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Using Individual Development Accounts to Save for a Home: Are There Differences by Race?

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Abstract

Research indicates that homeownership is a key variable in wealth accumulation. Using data from the American Dream Demonstration, this study examines the performance of low-income blacks and whites saving for homeownership through Individual Development Accounts (IDAs), a matched saving program. Results show black IDA participants saved smaller amounts and less frequently. Furthermore, findings suggest institutional variables have different associations with savings for blacks and whites. Implications for policymakers and program administrators are discussed regarding differential targeting of race groups in the design and implementation of programs aimed toward increasing savings and assets accumulation for low-income and minority households.

Keywords: Racial inequality; savings performance; matched savings accounts; IDAs; homeownership

Homeownership is a valuable and desirable goal for most Americans and is considered an integral part of the American Dream (Scanlon 1999). Beyond its iconic status, homeownership represents a significant financial milestone and can be an important vehicle for ongoing savings and wealth accumulation (Oliver 2001). With home equity accounting for 44 percent of net worth in U.S. households and 60 percent of total wealth among the American middle class, owning a home is arguably one of the most important means for American families to accumulate wealth (Oliver 2001; Wolff 2002). Nevertheless, wealth accumulation for low-income minority families is limited at best. However, research indicates that accumulation increases significantly for these families through homeownership, and, in some instances, is the only means of wealth accumulation for low-income minority families (Boehm and Schlottmann 2004).

In addition to contributing to wealth accumulation, empirical studies point to the many positive psychological, sociological, and health outcomes associated with homeownership. The beneficial aspects of homeownership include higher life satisfaction, more active citizenship, higher community stability, better performance of children in school, and reduction in marital violence and alcohol use (Scanlon 1998; Segal and Sullivan 1998). In addition, homeowners are more likely to participate in volunteer work, be involved in local government, be more aware of the actions of their political leaders, and maintain their properties at a higher standard than nonhomeowners (DiPasquale and Glaeser 1999).

A key indicator of racial inequality in the United States is the different rates of homeownership between whites and blacks. Despite the fact that the rate of homeownership among the total U.S. population is at an all time high of 69 percent, with a 79 percent increase in homeownership among low-income families, a gap remains and appears to follow lines of

income and, more substantially, lines of race and ethnicity (Denton 2001; Gabriel and Rosenthal 2005; Retsinas and Belsky 2002). Recent statistics indicate that although 76 percent of white households are homeowners, only 49 percent of black households own their own home (American Housing Survey [AHS] U.S. Census Bureau 2004).

Although homeownership rates have risen dramatically in the past decade for the general U.S. population, low-income individuals, particularly low-income African Americans, continue to face challenges in achieving this goal, including discrimination, credit barriers, and meeting requirements for a mortgage down payment. Policy makers face a different challenge: developing inclusive policies that promote asset accumulation among all income and racial groups. One way to address these challenges is to examine the experiences of low-income participants in programs designed to help with saving and accumulation of assets while providing equal opportunities to all racial groups. This paper presents a discussion of the variables associated with the homeownership gap and offers support for the argument that Individual Development Accounts (IDAs) may be an effective means toward narrowing this gap.

Implemented by community-based organizations, IDA programs partner with financial institutions, and are designed to assist low-income families in saving and building wealth toward a more secure financial future. IDAs promote savings among participants through a program of matching funds. Participants' savings are matched on a 1:1, 2:1, 3:1 or higher ratio. Funds deposited in an IDA usually may be used for purchasing a first home, paying for post-secondary education, or for starting a microenterprise. IDA programs offer low-income participants the opportunity to prepare for homeownership in two important ways, by providing financial education and offering matched savings accounts. The matching funds come from private sources (e.g., charitable organizations or foundations) or from public sources.

Background

Although many factors contribute to the racial wealth gap (i.e., historical inequities, homeownership disparities resulting from lending discrimination and residential segregation, and savings constraints), no single factor can exclusively explain this gap. Through a review of the literature, we present each of the factors for consideration.

Historical Explanations of Wealth Gap

Wealth accumulation among blacks has been stagnated throughout U.S. history. From the institution of slavery that excluded blacks from the legal right to asset ownership to the civil rights movement, where opportunities emerged but remained limited to the fact that discrimination continues to exist in the form of wage disparities, historical barriers to saving and asset accumulation have impacted African Americans (Oliver and Shapiro 1995). However, the wealth gap between blacks and whites that exists today may not be exclusively the result of income differences, but rather the consequence of cumulative effects of low wages, poor schooling, and segregation, as well as government policies that have historically either not included blacks or have not been as accessible to blacks as to whites (Oliver and Shapiro 1995; Shapiro 2004).

Inequality in Homeownership

A variety of federal policies and initiatives have been implemented since the 1930s with the intention of turning the dream of homeownership into a reality. Some of these measures include low-interest long-term mortgages, favorable changes in tax regulations, the GI Bill, and the establishment and work of the Veterans Administration and the Federal Housing Authority (Shapiro 2004). Despite such efforts, these homeownership opportunities have proven more

beneficial to white households than black households (Oliver 2001; Oliver and Shapiro 1995; Shapiro 2004).

Discrimination in Lending and Real Estate Markets

More recently, government and industry have attempted to improve access to homeownership through efforts including anti-discrimination laws and regulations in real estate and lending markets. Though these policies helped to narrow the racial gap in the 1990s, studies show that mortgage and real estate discrimination, as well as residential segregation, continue to occur. For example, fair housing laws passed in the late 1960s were intended to make it possible for blacks to purchase homes in white neighborhoods. However, retrospective studies show that as the percentage of black residents in a neighborhood increases, housing values decrease (Shapiro 2004).

Loan denial. The Boston Fed study found that when equally qualified whites and blacks applied for a home loan, blacks' applications were rejected 60 percent more often than whites' applications (Ladd 1998; Munnell, Tootell, Browne, and McEneaney 1996). Similarly, Charles and Hurst (2002) found that mortgage applications made by blacks were rejected more often (nearly 8 percentage points) than applications made by white applicants. The most frequently given reasons for loan denial included the applicant's debt-income ratio and poor credit history. However, credit barriers accounted for not more than 5 percentage points of the white-minority homeownership gap (Retsinas 2002). Other studies have shown that blacks who meet mortgage loan qualifications, including debt-income ratios and credit worthiness, experience loan rejection at a rate 3 times higher than the rejection rate among whites with the same qualifications. Consequently, due to fear of loan denial despite their comparable loan qualifications, blacks were 3.7 times less likely to apply for home loans (Ards and Myers 2001).

Blacks who are approved for a home loan pay higher interest rates than whites by about a third of a percent on average (Krivo and Kaufman 2004; Shapiro 2004). Although this difference may not appear to be significant at first, when added over the life of a median-value thirty-year loan, it means that blacks pay an average of $5,149 more than whites; money that could have been invested elsewhere for higher returns. In addition, blacks are more likely to hold government-insured loans (i.e., FHA, VA, or FHAM loans) that typically cost more than conventional loans (Krivo and Kaufman 2004).

Predatory lending. In addition to borrowing constraints related to conventional loans, blacks often face further exploitation from predatory financial services. Research in North Carolina indicates that 3 times the number of payday lenders exist in predominantly black neighborhoods as compared to white neighborhoods. Interest rates on payday loans typically start at 391 percent, sending loan recipients into a spiral of debt (King, Li, Davis, and Ernst 2005).

Subprime lending, or high-cost lending, charges higher interest rates on loans to consumers with no credit history or those with impaired credit records. Although not all subprime lending is predatory, much of the lending efforts directed at minorities are questionable because they funnel these consumers toward higher interest, subprime loans even though they may qualify for loans with conventional terms. According to a 2004 study published by the Association of Community Organizations for Reform Now (ACORN), blacks were 3.6 times as likely as whites to receive a home purchase loan from a subprime lender and 4.1 times as likely as whites to receive a refinance loan from a subprime lender in 2002. Studies show that 30-50 percent of borrowers with subprime mortgages could have qualified for loans with more affordable terms (ACORN 2005). Through directing applicants to high-interest loans with

excessive fees, these predatory lending practices put consumers at risk of inability to meet such payment expectations, contributing to damaging credit ratings that are a vital part of qualifying for conventional home loans.

Saving: An Important Pathway to Homeownership

Although saving is not easy for anyone, it can be particularly difficult for low-income households. Individuals and households with low-income usually earn low wages, have limited resources, and face uncertainties regarding their future income. In addition, they often face difficulties in meeting day-to-day needs and, therefore, it is impossible for them to defer consumption (Birdsall, Pinckney and Sabot 1996). Having some savings and being able to set aside money for a down payment and mortgage payments is crucial in order for individuals to become homeowners. Research published by the Department of Housing and Urban Development (HUD) shows that lack of savings was the key barrier to homeownership (HUD 2005). Savings make it possible to improve credit ratings and to cover expenses of a home purchase such as down payment, closing costs, and associated fees.

Theories of Saving

Saving behavior is shaped by patterns of income and consumption. The life-cycle hypothesis (LCH) assumes that patterns of consumption and savings reflect an individual's age or stage within the life cycle, with a majority of saving occurring in the middle years. However, conditions apart from income, such as race, education, and family composition, may also affect saving behavior. Furthermore, more recent models provide evidence that low-income households do not exhibit the savings behavior predicted in original LCH models (Calvet and Comon 2003; Lusardi, Cossa, and Krupka 2001). When applying this model to low-income families,

consumption floors and asset limitations related to means-tested benefits should also be

considered; a consideration that may alter the shape of the saving pattern.

Institutional Variables

An institutional model of saving suggests that institutional factors greatly influence an

individual's ability to save (Sherraden 1991). In particular, five variables have been identified

that appear to contribute to an individual's saving and asset accumulation: access, information,

incentives, facilitation, and expectations (Sherraden, Schreiner and Beverly 2003). Individuals

with access to institutionalized mechanisms such as Individual Retirement Account or 401(k),

are more likely to have higher rates of saving than those who lack access. Information refers to

the extent to which people understand the process and rewards of saving. The more thoroughly

people understand the process, the more likely they are to be engaged in saving. Incentives

increase the likelihood that people will save. Individuals who are provided with saving

facilitation which make it easier for them to save, such as direct deposit, will more likely

increase their willingness to save. People who have specific savings expectations are more likely

to save more than those who do not have savings expectations.

Being Banked Versus Unbanked

Wealth accumulation often begins with account ownership or "being banked." Being

banked not only means having an established relationship with a bank, which can be crucial to

loan acceptance, but it also provides individuals with access to important information related to

homeownership. In fact, recent studies indicate that being banked contributes to a greater

likelihood of homeownership (Gabriel and Rosenthal 2005; Heflin and Patillo 2002). Families

are more likely to be unbanked if they are low-income, are minority, renters, or have children.

Often these families do not have bank accounts for one of two reasons: they cannot afford the

costs associated with opening and maintaining an account, or they distrust banking institutions (Schreiner et al. 2001). A 2004 study confirmed this argument and found that only 22 percent of low-income families (defined as having annual incomes of less than $25,000) had bank accounts (Barr 2004); a concerning change from a 1998 study showing only 44 percent of low-income black renters as unbanked (Retsinas 2002). Account holding is an important factor to consider when pursuing policies and programs to assist low-income families in achieving homeownership. Being unbanked makes it more difficult and costly to access a variety of financial services, including cashing paychecks, obtaining tax credits, accumulating savings, and establishing credit.

Kin-Related Constraints

Kin support. Research suggests that strong financial, emotional, and social ties exist within the kin and social networks of African American families (Heflin and Pattillo 2002). Therefore, it is important to consider kin-related effects on an individual's ability to save and on account ownership. In the seminal work of Carol Stack (1975), she found that because of the limited resources of the African American urban poor, they developed strong networks among family and friends. These close familial and social ties often included an obligation to help one another monetarily. Stack (1975) found that once a member in these families established a level of financial stability, they often relinquished these limited savings to help someone in the kin network. Similarly, McAdoo (1978) found that among African Americans, 92 percent felt an obligation to help a relative in need. As a result, helping kin or a member of their social network may limit the ability of a person to save.

Chiteji and Hamilton (2000) found that having siblings or parents who are poor significantly reduces the possibility of account ownership and asset accumulation. Because

blacks are more likely than whites to have poor siblings, this factor presents a greater challenge

and may explain some of the racial gap related to asset accumulation (Heflin and Patillo 2002).

Similarly, Heflin and Pattillo (2002) found that though kin characteristics accounted for a

significant racial gap (61 percent) in bank account ownership, kin-related effects associated with

homeownership do not vary significantly by race.

Down payment assistance. Shapiro (2004) found that a crucial factor in a young family's

ability to purchase a home is receiving down payment assistance from extended family. A larger

down payment reduces the amount of interest paid over the life of the loan. Making a down

payment of less than 20 percent of the mortgage cost forces the homebuyer to pay a higher

interest rate in order to secure the loan. Down payment assistance comes from families in one of

two ways: as a direct transfer of funds, such as a gift, or through an inheritance. Whites are 4

times more likely than blacks to receive direct down payment assistance from their parents

(Charles and Hurst 2002; Gittleman and Wolff 2004). Moreover, 24 percent of white households

inherit money compared with only 11 percent of black households, resulting in large racial gaps

in down payment assistance from parents (Wolff 2004). Although both white and black families

often receive some form of assistance, whites are more likely to receive direct financial

assistance (e.g., cash from their family) where blacks are more likely to receive indirect

assistance, such as free rent (Shapiro 2004).

IDAs: A Savings Tool for Homeownership

For low-income families, homeownership is likely the largest investment they will ever

make. Therefore, assistance and support for saving toward this goal is important and necessary.

Because low-income families have little income to put into saving for a home, these individuals

face a high opportunity cost when interested in buying a home. A recently released study (HUD

2004) indicates that a stronger correlation exists between wealth, credit, and homeownership than between income and homeownership. In fact, this study reports that an increase in wealth of as much as $5,000 significantly increases the likelihood of homeownership for low-income families. Furthermore, results indicate that minority families require higher levels of wealth to reach the same homeownership potential as white families.

Participation in an IDA program can help low-income individuals accumulate this needed wealth and potentially overcome obstacles associated with pursuing homeownership. By participating in an IDA, an individual establishes a relationship with a financial institution, opens an IDA account, and saves toward a down payment. Moreover, at the end of the IDA program saving period, the individual's contributions are matched. Through participation in the IDA program and setting aside money each month, IDA participants acquire the habit of saving that can help them later to meet monthly loan payments.

One of the merits of the IDA program is that participants in IDAs have to make a commitment and an effort to save on a regular basis toward the down payment, typically 3 to 4 years. Over the course of their program involvement, participants receive ongoing support from the staff of the community agency offering the IDA program. Low-income individuals may also participate in peer meetings where they discuss the challenges they face as well as provide support and practical suggestions for one another. In addition, IDA participants are required to attend financial education classes on general topics such as preparing a budget, money management, and establishing or rebuilding credit. Classes also address asset-specific financial education and instruct participants in how to save for a house, how to look for houses in the market, and how to work with real estate agents.

As the literature suggests, some empirical evidence and theoretical explanations identify race as an important predictor of the different rates in homeownership among the low-income population. The purpose of this study is to examine the differences between whites and blacks who are saving for a home in IDAs in terms of their individual characteristics and saving performance. Specifically, the following questions are addressed:

1)   Do white IDA participants who are saving for a home have better saving outcomes than black IDA participants who are saving for a home? While IDAs provide equal savings opportunities to all racial groups, we hypothesize that white participants will do better in terms of saving outcomes than black participants. This hypothesis is based on known patterns of saving by race and historical barriers to saving and asset accumulation that have impacted blacks to a larger degree than whites (Oliver and Shapiro 1995).

2)   What factors are associated with saving performance for black participants who are saving for a home in IDAs? Are these factors different from the factors associated with saving for white participants? We hypothesize that different factors may be associated with saving performances for white and black participants in IDAs who are saving for a home.

Methods

Data and Sample

The data come from the American Dream Demonstration (ADD), the first large-scale test of IDAs designed to study the merits of IDAs as a community development and public policy tool. Beginning in 1997, ADD research followed more than 2,000 participants at 13 community-based program sites across the United States for four years (1997 - 2001). The Corporation for Enterprise Development (CFED) in Washington, DC, designed and guided ADD, while the

Center for Social Development (CSD) at Washington University designed and conducted much of the research.

IDA programs included in ADD were implemented by community-based organizations in partnership with financial institutions. Match rates for the IDA programs ranged from 1:1 to 6:1, with 2:1 as the most common match rate. All IDA programs included in ADD allowed participants to use their savings for home purchase, microenterprise, or post-secondary education; 11 allowed fund use for job training or technical education; nine allowed funds to go toward home repair or remodeling; and four allowed the saving to be used for retirement (Sherraden et al. 2003). IDA participants were required to attend free financial education and asset-specific classes as part of the program. The financial education classes covered general financial management and saving strategies for topics including how to create a budget, how to manage money, and how to repair or establish credit records. The asset specific classes provided specialized information on the desired asset. For example, participants saving for a home, participated in classes that taught them how to look for a house and how to work with real estate agents or loan officers. Usually, these participants also received individual help to establish creditworthiness and demonstrate sufficient potential future income to repay their debt (Schreiner et al. 2001).

The quantitative data used in this study includes the monitoring data set that came from the evaluation of ADD. In addition to participants' sociodemographic information, ADD program staff collected financial and savings transactions for all ADD participants (N=2,364) using the Management Information System for Individual Development Accounts (MIS IDA) developed by the CSD (Johnson, Hinterlong, and Sherraden 2001). MIS IDA also tracks program characteristics of the 13 different sites. Savings data were obtained from monthly passbook

savings account records from depository institutions and thus were highly accurate. This may be the best data on savings patterns among low-income families that exist today (Sherraden 2002). Fifty percent (n=1,176) of the participants in ADD indicated they were saving to buy a home. Among the 1,176 IDA participants saving for a home, approximately 32 percent (n=371) of ADD participants were white, and 54 percent (n=637) were black.

This analysis included all enrollees, including those who dropped out of the program without a matched withdrawal. The regression analyses used the participants' characteristics that were recorded at enrollment to avoid issues of two-way causation between income and savings.

Measurement

Dependent variables. Two dependent variables included in this study were the average monthly net deposit (AMND) and deposit frequency. These variables were constructed and used in previous reports on ADD programs (Schreiner, Clancy, and Sherraden 2002). AMND is defined as net deposits per month and is calculated as deposit plus interest minus unmatched withdrawals, and divided by the number of months of participation. Thus, AMND controls for the length of participation in the program. AMND is a key measure of savings outcomes because greater AMND implies greater savings and asset accumulation. Deposit frequency is defined as the number of months deposits are made divided by the total number of months of participation. It shows with what regularity a participant saves. AMND and deposit frequency are used as the key measure of savings outcomes in this study because larger and more frequent deposits imply greater savings and assets accumulation (Schreiner et al. 2001).

Independent variables. The independent variables include a wide range of participant and program characteristics. Participant demographics include gender (1 = female, 0 = male); age (in years); residency (1 = rural, 0 = urban); a set of dummies that measured marital status: single,

divorced/separated, and married (the reference group); number of children (under 18 years); and number of adults (18 years and older) in the household. Another set of dummies measured education attainment of participants: do not have a high school diploma (reference group); has a high-school diploma; has some college, but no degree; and graduated from college. Finally, employment status of a participant was measured by whether the individual was employed full-time (more than 35 hours per week); employed part-time (less than 35 hours per week); unemployed (reference group); or a student.

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

Four institutional constructs are included in the analysis: *facilitation* – defined as direct deposit; *incentives* – defined as match rate; *information* – defined as hours of financial education and peer group meetings; *expectations* – defined as monthly saving target. Specifically, the institutional characteristics are included as follows: Direct deposit (1 = yes, 0 = no); 4 dummies for match rate, 1:1 (reference group), 2:1, 3:1, and 4:1 to 6:1; financial education received (in hours); monthly saving target and peer group meetings.

The monthly savings target measure included in our analysis is the total match cap (i.e., the limit on the amount of deposits that can be matched) divided by the time cap (i.e., the number of months after opening an account in which a participant may make deposits eligible for matching funds).

Analysis

In the analysis phase, we produced some descriptive statistics to characterize blacks and whites who are saving for a home in IDA. To address the first research question, "Whether whites who are saving for a home do better in terms of saving outcomes than blacks who are saving for a home," we conducted several *t*-tests for independent groups to determine if a significant difference in saving outcomes exists between these two groups. Results of the *t*-tests were then confirmed using ordinary least squares (OLS) regression.

In addition, four OLS regressions were executed using each of the two dependent variables for each race to explore what the different predictors of saving outcomes are for black (n= 637) and white (n=371) participants who are saving for a home in IDAs.

Finally, with the aim of exploring whether the regression slopes in these four separate analyses are statistically different from each other, we applied the Welch-Satterthwaite *t* test (Satterthwaite 1946). The Welch-Satterthwaite *t* test is an alternative to the pooled-variance *t* test, because the mean square of the residuals for blacks is statistically different from the mean square of the residuals for whites. We applied the following formula:

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

Results

Individual Characteristics of the Sample

Compared with white IDA participants saving for a home, black IDA participants who are saving for a home were more likely to be female (87 percent versus 79 percent, P=0.00); to have more children (2.1 versus 1.7, P=0.00); and less likely to live in a rural area (3 percent versus 25 percent, P=0.00). Black participants were also more likely to be single (63 percent

versus 34 percent, P=0.00); less likely to be divorced or widowed (24 percent versus 36 percent, P=0.00), or married (12 percent versus 30 percent, P=0.00) when compared with white participants (see Table 1).

Fewer black participants saving for a home were college graduates (15 percent versus 28 percent, P=0.00), and a higher percentage of black participants did not complete high school (17 percent versus 10 percent, P=0.01) as compared to white participants saving for a home. Black participants were more likely to be employed full-time (67 percent versus 57 percent, P=0.00) and are less likely to be employed part-time (18 percent versus 30 percent, P=0.00).

Black participants were less likely to have never been on public assistance (49 percent versus 64 percent, p=0.00) when compared to white participants. However, the racial groups did not differ statistically in their income levels. Despite having similar income levels, blacks had significantly lower rates of business ownership (4 percent versus 12 percent, P=0.00); car ownership (52 percent versus 79 percent, P=0.00); and lower rates of having either a checking or a savings account (71 percent versus 86 percent, P=0.00; see Table 1).

Overall, these results suggest that black IDA participants who are saving for a home are somewhat more disadvantaged than white IDA participants who are saving for a home.

Institutional Characteristics of the Sample

When examining the differences in institutional characteristics between black and white participants, it appears that whites received an average of one additional hour of financial education as compared to blacks (10 hours versus 9 hours, t = 2.61, p=0.00), and had a slightly higher monthly saving target ($48 versus $41, t = 5.89, p=0.00). Our analysis showed no significant differences between black and white participants in the 1:1, 2:1 or 3:1 match rates. However, higher percentages of black participants had a 4:1 match rate (8 percent versus 3

percent, t = 12.14, p=0.00) than white participants. There were no significant differences

between blacks and whites in direct deposits (See Table 2).

Missing data in this study ranged from 0 percent to 9 percent, with the majority of cases

having no missing cases. An examination of the variables with the missing cases in this study

revealed no obvious pattern in the missing data.

Saving performances of blacks and whites who are saving for a home

Our examination of the differences in the saving performances between blacks and whites

showed that blacks saving for a home had a significantly lower AMND ($14.4 versus $20.5,

t=3.61, P=0.00) and lower deposit frequency (0.43 versus 0.54, t=5.90, P=0.00) as compared

with whites saving for a home. These results were confirmed using OLS regression analyses. The

regression results indicated that although low-income blacks were saving in IDA programs, they

were depositing smaller amounts and less frequently than the white participants. Specifically,

black participants were associated with a $4.45 decrease in AMND, and 7 percentage points

lower deposit frequency compared to whites.

To further examine possible differences in saving between the black and white

participants, we ran separate regression analyses using AMND and deposit frequency as the

dependent variables. We then used the Satterthwaite *t* test to determine differences in the slopes

of the regressions.

Results from these separate regressions suggest that for both blacks and whites saving for

a home, residency and asset ownership were associated with savings. For blacks, marital status

and income were also associated with savings. In addition, more institutional variables were

associated with savings among black participants as compared to white participants. Specifically,

among blacks, all four institutional variables (hours of financial education, match rate, monthly

savings target, and direct deposit) were associated with savings. Among whites, only two institutional variables (hours of financial education and direct deposit) appear to be associated with savings. Match rate and monthly savings target were not associated with saving for white participants (See Tables 3 and 4).

Being a resident of a rural area demonstrated a statistical association with a decrease in deposit frequency for both black and white participants. Specifically, being a resident of a rural area was associated with an 18 percentage point lower deposit frequency for blacks as compared to being a resident of an urban area. Similarly for whites, being a resident of a rural area was associated with a 17 percentage point decrease in deposit frequency as compared to being a resident of an urban area.

Asset ownership is significantly related to AMND and deposit frequency for both black and white participants. Compared to black participants who did not own a business, participants who owned a business were associated with an $11.53 higher AMND. Similarly, compared to white participants who did not own a business, participants who owned a business were associated with an 11 percentage point increase in deposit frequency. Car ownership was associated with higher deposit frequency among blacks and higher AMND among whites. In addition, black participants who owned cars were associated with a 5 percentage point higher deposit frequency than black participants who did not own a car. White participants who were also car owners were associated with a $9.87 increase in AMND when compared to white participants who did not own a car. Finally, looking at bank account ownership, white participants who had either a checking or savings account (excluding their IDA account) had an 11 percentage point higher deposit frequency than participants with no accounts.

Marital status was associated with savings for blacks only. Specifically, as compared with married participants, single participants were associated with a $7.36 lower AMND, and divorced or widowed participants were associated with an $8.77 lower AMND. Household income was also statistically associated with savings in IDAs for blacks only. Specifically, a $100 increase in total income was associated with a $0.43 increase in AMND.

For both white and black participants, the hours of financial education attended by IDA participants who are saving for a home was statistically related to both AMND and deposit frequency. Among blacks, each additional hour of financial education was shown as associated with an increase in AMND of $0.92, and a 1 percentage point increase in deposit frequency. Similarly for white participants, each additional hour of financial education was associated with an increase in AMND of $1.32, and a 1 percentage point increase in deposit frequency.

Access to direct deposit was also associated with an increase in deposit frequency for both black and white participants. For blacks, having a direct deposit was associated with a 20 percentage point increase in deposit frequency. Similarly for whites, having a direct deposit was associated with a 26 percentage point increase in deposit frequency.

Match rate and monthly savings target were associated with savings for black participants only. Black IDA participants with a match rate of 3:1 had 18 percentage points higher deposit frequency compared to the participants with a 1:1 match rate. In addition, black IDA participants with a match rate of 4:1 had 14 percentage points higher deposit frequency compared to the participants with a 1:1 match rate. Finally, monthly savings target was significantly related to both AMND and deposit frequency for black participants. Specifically, each additional dollar in monthly savings target is associated with a $0.27 increase in AMND. In addition, a dollar increase in monthly savings target is associated with a .003 increase in deposit frequency.

The Welch-Satterthwaite *t* test was used to test if the regression slopes in these four separate regression analyses were statistically different from each other. The results indicate that the regression slopes for match rate and assets ownership are statistically different between the black and white participants saving for homeownership (see Tables 3 and 4).

Specifically, the results indicate that the regression slopes of car ownership for whites and blacks were statistically different when AMND is the dependent variable. For whites, owning a car had a large effect on AMND, reflected in a $9.87 statistically significant increase in AMND. For black participants, owning a car was associated with a nonsignificant $0.59 increase in AMND.

In addition, the Welch-Satterthwaite *t* test results demonstrated that all six coefficients on the three different match rates (2:1, 3:1 and 4:1 to 6:1) were statistically different from each other with deposit frequency as the dependent variable. Match rates of 2:1 and 4:1 to 6:1, compared to having a match rate of 1:1, were associated with an increase in deposit frequency for blacks, but with a decrease in deposit frequency for whites. Moreover, having a match rate of 3:1 (compared to a 1:1 match rate) is associated with a statistically significant 18 percentage point increase in deposit frequency for blacks, but with only a nonsignificant 5 percentage point increase in deposit frequency for whites (see Table 4). Similar results were obtained with the match rate of 4:1 compared with 1:1 when AMND is the dependent variable. Specifically, having a 4:1 match rate was associated with a $5.83 increase in AMND for blacks, compared to a match rate of 1:1; however, for whites, a match rate of 4:1 was associated with an $18.06 decrease in AMND compared to a match rate of 1:1. However, these results are only marginally significant.

Limitations

It is important to note the limitations of this study. First, participants in IDA programs included in ADD do not represent a random sample of people eligible for IDAs. They are both program-selected, because of eligibility criteria, and self-selected, because they volunteered to participate in the program (Schreiner et al. 2001). Therefore, the results generated in this study may not adequately represent how the overall low-income population outside ADD will perform in IDAs. Second, one study assumption was that deposits to IDAs represented new savings. However, it is possible that participants in IDAs are transferring other assets to IDAs and their deposits may be in large part coming from shifted assets and not from new savings (Schreiner et al. 2001; Zhan, Sherraden, and Schreiner 2002). Third, our data analysis used individual characteristics collected on the participants at the time of their enrollment in the IDA programs. It might be that some individual characteristic changed over the course of IDA program and these unknown changes might have some relationship to the saving outcome (Schreiner et al. 2002).

Discussion

"Since home equity is the largest valued asset for most American households, efforts to combat discrimination in housing and lending markets will be critical to future reduction of the wealth gap" (Joint Center of Political and Economic Studies 2003, p.1). This study examines the saving performance of low-income blacks and low-income whites who are saving for a home in IDAs. Overall, the results indicate that both groups – black and white low-income participants who are saving for a home in IDAs - have the ability and willingness to save when they are provided structured opportunities to accumulate assets. Black participants, however, are saving smaller amounts and less frequently than whites.

Several possible explanations might account for these differences in saving between blacks and whites in IDAs. While the regression results controlled for many observed characteristics such as employment, education, and ownership of a bank account, there are many unobserved characteristics that may be correlated with race and savings and are not included in these models (Schreiner et al. 2001). For example, while the models in this study include a dummy variable for having a bank account, this variable did not control for how actively participants use this bank account and how trusting they are of banking institutions. As noted earlier, research suggests that due to historical reasons, blacks are still less trusting of the banks compared to whites. Similarly, while the model includes a variable that measures education level and high school completion, this variable still cannot account for the quality of the education that blacks may have received compared with whites (Schreiner et al. 2001).

The model cannot also control for discrimination and for the cumulative effects of the past. As Oliver and Shapiro (1995, p. 5) put it, "A history of low wages, poor schooling, and segregation affected not one or two generations of Blacks but particularly all African Americans well into the middle of the twentieth century."

Another possible explanation that has not been measured directly in this analysis and may explain some of the saving differences between blacks and whites in IDAs includes the amount of inheritance. Among all the types of financial help, inheritance appears to be the most substantial source of help. Empirical findings suggest that there are vast differences in the inheritance levels between blacks and whites. Wolff (2001) finds that 24 percent of white households inherit money compared with only 11 percent of black households.

One other possible explanation is the difference in kin and social networks between these two groups. As discussed earlier, past research suggests that there are strong financial,

emotional, and social ties within the kin and social networks of African American families (Heflin & Pattillo 2002). As a result, these close familial and social ties often include an obligation to help one another monetarily, which means at times having to let go of limited financial savings, further impeding the overall ability of a person to save (Stack 1975). Therefore, in future research, it might be helpful to include additional variables that look at additional kinds of help for kin and social networks.

In order to further understand the experiences of saving among blacks and whites who are saving for a home in IDAs, this study explores factors that may be associated with saving performance for these two groups separately. Results of the separate regression analyses suggest that for both blacks and whites saving for a home, residency and asset ownership were associated with savings. For blacks, marital status and income were also associated with savings. In addition, more institutional variables were associated with savings among black participants compared to white participants. Specifically among blacks, all four institutional variables (hours of financial education, match rate, monthly savings target and direct deposit) were associated with savings. Among whites, only two institutional variables (hours of financial education and direct deposit) appear to have a similar association with savings. Further analyses for the differences in the regression slopes indicate that car ownership and match rate have a different association with savings outcomes for whites as compared to blacks.

Results on the different associations of car ownership of blacks and whites in IDAs are important ones, especially considering the devastating tragedy of Hurricane Katrina, where the disparity in car ownership represented literally the difference between life and death for many of the Gulf Coast residents (Lui, Dixon, and Leondar-Wright 2006). Statistics on the rates of car ownership indicate that while 7% of white households do not own a car, 24% of black

households do not own a car. Moreover, blacks are more likely to own cheaper and less dependent cars with the median car value of black households at half the value of white households (Lui et al., 2006). Research indicates that owning a car is highly correlated with finding a job and prosperity (Stoll 2004). The findings in this paper that car ownership is associated with higher saving for whites but not for blacks may bring light to these issues and may capture the disparate value of cars between blacks and whites.

Findings on match rate are very interesting ones, suggesting that for whites match rate is not associated with an increase in savings but for blacks it is. These results may be explained in part by longstanding historical and sociological conditions. As noted above, blacks have historically and continuing to the present day been subject to discrimination and have had very limited opportunities and access to institutional benefits such as match rate and similarly structured mechanisms such as pension programs (Eisenbrey and Spriggs 2005). These circumstances may help to explain why, in a program such as IDAs, match rate is associated with savings for blacks but not for whites. More research, preferably using both quantitative and qualitative designs, on the association of match rate and saving outcomes for low income blacks and whites, is needed.

Implications

The results of this study may have several practical implications. With regard to black and white differences in saving performance, it appears that institutional variables may have different associations with savings for blacks and whites. These results suggest that policymakers and program developers should pay careful attention to institutional characteristics and in the design and implementation of IDA programs. Program developers may want to target black participants differently from white participants. Possibilities include increased financial

education with a targeted, culturally appropriate curriculum, higher match rates, establishing and encouraging the use of direct deposit and increased savings goals. Program characteristics should also reasonably assist participants to meet local housing market requirements (e.g. housing costs, availability). Collaboration with local financial institutions to facilitate relationships with program participants may also be a critical component.

Car ownership was also found to be an important variable that is associated with the difference in saving performances of black and white participants. As other research suggests increasing ownership of reliable and dependable automobiles may be an effective policy tool to narrow the savings gap between blacks and whites (Lui et al. 2006; Raphael and Stoll 2001).

Findings on match rate and IDA savings among blacks may have clear implications. Since higher match rates appear to lead to higher savings among blacks, with an optimal match rate of 3:1, matching funds might need to be allocated in this way to obtain the greatest impact. Increased match rates may allow access to higher quality housing markets and/or accelerated access to asset accumulation (Rohe, Gorham and Quercia 2005), which will be particularly important if IDA programs seek to rectify racial imbalances in asset accumulation.

Homeownership is an important wealth accumulation tool for all income groups, but may be especially important for low income people. The racial wealth gap is illustrated by racial differences in homeownership. Efforts to reduce this gap should consider IDA program design and implementation strategies as well as sustaining and refining IDA policy to support such efforts. More in-depth research is needed on all aspects of IDA program design, staffing, and operations, and how participants of different racial backgrounds, with different saving goals, think about, participate, and perform in saving and asset accumulation in this context. Because of

the positive effects of homeownership, it is important that we continue to explore structural

mechanisms to help low income people achieve this dream.

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Table 1: Individual Characteristics of Blacks and Whites Who Are Saving for a Home

Independent Variables	Blacks (n=637) Percent/ Mean (sd)	Whites (n=371) Percent/ Mean (sd)	*t test/* Chi square	P Value
Gender				
Female	87%	79%	11.12	0.00
Age	35 (8.5)	35 (9.6)	-0.14	0.89
Residency				
Population less than 2,500	3%	25%	17.12	0.00
Marital Status				
Single	63%	34%	83.25	0.00
Divorced/Separated/Widowed	24%	36%	17.18	0.00
Married	12%	30%	47.33	0.00
Household Composition				
Adults	1.4 (0.6)	1.4 (0.56)	2.16	0.03
Children	2.1 (1.5)	1.7 (1.4)	-4.08	0.00
Education				
Graduated from college	15%	28%	21.40	0.00
Attended some college (did not graduate)	39%	37%	0.39	0.29
Completed high school or earned GED	28%	25%	0.89	0.19
Did not graduate from high school	17%	10%	10.24	0.00
Employment				
Employed full-time	67%	57%	11.32	0.00
Employed part-time	18%	30%	19.43	0.00
Student	8%	6%	1.31	0.16
Unemployed/Not working	7%	7%	0.08	0.44
Receipt of Public Assistance				
TANF or AFDC never	49%	64%	19.89	0.00
Income				
Total income	1,459 (709)	1,424 (699)	-0.77	0.44

Table 1: Individual Characteristics of Blacks and Whites Who Are Saving for a Home (Continue)

Independent Variables	Blacks (n=637) Percent/ Mean (sd)	Whites (n=371) Percent/ Mean (sd)	*t test/* Chi square	P Value
Asset Ownership				
Car ownership	52%	79%	71.01	0.00
Own a micro-business	4%	12%	27.05	0.00
Having either saving or checking account	71%	86%	26.76	0.00

Table 2: Institutional Characteristics of Blacks and Whites Who Are Saving for a Home

Independent Variables	Blacks (n=637) Percent/ Mean (sd)	Whites (n=371) Percent/ Mean (sd)	t test/ Chi square	P Value
Financial education	9.25	10.3	2.61	0.00
Match rate				
1:1	13.5	16.2	1.35	0.14
2:1	54.9	58.5	1.20	0.15
3:1	17.4	19.4	0.62	0.24
4:1	8.2	2.7	12.14	0.00
Monthly savings target	41.40	48.02	5.89	0.00
Direct Deposit	6.1	8.5	1.98	0.10

Table 3: Summary of Simple Regression Analysis for Variables Predicating AMND for Black and White IDA Participants Including Satterthwaite t-test for Equality of Slopes

Variables	Blacks (n=528)		Whites (n=307)		
	B	SE B	B	SE B	t
Gender					
Female	6.59	3.38	5.93	4.25	0.12
Male (reference group)					
Age	0.19	0.12	-0.01	0.17	0.95
Residency					
Population less than 2,500	-9.35	6.07	-5.86	4.05	-0.48
Population 2,500 or more (reference group)					
Marital Status					
Single	-7.36*	3.71	-0.88	5.47	-0.98
Divorced/Widowed	-8.77*	4.04	0.97	5.68	-1.40
Married (reference group)					
Household Composition					
Children [17 years or younger]	-0.98	0.71	-0.91	1.14	-0.05
Adults [18 years or older]	2.94	1.83	5.57	4.06	-0.59
Education					
Graduated from college [2yr/4yr-college+]	2.17	3.66	4.66	5.53	-0.37
Attended some college [did not graduate]	2.68	3.01	1.27	5.27	0.23
Completed high school or earned GED	1.19	3.07	-8.50	5.45	1.55
Did not graduate from high school (reference group)					
Employment					
Employed full-time [>35 hrs/week]	-3.63	3.92	-2.45	6.10	-0.16
Employed part-time [<35 hrs/week]	-4.65	4.25	1.42	6.27	-0.80
Student	-1.03	5.05	0.70	8.34	-0.18
Unemployed/Not working (reference group)					
Recipient of Public Assistance					
TANF or AFDC used/using	1.29	2.22	3.12	3.33	-0.46
TANF or AFDC never (reference group)					
Income					
Total income	0.43*	0.17	0.14	0.24	1.01

*$p < .05$ **$p < .01$

Table 3: Summary of Simple Regression Analysis for Variables Predicating AMND for Black and White IDA Participants Including Satterthwaite t-test for Equality of Slopes (Continue)

	Blacks		Whites		
	b	se	b	se	t
Asset Ownership					
Own a micro-business	11.53*	5.26	2.85	4.96	1.20
Car ownership	0.59	2.16	9.87*	4.04	-2.02*
Having either saving or checking account	1.32	2.42	8.68	4.74	-1.38
Institutional Characteristics					
Financial education	0.92**	0.19	1.32**	0.32	-1.08
Match rate					
1:1 (reference group)					
2:1	-2.34	2.53	-3.95	4.50	0.31
3:1	5.84	3.55	-2.79	5.51	1.32
4:1 to 6:1	5.83	6.18	-18.06	10.60	1.95*
Monthly savings target	0.27**	0.06	0.21	0.12	0.40
Direct deposit	2.89	4.04	5.50	5.19	-0.40
R^2	0.18		0.17		
F	4.53**		3.66**		

*p < .05 **p < .01

Table 4: Summary of Simple Regression Analysis for Variables Predicating Deposit Frequency for Black and White IDA Participants Including Satterthwaite t-test for Equality of Slopes

Variables	Blacks (n=528)		Whites (n=307)		
	b	se	b	se	t
Gender					
Female	-0.01	0.04	-0.02	0.04	0.10
Male (reference group)					
Age	0.001	0.001	0.002	0.002	-1.45
Residency					
Population less than 2,500	-0.18**	0.06	-0.12**	0.04	-0.83
Population 2,500 or more (reference group)					
Marital Status					
Single	-0.02	0.04	-0.08	0.05	0.91
Divorced/Widowed	0.05	0.04	-0.06	0.06	1.57
Married (reference group)					
Household Composition					
Children [17 years or younger]	-0.01	0.01	0.002	0.01	-0.37
Adults [18 years or older]	-0.01	0.02	0.001	0.04	-0.02
Education					
Graduated from college [2yr/4yr-college+]	0.07	0.04	0.10	0.06	-0.34
Attended some college [did not graduate]	0.06	0.03	0.09	0.05	-0.43
Completed high school or earned GED	0.02	0.03	0.03	0.05	-0.15
Did not graduate from high school (reference group)					
Employment					
Employed full-time [>35 hrs/week]	-0.03	0.04	-0.02	0.06	-0.17
Employed part-time [<35 hrs/week]	-0.02	0.04	0.00	0.06	-0.22
Student	-0.10	0.05	-0.01	0.08	-0.95
Unemployed/Not working (reference group)					
Recipient of Public Assistance					
TANF or AFDC used/using	-0.04	0.02	0.003	0.03	-0.92
TANF or AFDC never (reference group)					
Income					
Total income	-0.001	0.002	-0.005	0.002	1.24

*p < .05 **p < .01

Table 4: Summary of Simple Regression Analysis for Variables Predicating Deposit Frequency for Black and White IDA Participants Including Satterthwaite t-test for Equality of Slopes (Continue)

	Blacks		Whites		
	b	se	b	se	t
Asset Ownership					
Own a micro-business	-0.01	0.06	0.11*	0.05	-1.62
Car ownership	0.05*	0.02	0.07	0.04	-0.40
Having either saving or checking account	0.01	0.03	0.11*	0.05	-1.80
Institutional Characteristics					
Financial education	0.01**	0.002	0.01**	0.003	1.22
Match rate					
1:1 (reference group)					
2:1	0.04	0.03	-0.08	0.04	2.22*
3:1	0.18**	0.04	0.05	0.05	1.97*
4:1 to 6:1	0.14*	0.07	-0.16	0.11	2.44*
Monthly savings target	0.003**	0.001	0.002	0.001	0.45
Direct deposit	0.20**	0.04	0.26**	0.05	-0.97
R^2	0.28		0.29		
F	8.04**		4.91**		

*$p < .05$ **$p < .01$