, Sherraden (1991) suggests that resource *ownership* has healthy effects on thoughts, behavior, goals, and overall well-being. People who own assets expect better economic outcomes in the future, and this expectation may spark hope that in turn changes current feelings, beliefs, and choices.

If asset accumulation matters so much (for both economic and non-economic reasons) and if everyone both saves and dissaves to some extent, then what determines who benefits from the asset accumulation that results when savings exceed dissavings in the long term? Why do some people become (or stay) poor, and why do others become (or stay) rich?

### **Three theories of saving and asset accumulation**

Theories of saving relevant to IDAs are economic, social/psychological, and behavioral.

#### **Economic Theory**

Economics assumes that people seek to maximize long-term utility subject to constraints. People are assumed forward-looking and rational, and preferences are fixed. Choices and the probabilistic distribution of their consequences are known and exogenous. Preferences are the *deus ex machina* of unknown causes that drives observed results.

The fundamental insight of economic theory for saving and the poor is simply that people with few resources relative to subsistence constraints—be they biological, psychological, or cultural—have less resources available to save. Also, the decreasing marginal utility of consumption means that the poor pay more (in terms of foregone utility) to save. Because current savings (in human capital, financial assets, social networks, and producer and consumer durables) determines future production and future income, poverty is a trap of low assets.

Economic theory also highlights the importance of indivisibilities. Some assets (such as a house, car, or college education) have a minimum size, and saving for a large, all-or-none purchase is more difficult than savings for purchases that can be made in smaller pieces.

The IDA match address both rate-of-return issues and size-of-return issues. For example, the



average match rate in ADD (2:1) may be so high that people find it saving a good deal despite a high cost in terms of current consumption.<sup>5</sup> Also, the match changes a given level of savings by participants into a higher level of asset accumulation, perhaps enough to purchase a large asset.

### **Social/psychological theories<sup>6</sup>**

These theories emphasize that people are not always rational and that social norms and interactions shape preferences. They look behind the *deus ex machina* of preferences to explain saving-related goals and expectations.

Social/psychological theories assume that people do not always form their own goals or even know what choices they might make, let alone know all possible consequences of choices. For example, people who see family and friends save may tend to view saving as a choice that they themselves might make (Lusardi, 2000). Likewise, different cultural and familial norms may lead to different savings goals. For example, the American Dream of home ownership is a goal that U.S. society expects of married people more than of single people.

Broad social norms also mold saving expectations. Americans learn that Benjamin Franklin was wise and that he advised that a penny saved was a penny earned. Policy can shape social norms through the rules of thumb that people use in the absence of omniscience and perfect rationality. For example, the Japanese seem to have largely conformed to the rather arbitrary suggestion of their government to save one-fifth of income (Bernheim, 1994). In the United States, the home-mortgage interest deduction implicitly suggests that a home is a good investment. Likewise, the existence of 401(k) plans signal workers that saving matters and is at least partly their responsibility.

The institutional structure of IDAs builds on social/psychological theory in several ways. First, the mere existence of IDAs sends a message that the poor (and perhaps should) save. The match in particular attracts attention. Second, IDAs require financial education; people are not assumed to know how to save nor to know the consequences of saving. Third, IDAs give feedback and social support via staff and peers. Fourth, planning for withdrawals encourages participants to make goals and to think about the benefits of saving. Fifth, participants receive monthly statements that remind them of their goals and that show their progress.

### **Behavioral theory**

Like social/psychological theory, behavioral theory relaxes some assumptions in economic theory. It recognizes that people impose systems of mental accounts on their resources (Shefrin and Thaler, 1988). For example, small windfalls—perhaps from lottery wins—may be assigned to splurges. Likewise, debt may be acceptable to buy assets such as a home or a college

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<sup>5</sup> Economic theory does not unambiguously predict that savings will increase in response to an increased rate of return. People might save more due to the increase in the inter-temporal price of current consumption (substitution effect). But people might also save less if the inter-temporal price of future consumption falls enough (income effect). We take up this issue again below.

<sup>6</sup> Parts of this section and the next draw on Beverly and Sherraden (1999).

education but not to eat out or to buy gifts.

Behavioral theory also recognizes that people know that they do not always do what is best for themselves. People are both forward-looking and myopic; they recognize that they will be tempted to spend even if saving would make them better off in the long term. Thus, they may create their own mental or external rewards and punishments that make it difficult to spend rather than save (Thaler, 1994; Maital, 1986). For example, they may commit to rules of thumb (and feel guilty when they break them) such as saving the income of one spouse or “paying oneself first”. Payroll deduction, probably the most common pre-commitment constraint, removes pay-day temptations. Christmas Clubs and time deposits offer the pre-commitment constraint of a substantial penalty for early withdrawal. Mortgage-financed purchases of homes or cars can also be a way to commit to build net worth through time (Maital and Maital, 1994).

IDAs fit behavioral theory because they help people to commit to save and to resist the temptation to dissave. First, IDAs create a new mental account: savings for a home (or college, or business). The distinct account (and reinforcement from staff that its funds are off-limits, even though in fact unmatched withdrawals are possible) helps participants to view IDA balances as distinct from “spending money” (Beverly, Moore, and Schreiner, 2001). Second, the expression of the match cap in terms of a monthly savings target may encourage participants to develop regular savings habits and to set monthly savings goals. Third, automatic deposits into IDAs—when available—may help to curb temptations to spend money before it is deposited. Fourth, the perceived obligation to save in IDAs may give participants a socially acceptable excuse to deny requests from importunate members of social networks.

### **Asset-subsidization policy in the United States**

Public policy often subsidizes asset accumulation (Sherraden, 1991), sometimes to combat poverty. For example, the most important asset of the poor is their human capital, and the most widespread asset-subsidy policy is public education. Deductions for mortgage interest subsidize home ownership, the bedrock of the middle class and the second-most important asset of the poor. Subsidized student loans (and public colleges and universities) and subsidized retirement accounts are other common asset subsidies that reduce poverty. The Homestead Act (Williams, 2000) and the G.I. Bill subsidized assets for many poor people.

Most subsidies for asset accumulation, however, go disproportionately to the non-poor because they directly or indirectly require wealth. For example, local-school finance places the best public schools in wealthy neighborhoods. Tax-advantaged retirement accounts link subsidies to the human capital required to reach a high tax bracket. Subsidized debt is indirectly linked to wealth because loans can finance only part of a purchase and because wealth is seen as a signal of creditworthiness. Prospective home buyers must accumulate both financial capital for a down payment and human capital to earn income to make mortgage payments. Likewise, student debtors must have savings (or wealthy parents, or time for a job) to pay for living expenses and books beyond (invariably subsidized) tuition.

Tax breaks for asset accumulation (such as deferments for IRAs and 401(k) plans or deductions for student-loan interest and home-mortgage interest) are weak incentives for people in low tax brackets. Furthermore, larger loans mean larger subsidies, so the poor—who go to less-expensive colleges and who buy less-expensive homes—get smaller subsidies. Whatever the administrative, targeting, and incentive reasons to link asset subsidies to wealth, loans, and taxes, the current system does more for the non-poor than for the poor.

IDAs may be a way to subsidize home purchase, post-secondary education, and self-employment for the poor because IDAs largely decouple subsidies from wealth, taxes, and loans. Of course, IDAs require deposits, and these are easiest for people who already have wealth. If it makes sense to subsidize debt for asset accumulation by the non-poor, however, then perhaps it also makes sense to subsidize savings for asset accumulation by the poor.

### **Can the poor save in IDAs?**

ADD shows that the poor can save in IDAs. Although ADD does not prove that the poor saved more than they would without IDAs, it at least proves that the poor can save.<sup>7</sup>

### **Participation**

*Enrollment.* As of June 30, 2000, ADD had enrolled 2,378 participants. The average length of participation was 13.3 months, and 81 percent of enrollees were still active.

*Graduation.* About 13 percent of participants had a matched withdrawal; a fourth of these “graduated” and left the program, and the rest were still saving for more matched withdrawals.<sup>8</sup>

*Exit.* About 16 percent of participants exited without a matched withdrawal. The risk of exit was 11 percent in the first 12 months and 16 percent for the first 24 months.

### **Savings outcomes**

*Gross deposits.* The average participant deposited \$41.43 per month (\$552 in 13.3 months).

*Unmatched withdrawals.* About 25 percent of matchable balances were removed in unmatched withdrawals. The 37 percent of participants with unmatched withdrawals (43 percent of whom were exits) averaged 2.9 unmatched withdrawals worth a total of \$320. With an average match rate of 2:1, these people lost potential matches worth about \$640. The unexpected size and frequency of unmatched withdrawals in spite of their high opportunity cost highlights the difficulty of asset accumulation for the poor, even in the supportive institutional context of IDAs.

*Net deposits.* Defined as gross deposits minus unmatched withdrawals minus balances in excess of the match cap, net deposits per participant in ADD were \$353 (\$420 for non-exits).

Average monthly net deposits (AMND) takes into account length of participation. Mean AMND

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<sup>7</sup> The empirical results from here on are drawn from Schreiner *et al.* (2001).

<sup>8</sup> These and other figures presented here will change as ADD progresses.

was \$25.42 (\$30.30 for non-exits). Median AMND was \$17.96 (\$23.35 for non-exits).

With an average match rate of 2:1, the average participant accumulated about \$75 per month. Asset accumulation in ADD as of June 30, 2000 (assuming all balances at that point will eventually be removed in matched withdrawals) is about \$1,000 per person ( $13.3 \cdot 25.42 \cdot 3$ ).

*Matched withdrawals.* Those with matched withdrawals averaged 2.0 withdrawals (total of \$603). With an average match rate of 1.82:1, their total asset accumulation averaged \$1,698.

Matched withdrawals were more common as balances grew with time; the probability of a matched withdrawal was 9 percent in the first 12 months and 27 percent in the first 24 months.

*Matched uses.* Of participants with a matched withdrawal, 24 percent bought a home, 24 percent invested in microenterprise, and 21 percent pursued post-secondary education. The rest used their matched withdrawals for home repair, retirement, or job training.

Of the 87 percent of participants (including exits) with no matched withdrawals, 57 percent planned to buy a home, 18 percent microenterprise, and 15 percent post-secondary education. The other 10 percent planned for home repair, retirement, or job training.

## **Saving behavior**

*Savings rate.* On average, net deposits were 2.2 percent of income at enrollment (median 1.3 percent). The savings rate in IDAs decreased as income increased in cross-section. As discussed later, it may be that the institutional effects of IDAs are stronger than the economic effects of income, and perhaps these institutional effects are stronger for poorer people.

*Deposit frequency.* At the mean and median, participants made deposits in 7 of 12 months (7.6 of 12 months for non-exits.) Causality is difficult to pin down, but some evidence suggests that frequent depositors accumulate more than infrequent depositors. We suspect that this results when people target a level of saving and then consume the rest (rather than target a level of consumption and then save the rest) and so make a greater effort to save in difficult months.

*Net deposits as a percentage of the pro-rated match cap.* On average, participants were on a pace to save two-thirds of their match-eligibility. At the median, the share was 49 percent.

*IDAs and EITC.* Net deposits increased about \$15 per participant per month in March, April, and May. Participants seem to save a chunk of tax refunds and/or payments from the Earned Income Tax Credit. Some programs in ADD explicitly encourage this, and some other work (Beverly, Tescher, and Marzahl, 2000; Smeeding, 2000; Souleles, 1999) supports the idea that saving is easier from tax refunds and the EITC than from “regular” income.

## Discussion

Can the poor save in IDAs? Yes: participants in ADD saved \$25.42 per month, made deposits in 7 of 12 months, and were on a pace to use about two-thirds of match-eligibility.

Is two-thirds a high or low rate of utilization? The opportunity cost of not saving the full amount is high. As a comparison, three-fourths of IRA contributors take full advantage of that program (and more than 90 percent of eligibles do not participate at all), and one-third of contributors reach the contribution limit in each of three straight years (Bernheim, 1997).

Are IDAs enough to make a difference? For perspective, median liquid assets at enrollment were \$125. Median illiquid assets (mostly homes and cars) were \$1,200, debt was \$1,335, and net worth was \$100.<sup>9</sup> At the median savings (\$17.96 per month), match rate (2:1), and months of potential participation (36), assets would grow by \$1,940. Even if all deposits came from reshuffled assets, IDAs would increase median net worth by more than 1,000 percent.

For the non-poor, a few hundred dollars—or even a few thousand dollars—may not seem like much. Data on matched withdrawals, however, suggest that participants in ADD do use IDAs to purchase assets expected to have high returns and that mark key steps in the life course. Perhaps more important, participants in qualitative components of the evaluation of ADD say that their accumulations have changed their outlooks for the better. Maybe what matters is not only the amount accumulated but also the process (and the simple existence) of accumulation.

If IDAs offer strong incentives to make deposits and then to maintain them until a matched withdrawal, why were unmatched withdrawals so common and large? The data do not say, but at least two explanations are possible. First, some participants may be close to subsistence and have highly variable income and/or expenses. If income drops (or if expenses spike, perhaps due to job loss or illness), then short-term needs may outweigh long-term opportunity costs. Second, some participants may simply be short-sighted or unwise.

Should IDA programs restrict unmatched withdrawals? If participants expect at enrollment that they will later succumb when tempted to make withdrawals for consumption, then they would welcome restrictions. Indeed, Moore *et al.* (2001) report that some participants in ADD seem to appreciate the formal and informal restrictions on unmatched withdrawals.

On the other hand, recurrent emergencies are a fact of life for the poor. One of the few ways that IDAs might do harm would be to put the cash of the poor out of reach. Perhaps IDAs could offer, at enrollment or afterwards, the choice (but not the requirement) to put at least some IDA deposits in an account with greater restrictions on unmatched withdrawals.

Why did so many participants exit? As with unmatched withdrawals, the level of exit exceeded expectations and suggests that, even in the supportive context of IDAs, saving is not easy for the poor. Some exits are inevitable, but two changes to policy and program design might reduce them. First, permanent access to IDAs would, in a way, make the exit issue moot, because

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<sup>9</sup> Median net worth is participant-by-participant, not median assets minus median liabilities.

everyone would always have an IDA, even if the balance were zero. Second, some programs in ADD kicked people out for low or infrequent deposits. This freed up match funds for other participants, but if the goal of IDAs is long-term improvement in well-being, then it makes little sense to cut off access precisely to those for whom saving is the most difficult. Not all people will save the same amount in the same length of time, but this does not mean that low savers would not benefit from greater access to institutionalized, subsidized savings mechanisms.

### **How do IDAs work?**

Links between saving and the institutional structure of IDAs matter for two reasons. First, asset accumulation probably depends not only on tastes but also on the constraints and opportunities afforded by institutions (Sherraden, 1991). Second, policy can affect institutions.

With IDAs, three institutional effects may matter. First, the match, apart from its economic incentives, may signal that saving is worthwhile. Second, people may mentally change the match cap—technically a limit—into a goal, so higher match caps might lead to higher savings for non-economic reasons. Third, financial education may increase knowledge of how to save and of the benefits of saving (economic models often assume no need for education).

We used Probit regressions to link match rates, match caps, and financial education with the risk of unmatched withdrawals and with the risk of exit. We also use a two-step regression to measure links between program rules and net deposits.<sup>10</sup> All the regressions use 2,378 observations and control for a wide range of program and participant characteristics.<sup>11</sup>

### **Match rates**

The question of the effect of the match rate on IDA savings relates to two classic questions: the elasticity of saving to the rate of return, and the response of employees to match rates in 401(k) plans. The consensus—based on models and data known to be imperfect—is that the interest elasticity of savings is about zero. Most research on 401(k) plans finds that the presence of a match boosts participation but that higher match rates—at least once past 0.25:1 or so—do not increase contributions and may even decrease them (Bassett, Fleming, and Rodrigues, 1998; Bayer, Bernheim, and Scholz, 1996; Papke and Poterba, 1995; Kusko, Poterba, and Wilcox, 1994).<sup>12</sup> The income effect seems to overwhelm the substitution effect at all but very low rates of return. Of course, the match rates in IDAs are far higher than those in 401(k) plans.

In addition to institutional effects, substitution effects, and income effects, the match rate might

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<sup>10</sup> The first part of the Heckman two-step controlled for unobserved factors that influence both the risk of exit and the level of net deposits for non-exits.

<sup>11</sup> Detailed results are in Schreiner *et al.* (2001).

<sup>12</sup> All these studies have several flaws. First, they do not control for censoring at the contribution limit. Second, they do not control for the contribution limit, for the combined maximum contribution plus match, or for more than a handful of other variables. Third, they measure match rates and contributions not for individuals but as averages across participants in a firm. Fourth, they do not control for endogeneity between the match rate and savings.

be correlated with IDA savings through censoring of desired savings at the match cap. This might mask links between match rates and savings. As of June 30, 2000, 10 percent of participants in ADD were at the match cap. The share censored will increase once they all reach their time cap, much as the number of IRA contributors at the contribution limit is higher on April 15 than in October. Once ADD is complete, we will account for censoring.

In theory, institutional effects and substitution effects lead to a positive link between match rates and savings, but income effects and censoring dampen the link.

In ADD, 24 percent of participants had a match rate of 1:1, 51 percent had 2:1 (the mean and median), 14 percent 3:1, and 6 percent from 4:1 to 7:1. In the regressions, a set of dummies represent match rates.

*Unmatched withdrawals.* Unmatched withdrawals are like negative savings, so the theory discussed above applies in reverse. Compared with participants with match rates of 1:1, participants with match rates of 3:1 or 4:1 to 7:1 had statistically less risk of unmatched withdrawals. Censoring is not an issue in this case, so it appears that institutional and/or substitution effects dominate income effects.

*Exit.* People who leave an IDA program are like people who are eligible for a 401(k) plan but who do not join. Consistent with the observed effects of match rates on participation in 401(k) plans, we expect higher match rates to decrease the risk of exit from IDAs.

For exit, censoring and income effects are irrelevant. It turns out that higher match rates were strongly linked with less risk of exit. This makes sense, as institutional effects and/or substitution effects are the only forces in play.

*Average monthly net deposits.* The match rate had no statistically significant link with AMND. This result is consistent with research on 401(k) plans. Like that literature, this analysis fails to control for censoring. Unlike the 401(k) literature, we control for the match cap and for a host of other variables, and we use individual-level data rather than firm-level data. Thus, although the test here is flawed, it is probably less flawed than most other tests.

## **Match cap**

The *match cap* is the maximum accumulated deposit eligible for matches. To control for the length of time that different participants have to make match-eligible deposits, we divide the match cap by the number of match-eligible months to give the *monthly savings target*. We call this a *target* both to reflect the belief that participants often change caps into targets and to reflect that many IDA programs in ADD advise participants to deposit this amount each month.

The average monthly savings target in ADD was \$43, and average monthly net deposits per participant were two-thirds of the target. In the regressions, higher targets were strongly linked with less risk of unmatched withdrawals, with less risk of exit, and with higher AMND.

Three factors may explain why higher savings targets are linked with higher savings:

- Institutional effects in which participants change limits into goals. Thus, people may save more (or withdraw less, or exit less) when challenged with a higher limit/goal.
- Net deposits are censored at the match cap. If caps vary and if the caps would bind for some participants even in the absence of institutional effects, then censoring would induce a spurious positive correlation between savings outcomes and match caps.
- Endogeneity. Some IDA programs probably assigned higher savings targets to groups of participants whom they expected to save more. As with censoring, this induces a spurious positive correlation between caps and savings outcomes.

The data from ADD do not allow this analysis to distinguish among these three factors.

## Financial education

Besides matches, a key feature of IDAs is required financial education.<sup>13</sup> Financial education in ADD took two forms, general and asset-specific. The broad goals of the classes were: to increase awareness of savings as a wise choice through discussion of long-term benefits; to instill stronger future orientation through exercises in planning and budgeting; to transfer practical techniques to reallocate resources from consumption to savings, to convert savings to illiquid forms, and to maintain savings through time; to communicate IDA rules; to provide a setting for peer support and for the exchange of experiences; and to equip participants to purchase and maintain large assets, in particular houses.

Each program in ADD sets the number of required hours, and some programs probably required more hours if they expected participants to be low savers. Furthermore, each program selected or developed its own curricula and enforced the financial-education requirement in its own way. MIS IDA recorded only the number of hours attended by each participant. All hours of financial education were not the same, but the analysis here must assume that they were.<sup>14</sup> Average hours required were 13, and the average hours attended per participant were 10.4.

Regression results suggest that net deposits increased about \$1 per month per hour of general financial education, up to 12 hours. After that point, more hours had no effect.<sup>15</sup> Asset-specific education followed the same pattern: a large effect up to 6 hours, then a plateau.

The results from ADD strongly suggest that some financial education improves saving performance. Furthermore, short courses may be just as effective as longer courses.

## Where do IDA deposits come from?

<sup>13</sup> Bernheim and Garrett (1996) find that financial education increases participation in 401(k) plans and that the effects are largest for those who saved little before the education. Bayer, Bernheim, and Scholz (1996) find that financial education also increases contributions to 401(k) plans. They also find that the effects are largest for non-highly compensated employees.

<sup>14</sup> Schreiner *et al.* (2001) discuss other weaknesses in the data on hours of financial education.

<sup>15</sup> The two-step regression has exit as the first step and controls for the length of participation and thus for the opportunity to attend financial education. In principle, a two-step hazard model would produce cleaner estimates, but MIS IDA did not record monthly changes in the independent variables nor exactly when participants attended classes.



IDAs aim to increase saving, but they do so only if deposits come from new savings rather than shifted (reshuffled) assets. For IRAs and 401(k) plans, research suggests that some deposits come from new savings and some from shifted assets (Bernheim, 1997; Hubbard and Skinner, 1996). Sherraden (1991) argues that the bulk of IDA deposits would be mostly new savings because the poor have few assets to shift. Evidence for IRAs and 401(k) plans suggests that the poor are indeed less likely to shift (Engen and Gale, 2000; Bernheim and Scholz, 1993). Still, the poor do have some assets, and the match in IDAs provides strong incentives to shift.

Schreiner *et al.* (2001) lay out a framework in which new savings come from increased income, increased net appreciation, increased gifts, and/or decreased consumption. Increased income or decreased consumption come from increased effort, increased time spent in production (household or market), and/or increased amounts, returns, or utilization of human capital. In contrast, asset shifts come from increased debt, decreased asset maintenance, or increased net conversions from non-IDA assets.

The ADD data do not distinguish well between new savings and shifted assets. First, like most data sets, some components of net worth are not measured. Second, net worth for participants in the absence of IDAs is—by definition—not observed. Third, participants are self-selected and program-selected, so they probably differ from non-participants in ways that make the net worth of non-participants a poor proxy for the net worth of participants without IDAs.

If only liquid assets (balances in checking accounts and passbook savings accounts, but not cash) held at enrollment could be shifted, and if all liquid assets that could be shifted were indeed shifted, then shifted assets would be 53 percent (44 percent median) of IDA deposits. The strong assumptions of this exercise do little more than to show that shifts were at least possible.

Survey responses from ADD participants (Moore *et al.*, 2001) suggest that IDA deposits came from both new savings and asset shifts. As examples of new savings, 29 percent said that IDAs made them more likely to work longer hours, 41 percent were more likely to work more, 61 percent were more likely to increase income in ways other than working more hours, 70 percent shopped more carefully for food, 68 percent ate out less, and 34 percent (of all participants) spent less on alcohol or tobacco. As examples of shifted assets, 35 percent were less likely to save in non-IDA forms, 7 percent borrowed from family or friends to finance IDA deposits, 16 percent postponed bill payment, 9 percent found it more difficult to pay bills, 12 percent sold household or personal items, 17 percent postponed visits to the doctor or dentist, and 8 percent gave up food or other necessities. In sum, IDA deposits were some mix of both new savings and shifted assets.

## Who saves in IDAs?

Because IDAs require participants to save and because participants are both self-selected and program-selected, some worry that IDAs may work only for the most-advantaged of the poor. Evidence from ADD suggests that although more-advantaged people may sometimes save more than others, even relatively disadvantaged people can still save in IDAs.

## Demographics

Compared to the U.S. low-income population, participants in ADD were better educated, more likely to be employed, and more likely to have a bank account.<sup>16</sup> This probably reflects how programs in ADD target the “working poor”. Participants in ADD are also more likely to be female (80 percent), African-American (47 percent), or never-married (49 percent).<sup>17</sup> This reflects how ADD programs target the disadvantaged among the “working poor”.

Gender, marital status, and employment were not linked with net deposits. Four-year college graduates saved the most, and high-school graduates and 2-year college graduates saved the least. All else constant, owners of checking accounts saved about \$50 more per year than others, but ownership of a passbook savings account had no statistical effect.

## Public assistance

Half of participants had received public assistance, either at enrollment or before. This was not, however, linked with net deposits, so unobserved characteristics correlated with receipt of public assistance were not correlated with willingness and/or ability to save in IDAs.

## Income

ADD had a means-test at 200 percent of the family-size adjusted poverty guideline. Median income was just at the poverty line, and 21 percent were below half the poverty line.

In regressions, income was not associated with net deposits, with unmatched withdrawals, or with exit. Furthermore, the savings rate decreased as income increased; the very poor saved a greater share of their income in IDAs than did the less-poor. This would not be expected from economic theory (Deaton, 1992) nor from data for the United States as a whole (Wolff, 1998).

What explains this? First, a host of measurement issues tend to depress measured income more for the very poor than for the less-poor (Schreiner *et al.*, 2001). This could induce a spurious negative correlation between income and the savings rate. Second, censoring of savings at the

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<sup>16</sup> This looks at people in households with income at or below 200 percent of the family-size adjusted poverty threshold in the first week of September 1995 in the Survey of Income and Program Participation. The fall in poverty since 1995 suggests that, all else constant, participants in ADD are likely more disadvantaged than the general low-income population in 1995.

<sup>17</sup> About 42 percent were unmarried women with children.

match cap could also induce a spurious negative correlation.<sup>18</sup> Third, institutional effects may be strongest for the poorest. The pull of the savings target may be greater for those furthest away. Likewise, the asset accumulation due to the match is a larger share of total resources for the very poor than for the less-poor. Furthermore, the very poor may have more to learn about how or why to save, so, in response to given a level of financial education or social support/pressure, they may change their behavior more. All three factors—measurement error, censoring, and institutional effects—are probably at work, but the data from ADD cannot disentangle them. Still, the broad lesson is that in IDAs, less income did not imply less savings.

Do the poor save too much in IDAs? Saving postpones consumption, so, at least in the short term, people who save also consume less and, all else constant, are worse off. Savers make this short-term sacrifice because they expect that it will improve their long-term well-being. Of course, saving can be overdone, but saving in IDAs is voluntary, and ADD provides little evidence that matches in IDAs have enticed participants to save to the point of harm.

### **Race/ethnicity**

About 47 percent of participants in ADD were African-American, 37 percent were Caucasian, 9 percent Hispanic, 3 percent Native American, 2 percent Asian-American, and 3 percent “Other”. Average monthly net deposits were at least \$19.50 for all groups, but differences between groups were large. Compared with Asian Americans, AMND was \$11.62 less for Hispanics, \$12.77 less for Caucasians, \$20.82 less for African Americans, and \$22.30 less for Native Americans. These differences in AMND (at least for African Americans and Caucasians) were not due to differences in unmatched withdrawals nor in exit.

These differences in savings outcomes are not due to race/ethnicity *per se* but rather to a constellation of socially produced unobserved factors (often sedimented through centuries) linked with both savings and race/ethnicity. In a perfect model that controlled for everything, the estimated link between race/ethnicity and savings would be zero.

In these models, observed factors explain about half the savings gap. Even half the gap, however, is large. Most analyses attribute to discrimination differences in outcomes correlated with unobserved factors that are correlated with race/ethnicity. This is correct, but most analyses forget that differences in outcomes correlated with observed factors that are correlated with race/ethnicity are also due to discrimination. With more data, the correlation between outcomes and unobserved factors would shrink, but not because discrimination decreased. In the end, what matters are improvements in long-term well-being. This requires smaller gaps in observed and unobserved factors and smaller gaps in savings and asset accumulation.

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<sup>18</sup> As discussed above, it is not worthwhile to control for censoring until ADD is complete.

Do IDAs narrow these gaps? The MIS IDA data do not reveal whether disadvantaged groups increased their savings more than other groups (or even whether IDAs increased savings for anyone). It is virtually impossible, however, for IDAs to have worsened the African-American/Caucasian wealth ratio. With a match rate of 2:1, the worst case is that all IDA deposits from African Americans (\$20.99 per month) came from shifted assets and that all deposits from Caucasians (\$29.04) came from new savings. Even so, the ratio of net worth for participants in ADD in these two groups would fall from about 4:1 at enrollment to about 3:1 at the end of ADD.<sup>19</sup> IDAs do not pretend to be a panacea for racial/ethnic gaps in wealth, but they do seem to have improved equity in at least some ways, and they certainly can improve access to institutionalized savings mechanisms for the poor regardless of race/ethnicity.

### **What do IDAs cost?<sup>20</sup>**

Wise allocation of scarce resources requires some knowledge of costs. All resources have opportunity costs; a dollar used in an IDA is a dollar removed (at least implicitly) from some other use. What matters is not that IDAs have benefits for participants, nor that IDAs have benefits for society as a whole. Rather, what matters is that the social net benefits of the use of resources in IDAs exceed the social net benefits of those resources in their best alternative use.

Benefit measurement awaits data from the experimental design. Until then, cost measurement can inform policy and program choices. Even without knowledge of benefits, knowledge of costs sets a benchmark for performance and spurs efforts to improve efficiency.

Data on program expenses in MIS IDA are very rough and almost certainly overstated. We had no way to clean the data, and most host organizations did not break out IDA programs as cost centers. Furthermore, ADD programs were among the first IDA programs and so incurred extraordinary expenses in start-up, in policy work, and in guidance for other IDA programs. Data collection for ADD itself added extraordinary costs.

With these caveats, program expenses (without matches) were about \$70 per participant-month, or \$2.77 per \$1 of net deposits. With a 2:1 match, total outlays in IDAs were about \$6 per \$1 of net deposits (\$1 savings, \$2 match, and \$3 program expense), or \$2 per dollar accumulated.

Are these costs high or low? There is no benchmark to judge. The ultimate criterion is whether benefits exceed costs, but benefits are not yet measured. Furthermore, we do not know what level of efficiency is possible. IDAs are young, and “best practices” continue to evolve.

Costs in ADD did fall as programs grew and learned. Up to June 30, 1999, program expenses were about \$117 per participant-month (\$3.66 per \$1 of net deposits); in the 12 months after that, expenses were about \$43 per participant-month (\$2.20 per \$1 of net deposits).

Would it be better to give participants \$70 rather than for them to save \$25? The comparison is

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<sup>19</sup> The average absolute wealth gap, however, would increase in this scenario. Also, it is unclear how IDAs might change the aggregate wealth gap between Caucasians and African Americans.

<sup>20</sup> This section draws on Schreiner (2000) and Sherraden (2000).

not straightforward. IDAs are more than just a way to transfer resources to the poor (Sherraden, 1991). The institutional structure forces participants to form savings strategies, to save, and then to plan for matched withdrawals. Because IDAs encourage participants to think about their savings, they may spark hope, future-orientation, and middle-class values.

Even if costs fell to \$1 per \$1 of net deposits and even if social benefits exceeded social costs, funders probably would not support universal, permanent IDAs with the current decentralized structure and intensive bundle of services. Yet qualitative evidence from ADD suggests that participants highly value financial education and close contact with staff. The tension between the desire for intensive services and the cost structures that would allow for wide access may lead to two tiers of IDA designs, the first with broad access, simple services, and lower costs, and the second with targeted access, intensive services, and higher costs.

## **Discussion**

To escape poverty requires asset accumulation. The United States has many policies that subsidize saving, but they often exclude low-resource households because they leverage existing wealth, operate via tax breaks, or require debt. Individual Development Accounts (IDAs) are a new policy proposal to help the poor build assets without these requirements. Withdrawals from IDAs are matched if used to buy a home, to pay for post-secondary education, or to finance self-employment. Participants also receive financial education and support from IDA staff.

The American Dream Demonstration (ADD) shows that the poor can save in IDAs. For the 2,378 participants as of June 30, 2000, average monthly net deposits per participant were \$25.42, or two-thirds of match eligibility. The average participant made a deposit in 7 of 12 months. With an average match rate of 2:1, the average participant accumulated assets at a rate of \$75 per month (\$900 per year).

Although the data are not conclusive, the institutional structure of IDAs—the match rate, the savings target, and financial education—seems to encourage participants to make deposits, to maintain their deposits, and to stay in the program. The effects of the savings target and of financial education are particularly strong.

The MIS IDA data from ADD do not reveal whether IDAs increase savings. Qualitative evidence from other components of the evaluation of ADD suggests that participant finance IDA deposits both from new savings and from shifted (reshuffled) assets.

Participants in ADD were more advantaged than the general low-income population in some ways but more disadvantaged others. Gender and receipt of public assistance were not linked with net deposits. Income was also not linked with the level of net deposits, but the share of income saved in IDAs was greater for the very poor than for the less poor. We suspect that at least part of the explanation lies in institutional effects that are strongest for the poorest.

Although members of all racial/ethnic groups saved in IDAs in ADD, there were large gaps among groups. IDAs almost certainly decreased the ratio of Caucasian net worth to African-

American net worth among participants, but the current pattern of unequal savings outcomes for different groups is still disturbing because it represents large amounts of lost potential for asset building, particularly for African Americans and Native Americans. Future work should ask why this occurs and what might be done to narrow the gaps and improve inclusion.

IDAs are costly. In the long term, two types of programs seem likely, one with a universal and permanent design with low costs and one a local and temporary design that offers greater services but that costs more.

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