Moving from Unbanked to Banked:

Evidence from the Money Smart Program*

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Abstract

Using data collected from participants of the FDIC's *Money Smart* program, this study investigates the impact that financial education has on an individual's decision to move from unbanked to banked. To date, most programs and initiatives that target the unbanked define program impact by the number of bank accounts opened. This study provides evidence that the best measure of program "success" may not be the number of accounts opened, but instead whether the program has provided the unbanked with the skills and tools necessary to make sound financial decisions given their financial circumstances.

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1. Introduction

Millions of Americans do not have bank accounts and must rely on high-cost alternative financial services such as currency exchanges and pawnshops to conduct everyday transactions such as check cashing, making payments, and taking out small, short-term loans. In a complex financial world, it is easy for the "unbanked" to fall prey to predatory lenders and financial scams, especially since many lack adequate financial education.

In recent years, a number of financial education programs have been created to empower the unbanked with financial knowledge and bring them into the financial mainstream. However, little research has investigated the role that financial education plays in changing the financial behaviors of the unbanked. To date, very few programs have conducted extensive program evaluations. The research that does exist suggests that these programs have had limited success in moving the unbanked into the financial mainstream (Beverly et al., 2001; Doyle et al., 1998; Good, 1999; Hogarth & O'Donnell, 1999; Prescott & Tatar, 1999). However, most programs that target the unbanked define program "success" by the number of accounts opened. This paper sheds new light on the role of financial education with respect to the unbanked and suggests that the financial community may want to redefine program "success" with respect to the unbanked.

Using data collected from participants of the Federal Deposit Insurance Corporation's *Money Smart* program, this study contributes to the literature by focusing on the impact that financial education has on the financial decisions and behaviors of the unbanked. The findings of this study provide evidence that the *Money Smart* program is succeeding in encouraging the unbanked to open accounts. However, the results also show that there are some individuals without accounts who, regardless of the amount of financial education they receive, are financially unable to open and maintain a healthy account. The findings suggest that the best

measure of program "success" may not be the number of accounts opened, but whether the program has provided participants with the financial skills and tools necessary to make sound decisions given their financial circumstances.

1.1 Literature Review

According to the 2001 *Survey of Consumer Finances*, about 9.1 percent of U.S. families are "unbanked," such that they do not have a transaction account (Aizcorbe et al., 2003). This is only a modest improvement from 1995 and 1998 statistics, which indicate that 13.0 percent and 9.4 percent, respectively, of U.S. families did not have a transaction account (Hogarth & O'Donnell, 1999). Who are the unbanked, and why has the financial community had a difficult time moving them into the financial mainstream?

Past studies identify a number of characteristics as being significant determinants of account ownership, including age, education, race, employment status, credit history, income, and net worth (Bond & Townsend, 1996; Caskey, 1994, 1997, 2001; Doyle et al., 1998; Dunham, 2001; Good, 1999; Hogarth & Anguelov, 2002; Hogarth & O'Donnell, 1997, 1999; Prescott & Tatar, 1999; Rhine & Toussaint-Comeau, 1999; Rhine et al., 2001; Stegman, 1999; Stegman & Faris, 2001; Toussaint-Comeau & Rhine, 2000). These studies indicate that the unbanked are more likely than those who are banked to be younger, less educated, black or Hispanic, unemployed, have a poor credit history and/or reside in a low- to moderate-income community. In addition, they are more likely to report low levels of income and net worth (Hogarth and O'Donnell, 1997; Rhine et al., 2001).

Toussaint-Comeau and Rhine (2000) also note that immigrants are less likely to use formal financial institutions. They suggest that some immigrants may have attitudes and perceptions toward banks that are shaped by negative experiences in their country of origin. It

is not uncommon for the unbanked immigrant population to indicate that they "do not like dealing with banks" or they "do not trust banks."

Individuals' attitudes and perceptions about banks is part of the reason why the unbanked indicate that they do not have an account. Other reasons commonly cited in the literature include: 1) financial constraints (i.e., do not have enough money, do not write enough checks, previous account mismanagement, poor credit history), 2) the costs associated with an account are too high (i.e., high minimum balances, high fees and service charges), 3) limited access and availability to financial institutions (i.e., hours or locations are inconvenient), and 4) product design factors (i.e., minimum balances, fees, other account options). Another reason frequently cited by the unbanked is related to an individual's level of financial knowledge and comfort with new financial technology and innovation. For example, Toussaint-Comeau and Rhine (2000) argue that immigrants from countries with underdeveloped, formal financial sectors are more likely to lack basic financial knowledge and thus be unaware of the benefits associated with account ownership. This lack of financial education creates a barrier to account ownership for individuals who are unfamiliar with today's complex financial system.

Efforts to address some of the reasons why the unbanked do not have an account have focused primarily on financial innovation aimed at making the services provided by mainstream banks more attractive to the unbanked. These efforts typically involve introducing low-cost accounts and educational initiatives to inform consumers about the advantages inherent in account ownership. However, these programs have had limited success in bringing the unbanked into the financial mainstream. In the 1980s, several states passed legislation creating "lifeline" banking accounts—basic banking accounts with low minimum deposits and low monthly fees. These low-cost accounts have had limited success in bringing the unbanked into the financial mainstream primarily because a low-cost account is not necessarily "low cost" if the unbanked

are likely to overdraw on the account or deposit a "bad" check (Beverly et al., 2001; Doyle et al., 1998; Hogarth & O'Donnell, 1999).

In 1996, the federal government passed the Debt Collection Improvement Act (1996) requiring that federal payments (i.e., government benefit payments) be electronically deposited into federally insured accounts called electronic transfer accounts (ETAs). Since the enactment of the legislation, the U.S. Treasury has seen an increase in electronic transfers for recipients of government benefits. However, a report by the U.S. General Accounting Office shows that less than 1 percent of unbanked federal benefit recipients have opened ETAs since the program's implementation (U.S. General Accounting Office, 2002). This increase has not been substantial and barriers to greater participation remain (Beverly et al., 2001; Tillet & Handlin, 2003). The Treasury Department started a new initiative in December 2000 called "First Accounts" to help the unbanked access low-cost, secure financial services, which has also had difficulty generating new accounts (Beverly et al., 2001; Tillet & Handlin, 2003).

Why has the financial community had difficulty encouraging a large proportion of the unbanked to enter the financial mainstream? Prescott and Tatar (1999) contend that, for many of the unbanked, the decision to remain outside of the financial mainstream is a rational and informed decision such that the real costs of owning an account actually exceed the costs of remaining unbanked. They argue that financial innovations and educational efforts directed toward the unbanked continually understate the cost of owning an account while overstating the cost of being unbanked.

On the one hand, studies that estimate the costs of account ownership typically do not account for the increased risk faced by lower-income consumers of incurring overdraft charges. Caskey (1997) shows that 28 percent of respondents who complain about fees indicate that overdraft

fees are their main concern. For highly indebted individuals, there is the added concern that creditors may seize their account balance to satisfy outstanding debts.

On the other hand, the extent to which the unbanked rely on expensive check-cashing outlets is overstated. Caskey (1997) finds that less than 20 percent of the unbanked regularly use these outlets, while nearly three-quarters regularly cash checks at depository institutions (i.e., banks and credit unions) or grocery stores. In fact, 59 percent cash their checks at no cost. However, it is important to point out that these findings may be due to the fact that the sample used by Caskey was primarily taken from areas of the country that are not highly populated, and these areas may be less likely to use check cashers.

Overall, studies such as Prescott and Tatar (1999) and Caskey (1997) argue that the cost of being unbanked is generally lower than is often asserted. However, it is important to point out that it is difficult to quantify the real costs of owning an account. Regardless of the real costs, these studies acknowledge that certain groups still face relatively high costs since they do not have easily accessible alternatives to expensive check-cashing outlets. These studies further acknowledge that certain groups typically lack adequate information on price differences between alternative financial services and those offered by mainstream banks. Doyle et al. (1999) cite a 1989 study by the Consumer Bankers Association in which more than 30 percent of unbanked individuals either did not know whether banks or check-cashing outlets were more expensive or believed that banks were more expensive.

Educational deficiencies such as these may be overcome with appropriate financial education. However, Prescott and Tatar (1999) speculate that financial education alone is not enough to induce a large proportion of the unbanked to enter the financial mainstream, especially given that 1) the unbanked is a very heterogeneous group and 2) current and past programs have had limited success.

To our knowledge, previous studies have not critically examined the effectiveness of financial education in moving the unbanked into the financial mainstream. This study builds on prior work to show that financial education can be effective at encouraging certain unbanked individuals to open an account. However, there are some individuals without an account who, no matter how much financial education they receive, are not financially prepared to maintain a healthy account.

2. Data and Methodology

Money Smart is a financial education program sponsored by the Federal Deposit Insurance Corporation (FDIC). The program encourages participants to open an account. It also provides them with comprehensive financial education to help them enhance their money skills, make informed financial decisions, and create positive banking relationships. The program consists of a set of 10 instructor-led training modules that cover a number of financial topics for low-income individuals, including general banking services, how to choose and maintain a checking and savings account, how to budget your money, the importance of saving, and how to obtain and use credit effectively. The first five modules were specifically developed for individuals with little or no experience with mainstream financial services. These five modules form the core of the program. The remaining five modules are considered to be more advanced and are offered, on average, only about 60 percent of the time.

Between May 2002 and February 2003, data were collected in a pre- and post-evaluation format from a total of 408 program participants at select locations in Chicago. At the beginning of each new *Money Smart* course, information was collected from participants on their current banking activities and knowledge of key financial concepts. Upon completion of the course, a follow-up survey was administered and information was collected on the overall impact of the

program, the participants' anticipated banking behaviors and individual characteristics. Information was also collected from the instructors on the specific lessons that were covered. Program participants included welfare-to-work participants, Spanish-speaking immigrants, Chinese immigrants, public housing residents, and individuals who participated in *Money Smart* through continuing education programs at community colleges.

Of the 408 surveyed, 22 participants did not complete the pre-evaluation and 48 participants chose not to respond to key survey questions. These observations were dropped from the data set. An additional 112 participants did not complete the post-evaluation, and these individuals were also dropped from the sample. Reasons for the low retention rate include issues related to employment, personal commitments, course registration, and possible dissatisfaction with the program. Excluding these individuals from the sample may create a response bias. However, it is unlikely since the pre-evaluation characteristics of the 112 individuals do not vary significantly from those who completed the entire program. In the end, 226 observations comprise the working sample used in this study. These individuals completed both the pre- and post-evaluations. (See Lyons and Scherpf (2003) for more complete details on the survey methodology and sample.)

2.1 The Model

Economic theory suggests that an individual will open an account when the marginal benefit of opening an account exceeds the marginal cost. If we define A_i^* to be the marginal benefit less the marginal cost, then an individual will open an account when $A_i^* > 0$. Within the data, A_i^* is unobservable; however, whether an individual has an account or plans to open an account is observable. This information is used to determine the effect that financial education has on the decision to move from unbanked to banked.

Two probit models are estimated to determine the likelihood that a *Money Smart* participant: 1) has an account at the beginning of the program; and 2) plans to open an account at the end of the program. For the first model, the relationship is assumed to be as follows:

$$A_i^* = X_i'\beta_1 + u_i, \text{ where } A_i=1 \text{ if } A_i^* > 0 \text{ and 0 otherwise for } i=\{1, \ldots, I\}.$$

In this model, A_i is defined to be the discrete dependent variable that is equal to one if the i^{th} participant reports having an account prior to the beginning of the program and zero otherwise. A_i is determined by A_i^*, the continuous, latent variable that indicates whether the marginal benefit of opening an account exceeds its marginal cost. The error terms, u_i, are assumed to be distributed standard normally with mean zero and variance σ_i equal to one.

The factors that determine A_i, are represented by the vector X_i. Included in X_i are factors that control for education, marital status, age, ethnicity, family size, employment status, and gender. The vector X_i also accounts for whether the participant registered for the program through a continuing education program at a community college. It is important to control for this factor, since these programs involved formal course registration. Also, there may be differences between those who participated in the program through the community college system versus another type of program.

With respect to the second model, information is available on whether an unbanked participant, upon completion of the program, planned to open an account. (Unfortunately, it is unknown whether unbanked participants actually opened an account following the program.) Using this information, the probit method is again used to identify the factors that determine the probability that a participant without an account plans to open an account. In this model, the vector X_i includes the same factors as in the first model and three additional factors to measure

the impact of the program on the account decision. The three measures of program impact capture general knowledge gain and ability to put financial knowledge to use. They are discussed in detail in Section 4. A dummy variable for whether the participant was exposed to the advanced modules (6-10) is also included in the model to control for the effect of curriculum content on the account decision.

It is important to acknowledge that information on a participant's annual household income from work, aid, and all other sources was also collected. However, careful investigation of the data suggests a significant fraction of the sample inaccurately reported their income level. In addition, 20 of the 226 participants chose not to report income at all. Due to suspected measurement error and limited observations, income is not included in the models. Information on income, however, is included in the descriptive statistics. The results from the estimated models with income are available from the authors upon request. Including income in the models does not significantly affect the results.

There may also be concern that differences in the behavior and characteristics of those with and without accounts may exist, and these differences may affect the probability that a nonaccount holder plans to open an account. A two-stage probit model can be used to correct for the possibility of selection. Unfortunately, due to the small sample size and limited information in the data set, we were unable to find a suitable exclusion restriction that explained an individual's initial account status and not the anticipated account status of nonaccount holders. For this reason, it was not possible to estimate a two-stage model.

3. Profile of Participants

Table 1 summarizes the types of accounts held by the 226 participants included in the working sample. In this study, a participant is classified as "unbanked" and thus "a nonaccount

holder" if they reported not having a checking or a savings account. A participant is classified as "banked" or "an account holder" if they reported having either a savings or a checking account. 40.7 percent of the participants reported that they did not have a checking or a savings account. The remaining 59.3 percent reported having a checking and/or a savings account, with 21.7 percent indicating that they had only a checking account and 9.7 percent indicating that they had only a savings account. Only 27.9 percent reported having both a checking and a savings account.

3.1 Demographics by Account Status

Table 2 provides demographic information on the program participants by account status. The first column of Table 2 presents the findings for the 226 participants. The next two columns present the demographics for those who reported having an account and not having an account. Comparing account and nonaccount holders, several findings are of significance, but perhaps not surprising. Nonaccount holders were more likely than account holders to be younger, black, less educated, and single. The largest percentage difference was for blacks—67.4 percent of those without an account were black compared to 37.3 percent of those with an account. In addition, families without an account tended to be slightly larger than those with an account. As expected, full-time workers made up a substantially higher proportion of account holders than nonaccount holders (41.8 percent compared to 13.0 percent), while unemployed participants accounted for the largest proportion of nonaccount holders (77.2 percent). With respect to income, 79.8 percent of the nonaccount holders reported annual household incomes under $10,000. Participants in income brackets above $10,000 were increasingly more likely to have an account.

The last two columns of Table 2 present the characteristics of nonaccount holders who, at the end of the program, indicated that they were either "planning to open an account" or "planning to not open an account." Nonaccount holders who planned to open an account were

more likely than nonaccount holders who did not plan to open an account to be female, older, more educated, and single. With respect to ethnicity, blacks were significantly more inclined to open an account, while Hispanics were more inclined to not open an account. A total of 74 nonaccount holders indicated that they planned to open an account, and only 18 indicated that they did not plan to open an account. Given the small sample size, one must be cautious in interpreting these findings. Also, it must be acknowledged that "planned" financial behavior does not necessarily translate into "actual" financial behavior.

3.2 Other Financial Characteristics by Account Status

Table 3 summarizes the borrowing behavior of the program participants by account status. Over half of the total sample (56.6 percent) indicated that they borrowed money, with a higher proportion of nonaccount holders borrowing money (60.9 percent) than account holders (53.7 percent). Of those who reported borrowing money, nonaccount holders were significantly more likely than account holders to borrow from family and friends, 94.5 percent and 50.7 percent, respectively. In addition, nonaccount holders were significantly less likely than account holders to borrow from a bank or to charge it to their credit cards, which is not surprising since nonaccount holders have no bank account and therefore no ties to the banking system. However, among nonaccount holders, those who did not plan to open an account relied less on family and friends and more on credit cards. Regardless of account status, only a small proportion of program participants indicated that they borrowed from a payday lender or title loan company (3.6 percent of nonaccount holders and 5.6 percent of account holders).

Table 3 reveals only slight differences between account and nonaccount holders in the reasons for borrowing money. Both groups indicated that they borrowed primarily to pay bills with a larger proportion of nonaccount holders borrowing for this purpose. Also, nonaccount

holders were significantly less likely to borrow for investment purposes, such as to purchase a home or to pay for an education. Interestingly, a significant proportion of both groups reported borrowing for purposes other than those specified on the survey. Among nonaccount holders, 39.3 percent reported borrowing for other purposes, such as for clothing, entertainment, eating out, baby supplies, insurance, and personal use.

3.3 Reasons for Having or Not Having an Account

Additional information was collected from nonaccount holders to better understand: 1) their reasons for not having an account, 2) the methods they used to pay bills if they did not have a checking account, and 3) the location they used for cashing checks. The findings are presented in Table 4. By far, the most cited reason for not having an account was a lack of money (71.7 percent). The next most cited reason was poor credit history (17.4 percent), followed by bank fees/costs being too high (10.9 percent).

Participants without a checking account were asked: "How do you pay your bills if you have no checking account? (Check all that apply)." Over half of those without checking accounts indicated that they used cash and/or money orders to pay bills. When asked about where they cash their checks, 76.7 percent without an account reported that they cash their checks at a currency exchange and/or payday lender.

Program participants without an account were also asked at the end of the program why they planned to either open or not open an account. The most common reasons cited for why participants planned to open an account were that they had established long-term financial goals through the program and wanted to meet those financial goals and/or establish financial security. Most of these respondents indicated that they had a particular financial goal in mind that they wanted to achieve (e.g., save for a down payment on a house, to have children, for an education, or

to create a financial cushion in case of an emergency). Other participants indicated that because of the program, they felt more knowledgeable about the banking system and more comfortable opening an account. Other reasons cited were related to participants wanting to re-establish creditworthiness and improve their credit scores and to save enough money so they did not have to worry about paying their monthly bills.

The most common reasons participants cited for not wanting to open an account focused on not being financially ready to open an account. Most of these respondents indicated that they did not have enough money and were currently unemployed. Others felt that, even after the program, they still did not trust banks.

The reasons why unbanked participants do not have an account or why they plan to open or not open an account are particularly insightful, since they provide an indication of the program's impact on a participant's account ownership decision. Program participants who planned to open an account were clearly indicating that, as a result of the program, they 1) felt more comfortable about opening an account, and 2) recognized the long-run importance of establishing an account. One the other hand, those who did not plan to open an account were indicating they were not likely to be in a financial position to open and maintain a healthy account, even after participating in the program. These individuals perhaps should not have been encouraged to open an account.

Overall, these initial findings may be reflecting a need for more low-cost accounts and/or for education about what low-cost accounts are available. The next step is to investigate the role that financial education plays in a nonaccount holder's decision to move from unbanked to banked.

4. Results

To measure overall program impact, *Money Smart* participants were asked at the end of the program to check the response that best indicates how much they agree with the following three statements:

1. "Because of this program, I am more financially knowledgeable."
2. "Because of this program, I feel I can manage my finances better."
3. "I feel that I can use what I learned in this program on my own."

Table 5 summarizes participants' assessment of the program's impact on their level of financial knowledge and on their ability to put that knowledge to use. Three findings are worth noting. First, over 90.0 percent of the entire sample agreed that, as a result of participating in the program, they were more financially knowledgeable, were better able to manage their finances, and were able to use what they learned on their own. Second, over half reported that they *strongly agreed* with all three impact statements, with the highest proportion of respondents strongly agreeing that they could use what they learned on their own. Finally, participants who already had an account at the beginning of the program were more likely than those without an account to *strongly agree* to all three impact statements. A similar pattern is shown for those without an account. Those who planned to open an account were more likely to strongly agree to all three impact statements, while those who did not plan to open an account were more likely to merely agree.

It is important to acknowledge that the first two findings may be due to the fact that those who were more satisfied with the program were those who did not drop out of the program. In addition, the third finding may be due to the fact that those who were more satisfied with the

program were more likely to respond that they "planned to open an account." Recall that planning to open an account does not necessarily mean that an account was actually opened.

Participants' responses to these three questions are used to capture the effect of the program on an individual's decision to move from unbanked to banked.

4.1 Probability of Having an Account

Table 6 presents the results from the probit model for the probability of having an account prior to the program. The table includes the coefficients on the independent variables, the standard errors, and the marginal effects. Note that all marginal effects have been calculated at the sample means.

The findings indicate that additional schooling significantly increases the probability of having an account. In particular, program participants with a college degree are 33.9 percentage points more likely than those without a high school education to have an account. Other factors that significantly increase a participant's probability of having an account include being married, being employed, and participating in the program through the community college system. All other things held constant, being married increases the probability of having an account by 28.2 percentage points and being employed increases the probability by 17.6 percentage points. Being black significantly reduces the probability of having an account by 17.1 percentage points. All of these findings are consistent with the literature and with descriptive statistics reported in the previous section.

4.2 Probability of Opening an Account

The results for the probit model for the probability that a participant without an account plans to open an account are presented in Table 7. Few factors are found to significantly influence

whether a participant plans to open an account after completing the program. None of the demographic characteristics included in the model are significant at conventional levels. This may be due to the fact that latent attributes exist which are not being captured in this model. Regardless, the model does provide evidence that the program positively increases the probability of opening an account. Participants who strongly agreed that the program made them more financially knowledgeable were more likely to plan to open an account as were participants who strongly indicated that they were better able to manage their finances.

Exposure to the advanced lessons of the *Money Smart* curriculum actually decreases the probability that a nonaccount holder plans to open an account by over 20 percentage points. Further analysis reveals that nonaccount holders who were exposed to at least one advanced module were not any more income constrained than nonaccount holders who were not exposed to the advanced lessons. The negative effect for the advanced lessons is not as surprising as it first seems, since the advanced lessons were developed for those who already had some basic knowledge of banking and mainstream financial markets. In addition, instructors typically did not take into account an individual's level of prior knowledge of basic banking concepts. The lessons covered in the course were selected by the instructor and were usually the result of time and resource constraints. Given this, instructors who covered the advanced lessons in a course may have spent less time on the early lessons that were so critical to nonaccount holders. Those who did not cover the advanced lessons may have spent more time driving home the fundamentals of opening and maintaining an account, which likely proved more beneficial to nonaccount holders.

Recall again that the sample size used for this estimation is very small so one needs to be cautious in interpreting these findings. Also, recall that there may be a response bias in that those who planned to open an account may be more likely to be satisfied with the *Money Smart*

program. However, even with these limitations, the results are robust to modifications in each model's specification, even when income is added. The results also remain consistent when the models are estimated using the logit method.

5. Discussion and Conclusions

The findings presented in this report provide insight into the potential impact that financial education programs, such as *Money Smart,* may have on the financial behavior of the unbanked. First and foremost, the findings provide evidence that the *Money Smart* program did succeed in encouraging the unbanked to open an account. Of the 92 unbanked participants in the sample, only 18 reported upon completion of the program that they did not intend to open an account. Furthermore, probit analysis shows that participants' subjective assessment of the program's impact significantly increased the probability of planning to open an account. In particular, those who *strongly* agreed that, as a result of participating in the program, they were more financially knowledgeable and better able to manage their finances were significantly more likely to report that they planned to open an account. However, it is important to point out once again that planning to open an account does not necessarily imply that an account was opened. Perhaps, more important, planning to open an account does not necessarily mean that one *should* be opened.

The findings from this study show that financial constraints play a predominant role in preventing the unbanked from opening an account. Over 70.0 percent of program participants without an account cited a lack of money as a reason for not having an account. This finding suggests that participants who do not plan to open an account are not yet in a financial position to maintain a healthy account and thus would not necessarily be best served by a program that strongly encourages them to enter mainstream banking. In fact, the efficacy of the *Money Smart*

program might be enhanced by targeting nonaccount holders who lack the means to sustain an account with additional education on the use of alternative financial services. In the end, while participating in the mainstream banking system can have substantial benefits, it may still be in the best interest of the individual to not open an account, even after participating in a financial education program. *The bottom line is that the best measure of program "success" may not be the number of accounts opened, but whether the program has provided the participant with the financial skills and tools needed to make that decision on their own.*

This finding is particularly important to note. Financial education programs that target the unbanked commonly measure program "success" by the number of bank accounts that are opened. However, not all households are in a financial position to manage a healthy bank account regardless of the individual's level of financial education. As a result of the *Money Smart* program, the individual may know the benefits associated with mainstream banking. They may even know that using alternative financial services can be, and in many cases are, more expensive. However, even with an increased level of financial knowledge and skills, they may decide that, given their current financial situation, it is still in their best interest to not open an account. In these cases, the program is "not a failure" even though the increase in knowledge did not lead to the specific change in behavior used to measure program success. Policymakers, financial institutions, and community leaders need to keep this in mind as financial education programs continue to be developed to target the unbanked. If the primary goal of programs such as *Money Smart* is to facilitate the transition of the unbanked into mainstream banking, *then it is critical that these programs identify unbanked participants who are in a financial position to open an account from those who are not.*

This study provides considerable insight into the characteristics of the unbanked and those who are more likely to open an account. However, it is far from complete and one must

acknowledge its limitations. First, attrition from the *Money Smart* program and missing information on several surveys considerably reduced the sample size. As a consequence, the results may be driven by the responses of only a few individuals and one needs to be cautious in regarding these findings as conclusive. Second, since participants were not randomly selected into the program and attrition from the program was likely not random, the results may be biased. However, it is impossible to correct for the possible bias given the lack of data on individuals who chose not to participate. Third, the key measure of program efficacy—whether unbanked participants enter and remain in the mainstream banking system—is imperfectly measured. A high proportion of unbanked participants cited financial hardship as an impediment to opening an account in the past. One must be skeptical about whether the 80.0 percent of unbanked participants who reported their intention to open (and maintain) an account actually did open an account.

Finally, as future research moves forward, three groups need to be identified within the unbanked population. The first group that needs to be identified consists of unbanked individuals who are in a financial position to open and maintain a healthy account, but who do not have the financial knowledge needed to enter the financial mainstream. These individuals have the greatest likelihood of benefiting from a financial education program like *Money Smart* that focuses on mainstream banking and introduces them to mainstream products and services. The second group consists of unbanked individuals who are in a marginal position to open an account but need the "right" product. These individuals would also benefit from financial education as well as new, less-costly financial products geared toward the unbanked. The final group consists of those who are unable to open and maintain a healthy account regardless of knowledge and/or financial product. The effectiveness of programs such as *Money Smart* could be enhanced if unbanked individuals who lack the means to sustain an account were targeted

with more detailed financial education on the use of alternative financial services, particularly low-cost alternatives.

Overall, this study provides a better understanding of how financial education programs such as *Money Smart* can more effectively meet the financial needs of the unbanked and their communities. This study also lays a foundation that other researchers can build upon as they evaluate similar programs so that better comparisons can be made across financial education programs that have the same goal of moving individuals toward mainstream banking.

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Table 1
Account Profile of Program Participants

Types of account (percentages)	All (N=226)
No Account	40.7
Savings or Checking Account	59.3
Only Checking Account	21.7
Only Savings Account	9.7
Both Savings & Checking	27.9

Table 2
Demographic Profile of Program Participants by Account Status

Variable (percentages)	**All (N=226)**	Account (N=134)	No Account (N=92)	No Account: Plan to Open Account (N=74)	No Account: Do Not Plan to Open Account (N=18)
Female	**68.6**	70.1	67.4	68.9	61.1
Age					
Under 25	**33.6**	29.8	39.1	36.5	50.0
25 – 34	**20.4**	22.4	17.4	20.3	5.5
35 – 44	**25.7**	21.6	31.5	31.1	33.3
45 – 54	**11.9**	13.4	9.8	10.8	5.5
55 – 64	**4.9**	7.5	1.1	1.3	0.0
65 or older	**3.5**	5.2	1.1	0.0	5.5
Race					
White	**9.3**	11.9	6.5	5.4	11.1
Black	**50.0**	37.3	67.4	74.3	38.9
Hispanic	**34.9**	41.0	26.1	20.3	50.0
Asian	**4.0**	6.7	0.0	0.0	0.0
Other	**1.8**	3.0	0.0	0.0	0.0
Schooling					
No high school	**16.4**	10.4	25.0	20.3	44.4
High School	**29.6**	23.1	39.1	40.5	33.3
Some College	**32.3**	35.8	27.2	29.7	16.7
College (B.A./B.S.)	**16.8**	25.4	4.3	4.1	5.5
Graduate School	**4.9**	5.2	4.3	5.4	0.0
Marital Status					
Single	**67.2**	56.0	82.6	85.1	72.2
Divorced	**8.4**	8.2	8.7	8.1	11.1
Widowed	**1.8**	2.2	1.1	0.0	5.5
Married	**22.6**	32.8	7.6	6.8	11.1
Family Size	**3.3**	3.1	3.5	3.6	3.2
Employment					
Not working	**58.8**	46.3	77.2	77.0	77.8
Working Part-time	**11.1**	11.9	9.8	12.2	0.0
Working Full-time	**30.1**	41.8	13.0	10.8	22.2
Household Income[1]					
Under $4,999	**34.9**	21.3	54.8	55.9	50.0
$5,000 to 9,999	**19.9**	16.4	25.0	27.9	12.5
$10,000-19,999	**16.0**	18.8	11.9	10.3	18.7
$20,000 – 29,999	**13.1**	18.8	4.8	4.4	6.3
$30,000 or more	**16.0**	24.6	3.6	1.5	12.5

[1] Twenty of the 226 sample participants chose not to report annual household income.

Table 3
Financial Profile of Program Participants by Account Status

Variable (percentages)	**All (N=226)**	Account (N=134)	No Account (N=92)	No Account: Plan to Open Account (N=74)	No Account: Do Not Plan to Open Account (N=18)
Do you borrow money?	**56.6**	53.7	60.9	63.5	50.0
From whom do you borrow?[1]					
Family/friends	**69.8**	50.7	94.5	95.6	88.9
Payday lender/title loan company	**4.8**	5.6	3.6	4.3	0.0
On credit cards	**18.2**	26.8	7.3	6.5	11.1
From bank	**15.9**	28.2	0.0	0.0	0.0
From other	**4.8**	5.6	3.6	4.3	0.0
What are you borrowing money for?[2]					
To pay bills	**57.8**	54.2	62.5	61.7	66.7
For furniture, appliances, etc	**5.5**	6.9	3.6	2.1	11.1
For car	**13.3**	15.3	10.7	12.8	0.0
For education	**16.4**	19.4	12.5	14.9	0.0
For house	**15.6**	26.4	1.8	2.1	0.0
For other	**28.9**	20.8	39.3	40.4	33.3

[1] Conditional on borrowing money.
[2] Conditional on borrowing money.

Table 4
Characteristics of Program Participants with No Account

Variable (percentages)	No Account (N=92)
Reasons for not having an account	
Do not have enough money	71.7
Do not trust banks	7.6
Poor credit history	17.4
Inconvenient hours or locations	5.4
Prefer currency exchanges to banks	4.3
Do not write enough checks	5.4
Do not have social security number	3.3
Do not have ITIN number	1.1
Do not have photo ID	1.1
Bank fees/costs too high	10.9
Do not want govn't to know income	4.3
How do you pay your bills if you have no checking account?[1]	
with cash	50.9
with money order	57.9
with credit card	3.5
with other	13.2
Where do you cash your checks if you have no account?[2]	
Currency exchange or payday lender	76.7
Grocery store	9.3
Bank or credit union	10.5
Convenience store	3.5
Employer	1.2
Other	17.4

[1] Conditional on having no checking account. For this question, N=114.
[2] Note: a few participants chose not to respond to this question.

Table 5
Impact Statements of Program Participants by Account Status

Variable (percentages)	**All (N=226)**	Account (N=134)	No Account (N=92)	No Account: Plan to Open Account (N=74)	No Account: Do Not Plan to Open Account (N=18)
I am more financially knowledgeable:					
Strongly Agree	**54.9**	56.0	53.3	62.2	16.7
Agree	**42.9**	43.3	42.4	36.5	66.7
Not sure	**1.8**	0.0	4.3	1.3	16.7
Disagree	**0.4**	0.7	0.0	0.0	0.0
I can manage my finances better:					
Strongly Agree	**53.5**	56.7	48.9	56.8	16.7
Agree	**42.0**	40.3	44.6	40.5	61.1
Not sure	**3.5**	2.2	5.4	2.7	16.7
Disagree	**0.9**	0.7	1.1	0.0	0.5
I can use what I learned on my own:					
Strongly Agree	**59.3**	63.4	53.3	58.1	33.3
Agree	**36.3**	32.8	41.3	37.8	55.5
Not sure	**3.5**	3.0	4.3	2.7	11.1
Disagree	**0.9**	0.7	1.1	1.4	0.0

Table 6
Probit Estimates for Probability of Having an Account

Variable	Coeff	SE	ME
High school	0.5273*	(0.3004)	0.1883
Some college	0.6071**	(0.3039)	0.2161
College degree	1.0782**	(0.3427)	0.3389
Married	0.8535**	(0.0348)	0.2824
25-34 years old	0.1565	(0.2827)	0.0578
35-44 years old	-0.3121	(0.2683)	-0.1197
Over 45 years old	0.2102	(0.3125)	0.0771
Black	-0.4570**	(0.2243)	-0.1705
Female	0.1259	(0.2162)	0.0477
Family size	-0.0582	(0.0619)	-0.0219
Employed (full-time or part-time)	0.4785**	(0.2274)	0.1758
Community college	0.5847**	(0.2384)	0.2179
Constant	-0.5975	(0.3918)	
Total observations	226		
Log of likelihood	-111.71		
R^2	0.2685		

$X^2 =$ 82.03 ($p<0.0000$)

Note: Standard errors for the coefficients are indicated by (·). ME represents the marginal effects for the probit model and are calculated at the sample means. (**) and (*) indicate significance at the 0.05 and 0.10 percent levels, respectively. Omitted categories are no high school, under 25 years old, and not working.

Table 7
Probit Estimates for Probability of Planning to Open an Account

Variable	Coeff	SE	ME
High school	0.2200	(0.5014)	0.0297
Some college	0.1006	(0.6482)	0.0135
College degree	0.3150	(0.9894)	0.0362
Married	-0.3262	(0.7899)	-0.0552
25-34 years old	0.8243	(0.8678)	0.0790
35-44 years old	-0.3028	(0.5124)	-0.0458
Over 45 years old	-0.4338	(0.7386)	-0.0761
Black	0.2781	(0.4381)	0.0416
Female	0.2052	(0.5167)	0.0301
Family size	0.2068	(0.1531)	0.0288
Employed (full-time or part-time)	-0.0590	(0.4902)	-0.0084
Community college	-0.0076	(0.6541)	-0.0011
Financially knowledgeable	1.3870**	(0.5453)	0.2203
Can better manage finances	1.0712*	(0.5907)	0.1541
Can apply what they learned	-0.2556	(0.5713)	-0.0353
Advanced Lessons (6-10)	-1.3816**	(0.6728)	-0.2193
Constant	-0.1782	(0.7141)	
Total observations	92		
Log of likelihood	-29.4635		
R^2	0.3521		

$X^2 = 32.03$ ($p<0.0083$)

Note: Standard errors for the coefficients are indicated by (·). ME represents the marginal effects for the probit model and are calculated at the sample means. (**) and (*) indicate significance at the 0.05 and 0.10 percent levels, respectively. Omitted categories are no high school, under 25 years old, not working, and basic lessons (1-5).