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**Center for Social Development**



George Warren Brown School of Social Work

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## **Abstract**

This study examines the saving performance of low income African Americans and Caucasian participants in an Individual Development Accounts (IDA) program. IDAs are matched saving for home ownership, education, and small business capitalization. Using data from the American Dream Demonstration (N = 2,364), this study compares the savings performance of Black and White participants in IDAs. The results indicate that low-income African Americans on average save successfully in IDAs, though in smaller amounts than Caucasians. Results of separate regressions for Blacks and Whites indicate that mostly individual characteristics are associated with saving performance among Caucasians. In contrast, mostly institutional characteristics are associated with saving performance among African Americans. Implications for policy and programs are suggested.

**Keywords:** Racial inequality; savings performance; matched savings accounts; Individual Development Accounts (IDAs)



## **Racial Differences in Performance in a Matched Savings Program**

“Wealth ownership is the socioeconomic measure that displays the single greatest racial disparity in America today. Blacks own, on average, one-twelfth the amount of property as Whites”(Conley, 1999, p.595). Wolff, (2001b) found that the ratio of mean wealth holdings between White and Black households was 0.18 and the ratio of their median wealth holdings was 0.12. Explanations for these differences have deep historical roots and are complex (Menchik & Jianakoplos, 1997; Oliver & Shapiro, 1995). Oliver and Shapiro (1990) find that 67% of Black households had zero or negative financial assets in 1984, versus only 30% of White families. Hurst, Luoh, & Stafford, (1998) find that 70% of the Black households that had no wealth in 1984 still had no wealth in 1994.

Theories have been developed to account for these racial differences in wealth accumulation. These theories are complex and include historical, economical sociological and institutional explanations (Conley, 1999; Menchik & Jianakoplos, 1997; Oliver & Shapiro, 1995; Shapiro, 2004; Sherraden, 1991; Wolff, 2001a). To deal with this racial wealth gap, a variety of public policy proposals have been developed in recent years. However, Wolff (2001a) argues that despite the existence of these proposals, there is not enough evidence on their potential success to reduce the racial wealth gap.

The purpose of this study is to examine the performance of African Americans in Individual Development Accounts (IDAs), one of these policy proposals. IDAs are matched savings accounts targeted to low-income people and provide incentives and an institutional structure for saving. Account holders receive matching funds as they save for assets that promote long-term well-being and financial self-sufficiency such as a home, post-secondary education, or microenterprise (Sherraden, 1988; Sherraden, 1991).

We begin by reviewing theoretical explanations for the racial gap in wealth accumulation. We continue with a description of IDA program and participant characteristics. Next to be followed by regression analyses conducted to examine factors related to savings of Black and White participants, and a Welch-Satterthwaite *t* test is used. Finally, practice implications that may promote saving and asset accumulation among African Americans are discussed.

## Review of Theory and Research

### *Assessing Assets Independently From Income*

In order to study and understand racial inequality in America, wealth should be taken into account (Oliver & Shapiro, 1995). Traditionally, the major indicator of well-being used by economists, sociologists and other social scientific researchers has been income. Accumulated wealth has been neglected. Social scientists have been much more engaged in describing and analyzing occupational, educational and income distributions. In recent years, researchers have recognized the importance of measuring household wealth independently from income (Wolff, 2001b).

While income and assets, or wealth, are strongly interrelated, they are different concepts that mean different things. Income refers to the flow of resources in the household over time. Families use income to provide the household with daily necessities such as shelter, food, and clothing. The concept of income is usually associated with the consumption of goods and services and the standard of living. Wealth is a stock variable. Wealth refers to the total amount of an individual's accumulated assets at a given time. "Wealth is what families own, a storehouse of resources... not usually used to purchase milk and shoes or other life necessities. More often it is used to create opportunities, secure a desired stature and standard of living, or pass advantages and class status along to one's children" (Shapiro, 2001, p.12).

While the difference in income between Whites and Blacks has been subject to much research and documented frequently, differences in wealth accumulation have received less attention (Collins & Margo, 1999). Most studies that have assessed the economic progress of African Americans have used income or earnings as their main indicator of economic well being. Focusing on incomes and earnings instead of focusing on assets can lead to an incomplete picture of well being. Gittleman & Wolff, (2000) argue that the economic position of two households earning the same income but having widely different wealth accumulation cannot be regarded as identical. The wealthier family is likely to be living in a better neighborhood that can offer more amenities and lower crime rates. In addition, they can send their children to a better school, provide them with better health care, and have greater resources to draw upon in a time of need.

Research using income and earnings data suggests that African Americans earn significantly less than Caucasians, but these differences are greater when using wealth measures (Altonji & Doraszelski, 2001; Stegman, 1999; Wolff, 2001b). For example, using the 1976 National Longitudinal Survey of Mature Men, the average wealth of Black households is 20% of the average wealth of White households, and 23% using the 1989 Survey of Consumer Finances. In comparison, the average income of Black households is 50% and 60% of the average income of White households in these two surveys, respectively (Menchik & Jianakoplos, 1997). Similarly, Conley (1999) argues that wealth is the most important indicator that captures racial inequality in United States.

### *Racial Inequality in Wealth Accumulation: Historical, Economic, Sociological and Institutional Explanations*

Several explanations have been suggested to account for differences in accumulated wealth between Whites and Blacks (Conley, 1999; Menchik & Jianakoplos, 1997; Oliver & Shapiro, 1995; Shapiro, 2004; Sherraden, 1991; Wolff, 2001a). These explanations focus on both past and current circumstances of African Americans. The most straightforward explanation is that African Americans have always earned less than Caucasians and as years go by this shortfall in earning results in lower savings and lower asset accumulation. While this may be the simplest explanation, there are more complex and deeper historical and social explanations.

#### Historical

A primary historical explanation goes back to the institution of slavery where Black slaves had no legal right to ownership and were discouraged from the development of a culture of assets ownership of any kind (Sherraden, 1991). There was, however, a minority of free Blacks during the antebellum period that did own property, but unlike the Whites they were not free to choose what they wanted to own. Historical records indicate that besides agriculture and business services, their property ownership was restricted. In addition, laws were often instituted to prevent Blacks from conducting business without a license. The cost of such a license was additionally prohibitive (Conley, 1999). Low levels of entrepreneurship and small businesses developed and owned by Blacks can be explained by Oliver & Shapiro's (1995) "economic detour" theory. From the postbellum period into the middle of the civil rights movement, Blacks were subject to legal restrictions, preventing them from owning and participating in businesses in the open market. Inability to access a customer base outside of their own community led Black business owners to a "detour" of economic insecurity.

Other explanations go back to the period following the Emancipation Proclamation. It was proposed that land be distributed to freed Blacks, allowing each one of them "forty acres and a mule". Although this proposal and other redistribution plans were never carried out, they provided hope to freed slaves (Sherraden, 1991; Conley, 1999). Another historical event of influence is that of the Freedman's Bank that was established to facilitate savings for land and homeownership among Blacks. The Freedman's Bank did not survive the economic crisis in 1873 and collapsed, resulting in thousands of African Americans losing their savings without repayment. An unfortunate consequence of the Bank's demise was the loss of faith in the bank system by many African Americans (Douglass, 1892; Du Bois, 1935; Gilbert, 1972; Myrdal, 1944).

Historically, the United States has implemented a variety of policies to assist Americans in asset building, such as the Homestead Act of 1862 that promoted home and property ownership, the GI Bill that offered educational opportunities to veterans, and Old Age Insurance (Social Security) that established benefits for older Americans (Conley, 1999). Though these measures lifted scores of Americans out of poverty, they were largely inaccessible to African Americans (Shapiro, 2004). This "racialization of state policy" within the U.S. has limited the opportunities for and created major barriers to accumulation of wealth by Blacks throughout American history (Oliver & Shapiro, 1995).

### Economic

From an economic perspective, there are several possible explanations for racial inequality in wealth accumulation. First, Blacks have historically earned less than Whites, resulting in less savings and asset accumulation. The earning gap has an additional effect of different social security and pension earnings during retirement (Wolff, 1992). Second, Blacks on average come from families who are less well off. Consequently, they benefit from lower levels of inheritance when compared to Whites. Third, Blacks may engage in different patterns of consumption with lower propensities to save. Explanations for different saving patterns include lower permanent income, higher health expenditures among Black families, different spending preferences, and participation in means tested social insurance programs. Fourth, fewer Blacks invest in equities and other historically higher return investments (Wolff, 1992). Finally, Blacks have lower levels of investment in human capital, such as education, skill acquisition, and employment experience (Blau & Graham, 1990; Brimmer, 1988; Du Bois, 1935; O'Neill, 1990; Smith, 1995; Wolff, 1992).

### Sociological

While economic factors can be useful explanations of racial disparity in wealth, they may overlook social context and underlying reasons why Whites and Blacks differ in their ability to accumulate wealth. In omitting considering social context, we may miss the fact that Whites and Blacks have faced appreciably different asset building opportunities. Most fundamentally, Blacks continue to face enormous obstacles in accessing quality education, as well as quality jobs and job training (Conley, 1999; Oliver & Shapiro, 1995). There is a high correlation between educational quality and the economics of a community (Shapiro, 2004); Blacks more often live where public schools are of low quality. And racial discrimination in the labor market continues to constrain the earning potential of Blacks compared to Whites. Regarding the American Dream of home ownership, segregation of residential real estate, discriminatory mortgage lending practices, and discriminatory insurance coverage combine to limit the asset appreciation of homes in predominantly Black communities (Oliver & Shapiro, 1995). Moreover, for historical and social reasons, Blacks are less likely than Whites to use their savings to invest in financial instruments with higher financial returns, such as stocks and bonds, contributing to long-term wealth inequality. This pattern of low participation in financial securities among Blacks can be explained in part by limited knowledge and information. Information regarding the stock market may be obtained through business contacts and social networks in which Blacks participate less than Whites. As a result, Blacks more often invest in familiar assets such as saving accounts and homeownership (Keister, 2000).

Conley (1999) advances this discussion by examining how much of the racial gap in wealth can be explained by inheritance and how much is due to the current state of African Americans. Shapiro (2004) further explores this theme, identifying *transformative assets* as key to individual and family ability to move beyond mere survival. Transformative assets include not only bequests, but also a transfer of assets among the living such as financial assistance for mortgage down payments and higher education or during periods of illness or unemployment. Assets provide a safety net for families in transition or crisis. Without such a net, a family's economic status may remain stagnant or decline (Shapiro, 2004).



Inheritance alone does not ensure accumulation of wealth by Blacks. Research indicates that among those who receive inheritances, Whites' inheritances are seven times larger than Blacks' inheritances. Shapiro (2004) believes that in-depth study of intergenerational transfers of assets may provide clues to strategies for assisting today's families in establishing bequests for future generations and potentially narrowing the wealth gap over the long-term.

### Institutional

An institutional perspective suggests that characteristics of financial, housing, and other markets, combined with characteristics of public policies and community programs, play an important role in shaping savings and wealth accumulation. From this perspective, some of the racial gap in wealth is the result of differential access, conditions, and experience in wealth building institutions (Oliver & Shapiro, 1995; Sherraden, 1991).

One example of limited access and unequal opportunities is the institutional discrimination in housing and lending markets, where Blacks face lower access to the home-mortgage interest subsidy, to mortgages, and to homeownership compared to Whites (Munnell, Tootell, Browne, & McEneaney, 1996; Oliver & Shapiro, 1995). This discrimination can be seen in the different rates of homeownership between Whites and Blacks, which is a key indicator of racial inequality in the United States. Recent statistics indicate that while 74% of White households are homeowners, only 48% of Black households are homeowners (Shapiro, 2004). Despite anti-discrimination laws and regulations, which were implemented in the 20<sup>th</sup> Century, studies find that mortgage and real estate discrimination still occurs today. A large study conducted by the Federal Reserve Bank of Boston reports that when equally qualified Whites and Blacks apply for a home loan, Black applications are rejected 80% more often than White applications (Ladd, 1998; Munnell et al., 1996; Shapiro, 2004). Moreover, while qualifying for a home loan, Blacks pay on average one-third of a percent higher interest rate than Whites. This limits the housing market available to Blacks and reduces their ability to accumulate assets and to increase wealth in comparison to Whites.

Further support for the institutional perspective can be found in the "sedimentation of racial inequality" explanation offered by Oliver and Shapiro (1995). This refers to the "layering effect" of historical structural discrimination in wealth accumulation among African Americans. Indentured servitude, segregated schooling and wage disparities, and other factors have contributed to a generational cycle of poverty, resulting in a "sedimentary" layer of inequality, with Blacks imbedded in America's lowest levels of the social structure (Oliver & Shapiro, 1995). In contrast, Whites have benefited from generational cycles of advantage, contributing to an ever-increasing wealth gap between Whites and Blacks.

Recently, a variety of public policies have been developed to promote wealth ownership among low-income households. One policy to encourage savings and asset accumulation is Individual Development Accounts (IDAs). As mentioned above, the purpose of this study is to examine the experience and outcomes of African American people involved in IDA programs. The following questions will be addressed: 1) Is there a difference in savings outcomes between African Americans and Caucasians in IDAs? 2) What are the specific experiences of African Americans in IDA programs, and are they different from the experiences of Whites? Specifically, are different variables associated with saving performance for Blacks and Whites? 3) What are

policy and program implications of these research findings that might promote asset building for African Americans?

## Methods

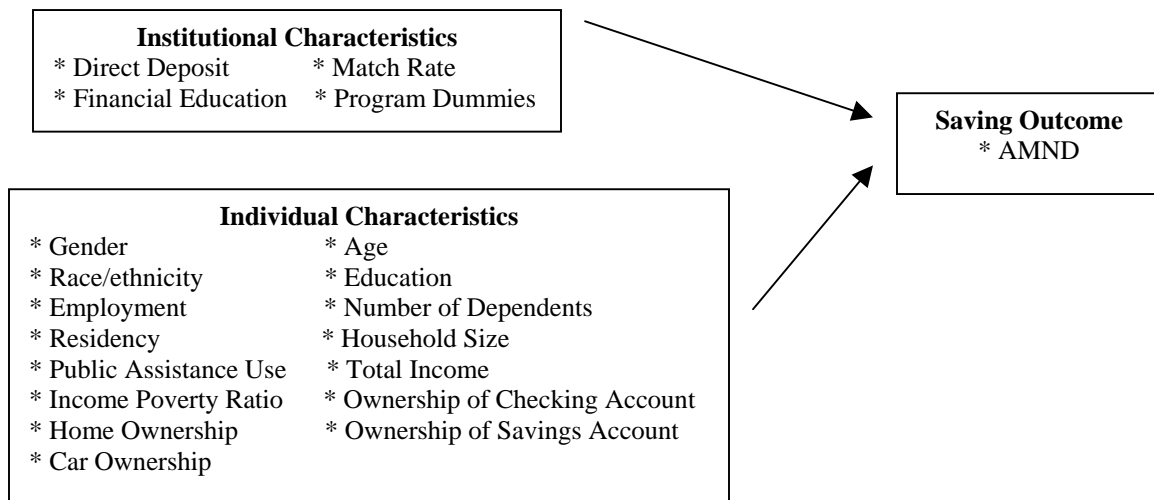
### *Data and Sample*

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 (Sherraden et al., 2000). 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), with follow-up research through 2003. ADD employed a multi-method research design to gather information on many aspects of IDA programs and participants in order to inform assets-based policy outside of ADD. 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, and the median participant is at about 100% of the income-poverty guideline. IDA savings are designated for specific purposes, usually home purchase, post-secondary education, or microenterprise.

The data set used in this study is from monitoring all savings deposits and withdrawals for all ADD participants for the full IDA program period. Program staff collected both program and participant data with the Management Information System for Individual Development Accounts (MIS IDA). Savings data are from financial institutions and thus are highly accurate. This may be the most detailed available data set on savings patterns among low income families (Sherraden, 2002).

### *Theoretical framework*

The theoretical framework emphasizes both institutional and individual characteristics and their effects on saving outcome, as illustrated below.



### *Measures*

Participants in this analysis include all enrollees, including those who have dropped out of the program without a matched withdrawal. The main dependent variable in this study is a saving outcome, Average Monthly Net Deposit (AMND). AMND is defined as net deposits per month and is calculated as deposit plus interest minus unmatched withdrawals, divided by the number

of months of participation. Thus, AMND controls for the length of participation in the program. AMND is the key measure of savings outcomes in this study because greater AMND implies greater savings and assets accumulation.

The independent variables used include a wide range of participant demographic, financial, and program characteristics. Including: gender, age, residency, household size, number of dependents, race, education, employment status, receipt of public assistance, total income, income poverty ratio, ownership of checking account, ownership of savings account, car and homeownership. In addition the following institutional characteristics are included: direct deposit, hours of financial education, match rate, and program dummies.

### *Analyses*

Descriptive statistics were first generated to compare the individual characteristics of the two groups (African American vs. Caucasian). Next, in order to answer the first question (difference in savings outcomes between African Americans and Caucasians in IDAs), an Ordinary Least Squares (OLS) regression analysis controlling for a wide range of factors that might affect savings outcomes was used. The unstandardized regression coefficients estimated by this technique give the estimated changes in AMND (in units of dollars of net deposits per month) given a unit increase in a given characteristic, holding all the other independent variables constant.

Then, with the aim of exploring unique predictors of AMND for African Americans and Caucasians in IDAs, two separate OLS regressions analyses were conducted for each sub sample: African American (n=1,100) and Caucasian (n=884). The second purpose of this analysis was to examine if the regression slopes in these two separate analyses are statistically different from each other. Therefore, the Welch-Satterthwaite *t* test was used. The Welch-Satterthwaite *t* test is an alternative to the pooled-variance *t* test, because the mean squared of the residuals for Blacks (347.96) is statistically different from the mean squared of the residuals for Whites (529.16). The formula is:

$$\frac{B_1 - B_2}{\sqrt{SE_1^2 + SE_2^2}}$$

To verify these results an additional regression was executed to test interaction effects between Blacks and Whites with the significant independent variables from the two separate regression analyses.

## Results

Table 1 shows characteristics of African American and Caucasian IDA participants. Compared with Whites, Black participants in ADD are more likely to be female (85% vs. 75%), to have a higher household size (3.3 vs. 3.0), with more dependents (2.6 vs. 2.1). Blacks are also much more likely to be single (62% vs. 36%). In addition, Black participants are more likely than White participants to be on public assistance currently (13% vs. 8%) or in the past (47% vs. 31%). Black participants also have lower levels of homeownership (8% vs. 27%) and car ownership (53% vs. 81%) compared with Whites, and are less likely to have a checking account (54% vs. 75%). Overall, these descriptive characteristics suggest that Black participants in ADD are somewhat more disadvantaged than White participants in ADD.

**Table 1. Participants Characteristics of White and Black IDA participants**

Variables	Whites	Blacks
<b>Continues variables</b>	<b>Mean (std.dev)</b>	<b>Mean (std.dev)</b>
Age	36.4 (11)	35.3(9.7)
Number of dependents	2.1 (1.1)	2.6 (1.3)
Household size	3.0 (1.6)	3.3 (1.7)
<b>Categorical variables</b>	<b>Percent</b>	<b>Percent</b>
<b>Gender</b>		
Female	75	85
<b>Residency</b>		
Rural	29	4
<b>Marital Status</b>		
Married	29	12
Single	36	62
Divorce/Separated	33	23
Widowed	2	3
<b>Education</b>		
Did not completed high school	12	17
Completed high school or GED	24	26
Attended college	36	39
Completed 2-year degree	5	3
Graduated from college	12	9
Completed 4-year degree or more	10	5
<b>Employment</b>		
Employed full-time	55	62
Employed part-time	29	19
Not working	6	3
Unemployed	3	6
Student, not working	4	7
Student, also working	3	3

**Table 1 (continued). Participants Characteristics of White and Black IDA participants**

<b>Categorical variables</b>	<b>Percent</b>	<b>Percent</b>
<b>Receipt of public assistance</b>		
Currently on TANF	8	13
Formally on TANF	31	47
<b>Asset ownership</b>		
Home ownership	27	8
Car ownership	81	53
<b>Banking experience</b>		
Ownership of checking account	75	54
Ownership of saving account	52	51

The results of the multiple OLS regression analysis indicate that the model was significant [ $F(49, 1947) = 13.72$   $p < .001$ ], and explains approximately 24 percent of the variance in AMND (adjusted  $R^2 = .24$ ). Several institutional and individual variables are significantly related to AMND. These variables included direct deposit, financial education, match rate, race, education, employment, ownership of checking account, and assets ownership.

The main focus of this paper is the different experiences of African Americans and Caucasians in IDA programs. The results of the multiple regression indicate that while low income African Americans save in IDA programs, they save smaller amounts than Caucasians. Specifically, being African American is associated with a \$3.04 decrease in AMND ( $p < .001$ ) compared to being Caucasian.

**Table 2: OLS Model Predicating the Effects of Individual and Institutional Variables on AMND**

<b>Independent Variables</b>	<b>Coefficients</b>	<b>p-value</b>
<b>Financial education</b>	0.69	0.00
<b>Direct deposit</b>	4.58	0.03
<b>Match rate</b>		
1:1	-5.97	0.02
2:1	-9.70	0.00
3:1	-5.79	0.10
(4:1 to 7:1)		
<b>Marital Status</b>		
Single	-0.68	0.69
Divorce/Separated	0.63	0.72
Widowed	0.57	0.88
<b>Race/ Ethnicity</b>		
African American	-3.04	0.03
Asian American or Pacific Islander	10.45	0.00
Latino or Hispanic	3.45	0.11
Native American	-5.94	0.06
Other ethnicity (Caucasian)	4.17	0.18
<b>Gender</b>		
Female (Male)	0.47	0.73
<b>Age</b>	0.05	0.36
<b>Residency</b>		
Rural (Urban)	-3.09	0.17
<b>Household composition</b>		
Household Size	0.38	0.51
Number of Dependents	-1.16	0.07
<b>Education</b>		
Completed 2-year degree	0.55	0.86
Graduated from college	4.38	0.04
Attended college	1.66	0.30
Completed 4-year degree or more	10.00	0.00
Completed high school or GED (Did not completed high school)	0.52	0.75

**Table 2 (continued). OLS Model Predicating the Effects of Individual and Institutional Variables on AMND**

<b>Independent Variables</b>	<b>Coefficients</b>	<b>p-value</b>
<b>Employment</b>		
Employed full-time	1.63	0.50
Employed part-time	3.52	0.15
Not working	-0.09	0.98
Student, not working	6.37	0.04
Student, also working (Unemployed)	8.50	0.02
<b>Receipt of public assistance</b>		
Formally on TANF	-0.46	0.70
Currently on TANF	-0.99	0.63
<b>Income</b>		
Total income	0.26	0.09
Income poverty ratio	-0.57	0.73
<b>Banking experience</b>		
Saving account	0.06	0.96
Checking account	4.81	0.00
<b>Asset ownership</b>		
Car ownership	2.73	0.02
Home ownership	8.26	0.00
N	1996	
R <sup>2</sup>	0.26	

In order to examine the unique predictors of AMND for African Americans and Caucasians in the IDAs, an additional two OLS regressions were executed. The first regression model was with only Caucasian participants (n=762) and the second regression model was with only African American participants (n=908). Results from these two individual regressions indicate that hours of financial education, and ownership of a checking account are associated with AMND for both the Black and White groups. Match rate is associated with AMND among African American participants. For Caucasians, several additional variables are associated with AMND; these include: marital status, household size, number of dependents, level of education, homeownership, and car ownership.



**Table 3. OLS Models Predicating the Effects of Individual and Institutional Variables on AMND for White and Black Participants**

<b>Independent Variables</b>	<b>Whites</b>		<b>Blacks</b>	
	<b>Coefficients</b>	<b>p-value</b>	<b>Coefficients</b>	<b>p-value</b>
<b>Financial education</b>	1.05	0.00	0.51	0.00
<b>Direct deposit</b>	4.95	0.14	4.27	0.15
<b>Match rate</b>				
1:1	-4.10	0.34	-6.98	0.08
2:1	-7.92	0.06	-10.28	0.01
3:1	-0.59	0.92	-8.97	0.04
(4:1 to 7:1)				
<b>Marital Status</b>				
Single	5.12	0.08	-4.19	0.09
Divorce/Separated	7.96	0.01	-3.59	0.17
Widowed (Married)	5.37	0.45	0.88	0.86
<b>Gender</b>				
Female (Male)	1.80	0.43	1.48	0.46
<b>Age</b>	-0.07	0.45	0.11	0.13
<b>Residency</b>				
Rural (Urban)	-3.24	0.32	-0.08	0.98
<b>Household composition</b>				
Household Size	2.51	0.03	-0.44	0.53
Number of Dependents	-4.42	0.00	-0.37	0.60
<b>Education</b>				
Completed 2-year degree	-3.12	0.50	6.74	0.10
Graduated from college	5.31	0.17	3.75	0.18
Attended college	0.74	0.81	3.66	0.07
Completed 4-year degree or more	9.86	0.01	5.56	0.09
Completed high school or GED (Did not completed high school)	-2.33	0.45	2.64	0.21
<b>Employment</b>				
Employed full-time	0.83	0.87	2.03	0.48
Employed part-time	4.63	0.37	2.12	0.47
Not working	2.50	0.68	-5.17	0.26
Student, not working	9.25	0.14	4.16	0.24
Student, also working (Unemployed)	11.77	0.10	5.74	0.19
<b>Receipt of public assistance</b>				
Formally on TANF	-1.89	0.39	0.18	0.91
Currently on TANF	-0.66	0.87	-0.72	0.76

**Table 3 (continued). OLS Models Predicating the Effects of Individual and Institutional Variables on AMND for White and Black Participants**

<b>Independent Variables</b>	<b>Whites</b>		<b>Blacks</b>	
	<b>Coefficients</b>	<b>p-value</b>	<b>Coefficients</b>	<b>p-value</b>
<b>Income</b>				
Total income	0.07	0.79	0.12	0.52
Income poverty ratio	0.58	0.84	0.05	0.98
<b>Banking experience</b>				
Saving account	-0.27	0.88	0.07	0.96
Checking account	6.83	0.00	3.59	0.01
<b>Asset ownership</b>				
Car ownership	5.43	0.02	1.78	0.21
Home ownership	10.34	0.00	4.15	0.09
n	762		908	
R <sup>2</sup>	0.26		0.20	

In order to test if the regression slopes in these two separate analyses are statistically different from each other, the Welch-Satterthwaite *t* test was used. The results indicate that the regression slopes for the following variables are statistically different between the Black and White groups: financial education, marital status, household size, the number of dependents, and home ownership. Similar results were obtained when an additional regression was executed with the interaction effects between the Blacks and Whites and significant independent variables from the two separate regression analyses. To avoid repetition, only the results of the Welch-Satterthwaite *t* test are presented below (the regression results with the interaction effects can be sent upon request).

**Table 4: The Welch-Satterhwaite *t* test for the Differences in Regression Slopes**

<b>Independent Variables</b>	<b>Whites</b>		<b>Blacks</b>		<b>t Value</b>
	<b>Coefficients</b>	<b>S.E.</b>	<b>Coefficients</b>	<b>S.E.</b>	
<b>Financial education</b>	1.05	0.20	0.51	0.09	-2.49
<b>Direct deposit</b>	4.95	3.32	4.27	2.94	-0.16
<b>Match rate</b>					
1:1	-4.10	4.27	-6.98	3.98	-0.49
2:1	-7.92	4.24	-10.28	3.82	-0.41
3:1	-0.59	5.84	-8.97	4.47	-1.14
(4:1 to 7:1)					
<b>Marital Status</b>					
Single	5.12	2.92	-4.19	2.44	-2.45
Divorce/Separated	7.96	3.10	-3.59	2.62	-2.85
Widowed	5.37	7.15	0.88	4.89	-0.52
<b>Gender</b>					
Female	1.80	2.27	1.48	2.00	-0.11
(Male)					
<b>Age</b>	-0.07	0.10	0.11	0.07	1.52
<b>Residency</b>					
Rural	-3.24	3.27	-0.08	4.20	0.59
(Urban)					
<b>Household composition</b>					
Household Size	2.51	1.17	-0.44	0.70	-2.16
Number of Dependents	-4.42	1.48	-0.37	0.71	2.46
<b>Education</b>					
Completed 2-year degree	-3.12	4.67	6.74	4.15	1.58
Graduated from college	5.31	3.88	3.75	2.78	-0.33
Attended college	0.74	3.06	3.66	2.02	0.80
Completed 4-year degree or more	9.86	3.88	5.57	3.31	-0.84
Completed high school or GED	-2.33	3.12	2.64	2.09	1.33
(Did not completed high school)					
<b>Employment</b>					
Employed full-time	0.83	5.23	2.03	2.89	0.20
Employed part-time	4.63	5.17	2.12	2.92	-0.42
Not working	2.50	5.98	-5.17	4.56	-1.02
Student, not working	9.25	6.32	4.16	3.50	-0.70
Student, also working	11.77	7.19	5.74	4.37	-0.72
(Unemployed)					
<b>Receipt of public assistance</b>					
Formally on TANF	-1.89	2.19	0.18	1.50	0.78
Currently on TANF	-0.66	4.20	-0.72	2.36	-0.01

**Table 4 (continued). The Welch-Satterthwaite *t* test for the Differences in Regression Slopes**

Independent Variables	Whites		Blacks		t Value
	Coefficients	S.E	Coefficients	S.E	
<b>Income</b>					
Total income	0.07	0.28	0.12	0.19	0.14
Income poverty ratio	0.58	2.88	0.05	2.23	-0.15
<b>Banking experience</b>					
Saving account	-0.27	1.87	0.07	1.40	0.14
Checking account	6.83	2.21	3.59	1.45	-1.23
<b>Asset ownership</b>					
Car ownership	5.43	2.40	1.78	1.42	-1.31
Home ownership	10.34	2.32	4.15	2.44	-1.84

Hours of financial education attended by participants is statistically related to AMND and has different associations for Blacks than for Whites. Specifically, for White participants, each additional hour is associated with an increase in AMND of \$1.05, and for Black participants each additional hour is associated with an increase in AMND of \$0.51.

An interesting difference appears in the interaction of marital status, savings and race. Among White participants single and divorced IDA participants are saving more than the married group. For Blacks it is the opposite; single and divorced Black participants are saving less than the married participants. Specifically, for Whites, being single is associated with a \$5.12 higher AMND and being separated is associated with a \$7.96 higher AMND compared to married group. But for Blacks, being single is associated with a \$4.19 decrease in AMND and being divorced is associated with a \$3.59 decrease in AMND compared to the married group.

Household size has a statistically different association for Whites when compared with Blacks. For Whites, each additional person in the household is associated with a \$2.51 increase in AMND. For Blacks on the other hand, each additional person in the household is associated with a \$0.44 decrease in AMND.

The dependency ratio, which is the ratio between the number of household members per adult, has a statistically stronger association for Whites than for Blacks. For Whites, a unit increase in the dependency ratio is associated with a \$4.42 decrease in AMND. For Blacks, a unit increase in dependency ratio is associated with a \$0.37 decrease in AMND.

Finally, results of the Welch-Satterthwaite *t* test indicate that the regression slopes of being a homeowner for Whites and Blacks are marginally significant using a two-tail significant level, and are significant using a one-tail significance level. Specifically, homeownership is associated with higher AMND for both Whites and Blacks, but the association of owning a home is statistically stronger for Whites than for Blacks. Owning a home is associated with a \$10.34 increase in AMND for Whites compared with a \$4.15 increase in AMND for Blacks.

## Summary, Discussion, Conclusions

Asset-building for poor families and families of color is a relatively new idea (Wolff, 2001a). Assets may lead to positive outcomes for individuals, families and communities; they may create opportunities for advancement, and may enable the poor to improve expand their economic, political, and social positions (World Bank, 2001). In his study of racial disparities in wealth, Wolff (2001a) finds that, even if the racial income gap is closed, it might take as long as two generations to close the wealth gap. Public policy can accelerate this process, he argues, by using asset building policies for low wealth families who are willing to work and save (Wolff, 2001a). From this perspective, research that could contribute to narrowing the racial gap is a priority.

This study examines the saving performances of African Americans compared to Caucasians in IDAs. Overall, the results indicate that low-income African Americans save in IDA programs. The Average Monthly Net Deposits (AMND) of African Americans in IDAs is \$13.80. With an average match rate of 2:1, the average participant can accumulate \$41.10 per month or approximately \$500 a year. These results suggest that African Americans, when provided structured opportunities and incentives, have the willingness and ability to save and accumulate assets.

African Americans, however, are saving smaller amounts than Caucasians. The results of the OLS regression show that African Americans had significantly lower AMND than Caucasians. In order to understand the experiences of saving among African American and Caucasian IDA participants, we further examined factors that may be associated with saving performance for these two groups. Results of the two separate regression analyses suggest that mostly individual characteristics are associated with AMND among Caucasians; the significant variables are marital status, household size, number of dependents, education, assets ownership, having a checking account, and financial education. In contrast, mostly institutional characteristics are associated with AMND among African Americans; the significant variables are checking account ownership, financial education, and IDA match rate. Among African Americans, there is little evidence that individual characteristics -- even marital status, number of dependents and education -- are associated with savings performance.

These overall results may reflect longstanding historical and sociological conditions. As noted above, Blacks have historically and continuing to the present day been blocked, hindered, shortchanged, and swindled in a wide range of institutional forms of asset accumulation, including schooling, business property ownership, home ownership, employment, employment-based retirement and other benefits, and financial investments. Under these circumstances, it may not be surprising that, in a program of IDAs, it is the institutional variables that most affect the saving performance of Blacks. Institutional opportunities may have greater impacts in a population where such opportunities have been less available in the past. In contrast, the variables explaining White saving performance are mostly individual level variables. Where there have been more institutional opportunities for asset accumulation in the past, individual differences may matter more.

These results may have important applied implications. If it is the case that institutional structures associated with IDA programs have more positive effects on saving performance among African Americans than among Whites, IDA programs might be able to target Blacks differently from Whites in IDA program design and implementation. Possibilities include increased financial education, higher match rates, and assisting African Americans to navigate the banking system.

Regarding financial education, IDA programs provide classes for participants to increase their knowledge and understanding regarding saving, and to suggest ways to help them save. This study finds that more hours of financial education are associated with higher savings. This result is consistent with other studies reporting that financial management programs can improve financial knowledge and behaviors of the low-income population (Caskey, 2001; Clancy, Grinstein-Weiss, & Schreiner, 2001; Jacob, Hudson, & Bush, 2000).

While both African Americans and Caucasians had received the same amount of financial education (10.5 hours on average) this study finds that financial education has a somewhat stronger association with savings for Whites than for Blacks. This may suggest that Black and White participants might have different cultural outlooks about saving, different knowledge base, different learning styles, and/or different confidence or commitment to financial education in the form it is being offered in IDA programs. It could be that the content and delivery of financial education is not well suited to Blacks. Further studies on the content and delivery of financial education is needed in order to examine these differences, with the aim of designing financial education classes to meet the needs of African American participants.

Findings on match rate and IDA savings among African Americans have straightforward implications. Since higher match rates appear to lead to higher savings among Blacks, matching funds might be allocated to obtain the greatest impact. This is especially true if the IDA program has an agenda of beginning to redress large historical imbalances in asset accumulation by race.

Regarding having a checking account, as we have indicated above, there are both historical and current reasons for Blacks to be culturally distant from and sometimes untrusting of mainstream financial institutions in America. This distance and distrust may have incalculable long-term costs. The findings on having a checking account and IDA savings are perhaps a small window onto these costs. When people do not have prior experience with banking, an IDA is less familiar, and saving performance is lower. Efforts should be made to create financial institutions that serve the needs of Blacks, and to reach out to get more low-income Blacks “banked.” The expected payoff in the context of this study would be higher IDA savings, but there would likely be other positive long-term payoffs as well.

A closer look at the differences of the regression slopes of the two separate analyses indicate that several other independent variables may have larger effects on saving outcomes for Whites than for Blacks. These variables include marital status, age, household size, dependency ratio and homeownership.

Marital status seems to have different associations with IDA saving for Blacks and Whites. Single and divorced Black participants may face greater difficulties in saving than Black participants who are married. Among White participants, this is not the case; single and divorced participants are saving more than the married group. These are puzzling findings for which we hesitate to offer an explanation. However, we can conclude that IDA program administrators should target single and divorced Black participants more carefully, and offer greater support.

Household size also seems to have different effects on savings of White vs. Black families. For White families larger household size is associated with more savings, and for Black families larger household size is associated with less savings. A greater dependency ratio, on the other hand, is associated with a decrease in savings for both White and Black families. These results suggest that, among White families, a larger household on average indicates more adults and therefore more resources and higher income and savings.

For Blacks there is somewhat different situation. The majority of Black families in this study are single families (62%), with bigger households (3.31 vs. 2.99) with more dependents (2.6 vs. 2.1) compared to White families. These statistics suggests that there are more single parent families with two or more children among Black participants than among White participants. In other words, among Black families, a larger household on average indicates more children in relation to adults, and such households find it harder to save. IDA policy and programs could take into consideration numbers of adults and children when designing IDA programs, especially in the setting of saving expectations and matching amounts.

Finally, homeownership is associated with higher savings for both Whites and Blacks, but the association of owning a home is statistically stronger for Whites than for Blacks. This finding may reflect discrimination in housing markets, where Blacks face lower access to homeownership and pay higher interest rates and higher insurance costs, (Conley, 1999; Ladd, 1998; Munnell et al., 1996; Oliver & Shapiro, 1995; Shapiro, 2004).

America is in many places a segregated nation. As noted at the beginning of this paper, property values and home equity do not increase as rapidly in predominantly Black communities as in predominantly White communities. This stark fact alone would be sufficient to explain the different associations of home ownership and IDA saving performance by race. Homeownership is positive, but more positive for Whites. All else equal, Blacks pay more in interest and insurance payments for home ownership, and have lower asset appreciation, and as a result have lower discretionary income (Shapiro, 2004). This lower level of discretionary income may mean that Blacks who are homeowners and participate in IDAs have less money than comparable Whites to put into their accounts.

Limitations of this study are important to note. First, participants in IDA programs in ADD are program-selected because of eligibility criteria, and self-selected because they volunteer to participate in the program (Schreiner et al., 2001). Therefore, ADD participants are different in some aspects when compared with the U.S. general low-income population. Therefore, results in this study may not represent how the low-income population outside ADD would perform in IDAs. Second, because we cannot compare savings performance of ADD participants to non-

ADD participants, it is not possible to attribute saving outcomes to participating in IDAs. An experimental design in ADD may shed more light on this in the future.

Despite these limitations, results of this study suggest that African American participants can and do save in IDA programs; however, they are saving smaller amounts than Caucasians. This result can and should be used by policymakers and program administrators to design IDA programs to enable African Americans to save and accumulate assets more effectively, and narrow the gap in saving between African Americans and Caucasian in IDAs.

For perspective, the reported saving performance by Blacks in IDAs should not be viewed as a negative. Real savings and assets are accumulating for Black IDA participants. At a societal level, given very unequal wealth accumulation for Blacks compared to Whites, a large-scale IDA program with the outcomes reported in this study would narrow the proportionate wealth gap between Blacks and Whites (Schreiner et al., 2001). However, this conclusion, while positive, is not good enough. Saving and asset building policies and programs should aim for similar impacts by race. Where there are shortfalls from this standard, additional research and corrective action should be the next agenda. More detailed research is needed on all aspects of IDA program design, staffing, and operations, and how participants of different racial backgrounds think about, participate, and perform in saving and asset accumulation in this context.



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