

Inclusion in Asset Building: Research and Policy Symposium

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LINKING TAX REFUNDS AND LOW-COST BANK ACCOUNTS

Policy-makers and community advocates have become increasingly concerned about individuals who do not have a checking or savings account, who rely on “alternative” financial services such as check-cashing outlets and payday and pawnshop loans, and who have little or no assets. At the same time, participation in the Earned Income Tax Credit (EITC) program continues to rise, providing millions of low-income workers with a potentially substantial source of savings. In response to these two trends, ShoreBank (formerly South Shore Bank) and the Center for Law and Human Services created the Extra Credit Savings Program. This initiative seeks to connect the “unbanked” to mainstream financial services and to facilitate on-going saving and asset accumulation in low-income households by linking tax refunds to low-cost bank accounts.

This paper presents findings from an on-going evaluation of the Extra Credit Savings Program (ECSP). The first section provides background information on unbanked families and the EITC, and the second describes the ECSP. The third section describes data sources and research questions. In the fourth and fifth sections, we describe ECSP participants and present data regarding planned uses of tax refunds. The sixth section documents patterns of activity in ECSP accounts. The final two sections provide discussion and conclusions.

BACKGROUND

Unbanked Families in the U.S.

According to data from the Survey of Consumer Finances (SCF), in 1998, about 10 percent of all U.S. families had neither a checking or savings account (Kennickell, Starr-McCluer, & Surette, 2000). Estimates from the SCF indicate that about 13 percent of all U.S. families and about 24 percent of lower-income¹ families were unbanked in 1995 (Hogarth & O'Donnell, 1999). Estimates from other data sets suggest that as many as 20 percent of all American households are unbanked (Carney & Gale, 1999; Hurst, Luoh, & Stafford, 1998). The large number of unbanked families is troubling for several reasons: First, those without bank accounts pay more for routine financial transactions such as check-cashing and bill-paying (Caskey, 1994; Consumer Federation of America, 1997; Doyle, Lopez, & Saldenberg, 1998). Second, it is difficult for the unbanked to build a positive credit history (Caskey, 1997). Finally, it is more difficult to accumulate assets because financial savings kept outside of formal financial institutions are less secure, are more susceptible to consumption pressures and temptations (Beverly, Moore, & Schreiner, 2001), and do not earn interest.

Policy-makers and consumer groups have developed a number of initiatives to bring the unbanked into the financial mainstream. In the 1980s, several states passed legislation requiring commercial banks to offer low-cost banking accounts called “lifeline” or basic accounts (Doyle et al., 1998; Hogarth & O'Donnell, 1999). In the middle- and late-1990s, the federal government created regulations that require electronic delivery of federal payments, and consumer groups advocated for provisions that would help the unbanked open and maintain low-cost accounts (see Stegman, 1999). And, in December 2000, Congress appropriated \$10 million to the Treasury Department for the “First Accounts” initiative, which will pilot strategies to help the unbanked access convenient, secure, and low-cost financial services.

¹ Lower-income families had less than 80 percent of median family income (Hogarth & O'Donnell, 1999).

The Earned Income Tax Credit

The federal EITC is a refundable tax credit administered through the income tax system. The credit was created in 1975 to offset the burden of Social Security and Medicare payroll taxes for working-poor families with children. Major expansions of the credit were enacted in 1986, 1990, and 1993. The most recent expansion, which was phased in between 1994 and 1996, increased the maximum credit for families with one child by 9 percent and the maximum credit for families with multiple children by 69 percent (Liebman, 1998). In 1999, federal spending for the EITC was almost double the amount of federal spending for the Temporary Assistance for Needy Families (TANF) program. Although childless workers are eligible for a small refund, the program largely benefits working families with children. In the 1999 tax year, the maximum benefit was \$2,312 for families with one child and \$3,816 for families with two or more children (see Hotz & Scholz, 2001 for an overview of the EITC and related studies).

For several years, the Internal Revenue Service has promoted the advance EITC payment option, which allows EITC-eligible individuals to receive a portion of their credits through their paychecks, but virtually all EITC recipients receive a lump-sum refund after they file their tax returns (Hotz & Scholz, 2001). With an average EITC benefit of about \$1,500 for families with one child, and about \$2,300 for families with multiple children (Johnson, 2000), the credit offers a unique asset-building opportunity for low-income taxpayers who often lack the resources to open, or contribute to, a savings account or other investment vehicle. In fact, a 1998 study of 826 EITC recipients in Chicago (Smeeding, Phillips, & O'Connor, 2000) found that nearly half of the sample planned to use all or some of their tax refunds for “social mobility” purposes such as the purchase or repair of a home or car, payment of school or college tuition, or debt payments. Saving was particularly important: More than a quarter (28%) identified saving as an important use of the EITC. However, only 36 percent of the sample had a checking account, and only 28 percent had a savings account. As Smeeding et al. suggest, those without bank accounts may have difficulty saving or even prioritizing uses of a large tax refund.

While the EITC provides many lower-income families with substantial income tax refunds, refund payments may also include overwithholding. If individuals make no distinction between EITC payments and overwithholding, then the essential link for the program described here is between *tax refunds* and low-cost savings accounts. However, if EITC payments are perceived differently than overwithholding—for example, if individuals are more likely to anticipate and make plans to use EITC payments—then the essential link is between the EITC and low-cost savings accounts. This is an important area for future research.

THE EXTRA CREDIT SAVINGS PROGRAM

The Extra Credit Savings Program is a pilot program developed by ShoreBank (SB), a community development financial institution serving under-invested communities in Chicago, and the Center for Law and Human Services (CLHS), a non-profit organization that seeks to increase the resources of low-income families and individuals by improving access to public benefit and entitlement programs. Between January and April 2000, the Tax Counseling Project of CLHS offered free tax preparation assistance and electronic filing of tax returns to EITC-eligible individuals two nights a week at a SB branch. On these evenings, SB bankers invited individuals to join the Extra Credit Savings Program. Those who chose to participate opened no-

fee, no-minimum-balance savings accounts and arranged to have their 1999 federal tax refunds directly deposited into these accounts. Funds in ECSP accounts earn a market rate of interest (2.5% in 2000), and a no-fee ATM card is available.² As an extra saving incentive, participants received an additional 10 percent bonus on funds remaining in the account on December 31, 2000 (up to a maximum bonus of \$100 per account-holder). Enrollment in the ECSP was voluntary and was not limited to those without bank accounts.

DATA SOURCES AND RESEARCH QUESTIONS

This research uses four sources of data from ECSP participants. CLHS intake forms provide demographic data. Data from federal tax returns compiled by CLHS provide additional demographic data, as well as income and tax information. Monthly bank statements provide data on ECSP account transactions. Finally, account-holders completed 15-minute surveys upon enrollment. These surveys included both open- and closed-ended questions on planned EITC uses, saving-related attitudes, perceptions of banks and account features, and use of financial services.³ In addition to these sources of data for ECSP participants, CLHS provided intake form and tax return data (with all identifying information removed) for the individuals who received tax preparation assistance at the SB site but chose not to open ECSP accounts.

With these data, we seek to answer several research questions:

1. How many eligible individuals chose to participate in the Extra Credit Savings Program?
2. What are the characteristics of ECSP participants, and how do they differ from those who chose not to enroll?
3. Why did participants choose to enroll in the program?
4. How did ECSP participants plan to use their tax refunds?
5. What are the patterns of saving and withdrawal for ECSP accounts?

CHARACTERISTICS OF ECSP PARTICIPANTS

Table 1 provides information on the “take-up” rate and various response rates. Out of 446 individuals who filed their taxes at the CLHS-SB site,⁴ 89 chose to open an ECSP account, for a take-up rate of 20 percent. Eighty-six of these account-openers were adults and therefore eligible study participants. Seventy-two of these eligible individuals completed the informed consent process, resulting in an overall study participation rate of 84 percent.⁵ Sixty-nine individuals completed baseline surveys.

Insert Table 1 About Here

² ShoreBank does not charge fees for ATM use. However, individuals may incur fees (typically \$1.50 per use) if they use ATMs owned by other banks.

³ Eighty-five percent of the completed surveys were conducted in-person, the remainder by telephone.

⁴ Sixty-three other individuals met with CLHS volunteers but did not complete the filing process.

⁵ Of the remaining 14 adults who opened ECSP accounts, seven refused to participate in the research study, and seven could not be reached.

Demographic Characteristics and Tax Refund Information

Table 2 provides information on demographic characteristics and 1999 federal income tax status for ECSP participants and non-participants. Participants were predominantly female and African-American, and most had never been married. The median age was 34, and the median number of dependents was 1. In economic terms, the group was fairly disadvantaged: Half had received Food Stamps in 1999, and almost one-third had received TANF. The median 1999 federal adjusted gross income was under \$9,000. The median anticipated federal tax refund was \$1,206.⁶

Because one goal of the Extra Credit Savings Program is to connect the unbanked to the financial mainstream, we are particularly interested in the percentage of participants who did not have a checking or savings account upon enrollment. According to CLHS intake form data, 74 percent were unbanked at the time of enrollment. According to baseline survey data, however, about 60 percent of ECSP participants were unbanked. It is impossible to know with certainty which figure is more accurate, but we have greater confidence in the survey data for at least two reasons: First, individuals may not have reported account ownership on the intake form because they mistakenly believed that having an account would make them ineligible for the ECSP. This fear is less likely to have affected survey responses because individuals usually completed surveys after opening their ECSP accounts. Second, the surveys were completed via face-to-face interviews, while the intake forms were completed by individuals as they waited for tax preparation assistance. It seems reasonable to expect more complete and accurate data from the surveys. On the other hand, survey data could underestimate the number of participants without bank accounts upon enrollment if individuals mistakenly considered their new ECSP accounts when asked whether they had bank accounts.⁷ Still, we adopt the smaller estimate and conclude that about 60 percent of participants were unbanked at enrollment.

Insert Table 2 About Here

Differences Between Participants and Non-Participants

Next, we highlight similarities and differences between participants and non-participants (Table 2). Those who chose to open ECSP accounts may have been somewhat more likely to be female. In terms of race/ethnicity, marital status, and number of dependents, the two groups were very similar.⁸ Overall, the two groups appear to have quite similar demographic characteristics. Participants were more likely to receive Food Stamps and may have been more likely to receive TANF in 1999. They were less likely to receive Social Security or Unemployment Insurance. Participant households had slightly less income than non-participant households. We conclude that participants may have been more disadvantaged than non-participants, but any differences are likely to be small. Anticipated refunds appear to have been larger for participants than for non-participants. This finding may indicate that individuals with larger refunds were more likely to open accounts. Anecdotal evidence supports this proposition: SB employees noticed that individuals often wanted to complete their tax forms to determine refund status before deciding

⁶ “Anticipated” refunds come from completed tax forms. Actual amounts may differ from anticipated amounts. Refunds are negative for individuals who owe taxes.

⁷ The first relevant survey question read, “Other than the Extra Credit Savings Account you just opened, do you currently have a savings account at a bank or credit union?”

⁸ Differences in race/ethnicity are statistically significant but not practically significant.

whether to open an ECSP account. Finally, with the lower estimate of non-account-ownership for participants, participants were more likely than non-participants to be unbanked, but the difference is not statistically significant at conventional levels.

Use of Financial Services

In the baseline survey, we asked participants about financial services used recently. Sixty-two percent of respondents had purchased at least one money order in the past month, and 53 percent had cashed at least one check at a check-cashing outlet in the past month. Forty-three percent of respondents had a credit card, usually a Visa or Mastercard. The use of other credit products, including bank, finance-company, payday, and auto-title loans, was much less common.

As noted above, about 60 percent of participants were unbanked at the time of enrollment. About one-third of these unbanked individuals had never had an account, and another one-third had not had an account in at least three years. For those without accounts, we read a list of possible reasons for not having an account and asked whether each item helped explain why they did not have an account. Four items were named by more than half of respondents: “You don’t need an account because you don’t have any savings” (66%); “You want to keep your financial records private” (66%); “Banks require too much money just to open an account” (59%); and “Bank account fees are too high” (56%). Relatively few respondents (10%) blamed inconvenient bank hours and locations. Next, we asked participants without accounts to name the most important reason they did not have an account. The same four items ranked highly. However, the most commonly-cited reasons were large opening deposit requirements (28%) and the desire to keep financial records private (28%).

Reasons for Opening an ECSP Account

Survey respondents were also asked why they decided to open an ECSP account. The first question on this topic was open-ended,⁹ and the 69 survey respondents mentioned a total of 96 reasons. Thirty-two respondents (46%) named some sort of saving motive, usually a general saving motive (e.g., “To learn to save money,” “To try to save more money,” “I need to save”). Twenty-eight respondents (41%) mentioned wanting a bank account, including 21 who expressed a general desire for an account (e.g., “I wanted to open up a savings account before,” “This is something I’ve been meaning to do for awhile”) and seven who expressed a specific desire to save in a formal institution (e.g., “Need an account to save money,” “To have a secure place for money,” “It’s easier to save when money is in the bank and not in my hand”). These last responses reveal a saving motive as well as a desire for a bank account.

Next, we read a list of nine account features and asked participants: (1) whether each feature was important in their decision to open an account, and (2) which feature was most important in their decision to open an account. When allowed to name multiple features, more than half of respondents named each of the nine selected account features (Table 3). When asked to choose the most important account feature, 16 respondents (24%) cited the absence of fees, 12 (18%) cited the tax refund serving as opening deposit, and 11 (16%) cited interest payments.

⁹ We coded all open-ended questions in four steps: Two individuals separately developed coding schemes and then discussed each discrepancy until they reached consensus. The same two individuals separately assigned codes and then reached consensus on discrepancies.

Insert Table 3 About Here

Table 3 also shows the most important account features separately for those with and without accounts upon enrollment. For the unbanked, the most commonly-cited feature was the ability to open an account with a tax refund. We believe many unbanked individuals chose to open an ECSP account because the opportunity was presented *when they anticipated having money available*. The anecdotal evidence cited above also supports this proposition: Individuals often wanted to know their refund status before deciding whether to open an ECSP account. This finding is important and suggests that the income tax system may be an effective vehicle to connect the unbanked to mainstream financial institutions. Other important account features for the unbanked were interest payments and the absence of fees. For individuals with bank accounts, the most important account feature was the absence of fees. Other important features were the year-end bonus and the absence of a minimum balance requirement. We suspect that these participants compared ECSP features to features of their current accounts and decided that the ECSP account was more attractive.

Attitudes about Saving and Financial Institutions

We asked participants how much they agreed or disagreed with a series of statements designed to measure attitudes about saving and financial institutions (Table 4). All respondents said that saving was important, but most expressed some pessimism about their ability to save, or to save meaningful amounts. Respondents also generally had favorable attitudes toward financial institutions. Of course, ECSP participants are a self-selected group and probably had more favorable and optimistic attitudes toward saving and financial institutions than the general lower-income population. These responses may also reflect social desirability bias, the tendency for survey participants to give responses they believe will please interviewers.

Insert Table 4 About Here

We also examined the percentage of participants agreeing with statements about saving and financial institutions separately by account ownership. Unbanked participants were somewhat less likely than banked participants to strongly agree that saving is important. This finding could indicate that those who place less value on saving are less likely to open accounts (and thus were more likely to be unbanked at the time of enrollment). Because the unbanked tend to be more economically disadvantaged, this finding may also indicate that saving seems somewhat less important in the face of more urgent subsistence needs. Unbanked individuals were also more pessimistic about their ability to save. They were equally likely to believe that checking and savings accounts are secure. Interestingly, the unbanked were more likely to believe that it is easier for people to save when they have a bank account and that direct deposit is a good idea. These findings may suggest that the unbanked somewhat overestimate the extent to which account ownership and direct deposit lead to asset accumulation.

Saving Motives

We asked respondents whether their households were currently saving money, and if so, if they were saving for anything in particular. For those who reported having a particular saving motive, we asked an open-ended question, “What are you saving for?” Thirty-one participants (45%) said their households were currently saving. Of these, nine said they were not saving for

anything in particular. The remaining 22 participants named 35 specific saving motives. The most common motives were home purchase, mentioned by 15 percent of participants, and education for children or grandchildren, mentioned by 10 percent of participants. Other motives named by multiple participants were vehicle purchase (6%); emergencies, hard times, or “the future” (6%); and retirement (3%). The unbanked were less likely to report currently saving, and those who were saving were less likely to report specific saving motives.

Saving Barriers

To assess barriers to saving, we asked respondents the following open-ended question: “What, if anything, makes it difficult for you to save?” The most commonly-cited barriers reflect difficulties finding “surplus” resources: Almost half of the participants (48%) mentioned bills or debt payments, 19 (28%) referred to inadequate income, 11 (16%) mentioned expenses for children, and 7 (10%) mentioned emergencies or unusual expenses. Four participants (6%) said they had trouble resisting temptations to spend money. Seven participants (10%) named no barriers.

PLANNED USES OF TAX REFUNDS BY ECSP PARTICIPANTS

Like Smeeding et al. (2000), we asked participants how they planned to use their tax refunds. Respondents were first asked, “What are the most important things you plan to do with your tax refund?”¹⁰ Twenty-seven respondents identified one planned tax refund use, 19 respondents named two uses, 14 named three uses, and eight named four uses. Thus, when allowed to identify multiple uses, 68 respondents named a total of 139 uses. Next, those who gave multiple responses were asked to name the most important use.

We coded responses into 42 initial categories¹¹ but believe some grouping of these items is desirable. In Table 5, we present the number and percentage of respondents naming uses in seven fairly broad categories: bills, housing-related uses, vehicle-related uses, educational uses, personal and household purchases, social network-related uses, and special events. In most of these categories, participants named both current and future uses. For example, under educational uses, some planned to pay for educational expenses, and some planned to save for future educational expenses. In addition, many participants mentioned future uses that did not fall into one of the seven categories just mentioned (e.g., save for a “rainy day”, save to establish a credit record). Thus, we created an eighth category, other saving and investment. We also computed the number of individuals giving responses that explicitly mentioned saving. These responses could fall into any of the eight categories. We refer to this cross-cutting category as “all saving.”

Insert Table 5 About Here

When ECSP participants were allowed to name multiple uses, the most common were bills (especially utility and credit card bills), other saving and investment (primarily precautionary saving), personal and household items (especially clothes for children), and vehicle-related uses

¹⁰ Interviewers were trained to prompt for some detail. For example, when respondents said they planned to “pay bills”, interviewers asked, “What are the most important bills you plan to pay with your tax refund?”

¹¹ Table available from authors upon request.

(primarily vehicle purchase). Thirty-six participants (52%) said they planned to save some or all of their tax refunds. When asked to name the most important use, twenty participants (29%) named bills, and 18 (27%) named other saving and investment, primarily precautionary saving. Ten participants (15%) mentioned housing-related uses, including eight who planned to move to a new apartment and two who planned to purchase a home. Finally, seven participants (10%) named vehicle-related uses (primarily vehicle purchase) as their most important planned use. Twenty-six participants (38%) named a most important use that explicitly mentioned saving. These findings are quite consistent with planned EITC uses documented by Smeeding et al. (2000). Many ECSP participants planned to use their tax refunds to “make ends meet” (e.g., to pay bills or to purchase basic household items). At the same time, ECSP participants demonstrated strong saving motives and appeared to view tax refunds as an important source of savings. These saving motives point to the importance of account ownership because it is more difficult to accumulate and maintain savings without a bank account. As always, it is important to acknowledge that ECSP participants are self-selected, but these findings provide further support for programs that link tax refunds with low-cost savings accounts.

PATTERNS OF SAVING AND WITHDRAWAL FOR ECSP ACCOUNTS

In this section, we use data from account statements to describe deposit and withdrawal patterns for ECSP accounts through November 15, 2000. As noted above, 72 ECSP participants signed consent forms giving the research team access to account statements. However, for most research questions, it is necessary to restrict the sample to participants whose refunds had been directly deposited into an ECSP account. As of November 15, 60 participants had had tax refunds directly deposited into their ECSP accounts. After we exclude two individuals who received refunds smaller than \$15, our primary sample for questions regarding account activity consists of 58 participants who received non-negligible refunds. Although this section focuses almost exclusively on those who have received refunds, it is important to note that six of the twelve individuals who had not received refunds had deposited money into their ECSP accounts.

Federal Tax Refunds

Most participants received their refunds in February or March. Refunds ranged from \$141 to \$4,688. The mean was \$1,808 (standard deviation=\$1,463), and the median was \$1,524. For these lower-income families, refund amounts are substantial. The median anticipated refund amount as a percentage of adjusted gross income was 21 percent. The total value of refunds for the 58 participants who had received refunds by November 15 was \$104,873.

First Withdrawal

Data on first post-refund withdrawals are interesting because they reveal *initial* responses to anticipated tax refunds. Thirty-four participants (59%) made withdrawals in the first week, including twelve (21%) who made withdrawals the same day their refunds arrived. Nine (16%) waited at least thirty days before making a withdrawal. The median number of days between refund and first withdrawal was five, and the average was 17. The median value of first withdrawals was \$250, and the median first withdrawal amount as a percentage of refund was 34 percent.

Account Activity in the First Thirty Days

Next, we examine all account activity in the first thirty days following refund receipt (first column of Table 6). Like data on first withdrawal, these data provide insight into behavior soon after anticipated refunds arrive.

Insert Table 6 About Here

Withdrawals

Nine individuals (16%) did not make any withdrawals in the first month. The median number of withdrawals was 3, and the mean was 4.3. Withdrawals were fairly small. The median withdrawal amount (calculated over 248 withdrawals) was \$67, and the mean was \$290. The median withdrawal as a percentage of refund was 8 percent, and the mean was 18 percent. The total amount of withdrawals in the first month was \$71,837.

Deposits

Fifteen individuals (26%) made at least one deposit (not including interest payments) in the first month. Individual deposits (N=23) ranged from \$1 to \$1,500. The median value was \$150, and the mean was \$292. The total amount of deposits in the first month totaled \$6,723. Three individuals (including two who were unbanked at the time of enrollment) received paychecks or transfer payments via direct deposit within the first thirty days. Arranging for direct deposit is important because it demonstrates some degree of comfort with a bank account and some commitment to using the account over time. By automatically converting money into a less liquid form, direct deposit may also facilitate saving and asset accumulation (Beverly et al., 2001).

Thirty-Day Ending Balances

Total funds on deposit declined by 63 percent in the first thirty days following refund receipt. By the end of the first month, one individual had closed her account, and six others had less than \$5. Thus, 12 percent had essentially depleted their accounts, at least in absolute terms.¹² The median ending balance after the first thirty days was \$206, and the mean was \$649. The median ending balance as a percent of refund was 13 percent, and the mean was 39 percent. Ten participants (18%) had ending balances that were larger than their refunds; four of these individuals had made deposits in addition to receiving interest payments.

Patterns of Account Activity

To summarize account activity in the first thirty days, we defined three general patterns:

- (1) Maintenance (i.e., thirty-day ending balance was greater than or equal to 95% of refund amount);
- (2) Decline (i.e., thirty-day ending balance was less than 95% but greater than or equal to 15% of refund amount);
- (3) Depletion (i.e., thirty-day ending balance was less than 15% of refund amount).

¹² Accounts remain open until individuals ask that they be closed, and some individuals with very low balances may have no plans to use their accounts in the future. Still, as long as their accounts remain open, it is possible for individuals to become active account-holders.

Table 7 shows the distribution of patterns for all participants and by account ownership. In the full sample, 19 percent of refund recipients left their refunds virtually untouched and/or had thirty-day ending balances that exceeded their refund amounts. Twenty-eight percent withdrew some of their refunds but did not deplete their accounts. Fifty-three percent depleted their accounts in the first month, including 21 percent who depleted their accounts within the first week. Unbanked participants appear to have been more likely than banked participants to deplete their accounts in the first month and less likely to have high (relative to refund amounts) ending balances.¹³

Insert Table 7 About Here

Subsequent Account Activity

In the previous section, we documented account activity in the first thirty days following refund receipt. In this section, we discuss deposit and withdrawal activity in subsequent time periods. First, we describe withdrawals, deposits, and ending balances in the first sixty, ninety, and 120 days. Next, we discuss overall patterns of account activity. In particular, we document the extent to which individuals have used ECSP accounts for something more than “short-term storage” for tax refunds.

Withdrawals, Deposits, and Ending Balances

The second, third, and fourth columns of Table 6 summarize account activity in the first sixty, ninety, and 120 days. As one would expect, the number of individuals with no withdrawals declined over time. Still, four participants (7%) did not make any withdrawals in the first three months, and two (3%) did not make any withdrawals in the first four months. The median withdrawal amount changed very little, in absolute or percentage terms.

The number of individuals who had made one or more deposits increased over time, as did the number who had received direct deposit paychecks. Seventeen of the twenty-five individuals who made deposits—including six of the eight who had received direct deposit paychecks or transfer payments—were unbanked at the time of enrollment.

No additional accounts were closed in the second, third, and fourth months, but the number of individuals with less than \$5 increased to sixteen (28%). The median ending balance declined substantially over time. After 120 days, only half of the participants had ending balances greater than \$19, and only half had ending balances greater than 2 percent of refund amount. The mean balance after 120 days was \$271, and the mean balance as a percent of refund was 29 percent.

Overall Patterns of Account Activity

Next, we examined graphs for each individual showing daily balance between the date of refund receipt and November 15, 2000 and defined four overall patterns of account activity: (1) rapid spend-down, (2) slow spend-down, (3) transaction, and (4) saving.¹⁴ The first column of Table 8 shows the number and percentage of ECSP participants in each category. The first and most

¹³ The chi-square test for differences in patterns by account ownership is significant at the 21 percent confidence level.

¹⁴ Here, we do not consider length of time since refund receipt. The number of days since refund receipt ranged from 130 to 277. The mean was 244 with a standard deviation of 27.

common pattern is *rapid spend-down*. The 24 individuals in this group (41% of the sample) depleted their accounts (i.e., account balance fell below 15 percent of refund amount) in the first thirty days, and their accounts were largely inactive from this point on. Six of these individuals made at least one deposit, but funds were quickly withdrawn. To a large extent, these ECSP participants used their accounts solely for short-term storage of tax refunds.

Insert Table 8 About Here

The second pattern is *slow spend-down*. The 14 individuals in this group (24% of the sample) did not deplete their accounts in the first thirty days, but their account activity was dominated by withdrawals. Four individuals made at least one deposit, but these funds were usually withdrawn fairly quickly. Almost all had balances of at least \$500 two months after refund receipt, and many had balances of at least \$500 after three months. These ECSP participants also used their accounts for storage of tax refunds, but funds remained in accounts longer. This postponed consumption might be viewed as saving. These accounts are more likely to be profitable than accounts belonging to those in the first group.

The third overall pattern of account activity is *transaction*. The 11 individuals in this group (19% of the sample) may have rapidly withdrawn their tax refunds but in later months had frequent deposits and withdrawals. Average daily balances tended to be low, and these individuals were essentially using their ECSP accounts like checking accounts. Nine of these individuals had received direct deposit paychecks or transfer payments.

Nine individuals (15%) fell into the fourth pattern—*saving*. All of these individuals had periods of time when account balances were increasing, and all had account balances on November 15 that were greater than 15 percent of their refund amounts. The median account balance on November 15 was \$565, and the average was \$676. The median account balance as a percentage of refund was 35 percent, and the average was 52 percent. We assume that these individuals were attempting to save in their ECSP accounts.

The second and third columns of Table 8 show overall patterns of account activity by ownership of other accounts at enrollment. We do not test for statistically significant differences because the small sample and relatively large number of cells make a chi-square test inappropriate. However, rapid spend-down appears to have been more common, and saving appears to have been less common, for the unbanked. These findings may indicate that unbanked individuals are more disadvantaged and have greater difficulty postponing consumption. Given the survey results reported above, this finding probably does not reflect a distrust of banks among the unbanked. The unbanked were more likely to use their accounts like checking accounts, probably because they did not have other accounts that could serve this function.

Taken together, these findings reveal that about two-fifths of ECSP participants used their accounts simply as short-term storage for tax refunds. Although one might assume that the ECSP provided few benefits to these individuals, the program enabled them to receive refunds quickly—without the fee charged by commercial rapid-refund providers. The program may also have helped them prioritize refund uses, even over a short time period. One-fifth of participants made frequent deposits and withdrawals into their ECSP accounts and might be good candidates

for checking accounts. One-fourth of participants used their accounts largely to store refunds, but many of these individuals held substantial balances for two months or longer. Several had periods of at least thirty days where account balances remained steady and above \$500. When these individuals are combined with the 15 percent who had periods of increasing account balances, it appears that between 30 and 40 percent of participants could be viewed as saving in ECSP accounts. Decomposition by account ownership reveals that over one-half of the unbanked used their accounts for something other than short-term storage of tax refunds. This suggests that programs such as the ECSP that link tax refunds and low-cost accounts have the potential to encourage the unbanked to develop more enduring relationships with banks, which in turn provides them with opportunities to save and accumulate assets.

DISCUSSION

The essential feature of the Extra Credit Savings Program is the link between tax refunds and low-cost bank accounts. It is useful to consider three positive outcomes that may result: Linking tax refunds and low-cost bank accounts may (1) facilitate account ownership among the unbanked, (2) facilitate saving, and/or (3) promote asset purchases. In this section, we discuss findings relevant to each of these outcomes and suggest policy and practice implications.

Linking Tax Refunds and Low-Cost Bank Accounts to Facilitate Account Ownership

About 60 percent of ECSP participants lacked a checking or savings account at the time of enrollment. Over 20 percent of participants had never had an account, and another 19 percent had not had an account in at least three years. These findings suggest that the ECSP was an effective outreach tool for the unbanked: The program encouraged individuals without accounts to open accounts. Data also seem to suggest that special financial incentives are not key to encouraging the unbanked to open accounts. Instead, the most important account features were those that reduced the cost of bank products, such as allowing a tax refund (no matter how small) to serve as opening deposit and the absence of fees.

Several findings suggest that the timing of outreach efforts is paramount, that individuals are more likely to open accounts or to join a savings program *when they anticipate having money available*. For example, one of the two most common reasons given by the unbanked for not having an account was the fact that banks require large opening deposits. In addition, when asked to choose the ECSP account feature that most influenced their decision to open an account, the most common response among unbanked participants was the ability to use a tax refund as the opening deposit. Finally, SB employees noted (anecdotally) that individuals often wanted to determine refund status before deciding whether to open ECSP accounts. This evidence suggests that the income tax system—particularly through refundable credits such as the EITC—may be an effective vehicle to connect the unbanked to mainstream financial institutions, as long as the timing of the account offer is right.

In addition, refund size appears to play an important role in the decision to open a bank account. Individuals who chose to participate in the ECSP program anticipated larger refunds than those who chose not to participate. Particularly in light of the anecdotal evidence cited above, we believe that the ECSP had particular appeal to individuals receiving larger tax refunds. Those who receive large refunds are more likely to need a secure place to keep money. They may also

have a greater incentive to avoid check-cashing fees, which are generally set at a percentage of the face value of the check. If programs such as the ECSP do indeed have greater appeal to those with large tax refunds, then expansions in refundable tax credits could have an unintended, positive effect of encouraging individuals to open accounts and/or join saving programs. In addition, larger refunds help counter banks' concerns that low-income customers have account balances that are too low to cover the costs of opening and maintaining them. A larger initial deposit may improve the chances of an account paying for itself.

Linking Tax Refunds and Low-Cost Bank Accounts to Facilitate Saving

In response to an open-ended question about why they decided to open ECSP accounts, 46 percent of respondents named some sort of saving motive. In addition, 10 percent of respondents expressed a desire to save in some type of formal institution. When asked to name the most important use of their tax refunds, the single most common response—named by 21 percent of the sample—was precautionary saving. Almost two-fifths of the responses (38%) explicitly mentioned some type of saving. We believe that ECSP participants, as a group, have strong saving motives and that many joined the program because they expected it to help them save.

Data on actual use of ECSP accounts reveal that 43 percent of participants made deposits (excluding interest payments and tax refunds) in the first four months. Data on overall patterns of account use suggest that 30 to 40 percent of participants saved in their ECSP accounts. These individuals either maintained substantial account balances over a period of weeks or had periods of time when account balances increased. Although it is impossible to make a strong statement about the effect of the ECSP on saving without a control group and without data on other forms of saving, we suspect that the bulk of funds in ECSP accounts represents new saving, particularly for the unbanked. It is also worth noting that over half of unbanked participants were using their accounts for something other than short-term storage of tax refunds. This finding seems to suggest that programs that link tax refunds and low-cost accounts have the potential to encourage the unbanked to develop *on-going* relationships with banks, and thus to have more formal saving opportunities. From a bank's perspective, however, the real test will be whether ECSP participants use other bank products and services over time, increasing the likelihood that they will become profitable customers.

Linking Tax Refunds and Low-Cost Bank Accounts to Facilitate Asset Purchases

Several studies (Barrow & Granahan, 2000; Romich & Weisner, 2000; Smeeding et al., 2000; Souleles, 1999) suggest that people often use tax refunds to purchase vehicles, homes, cars, and furniture or to pay for educational expenses. At least one study (Smeeding et al., 2000) suggests that tax refunds may make these purchases possible for low-income families. With the data reported here, we can say very little about whether the ECSP program facilitates asset purchases. However, the data do confirm a link between *tax refunds* and asset purchases. When asked to name the most important use of their tax refund, 10 percent planned to purchase a car, 7 percent planned to pay or save for educational expenses, and 4 percent planned to purchase real estate. In future research, we will examine data on actual refund uses from a follow-up survey with ECSP participants.

CONCLUSIONS

Asset accumulation is increasingly viewed as an important, long-term anti-poverty strategy, and participation in mainstream financial systems is a principal prerequisite. The Extra Credit Savings Program seeks to facilitate access to financial services and asset accumulation for low- and moderate-income individuals, many of whom previously relied on public assistance. Evaluating the success of this initiative is a key step in structuring profitable bank products that capture the attention of low-income consumers, encouraging other financial institutions to reach out to this population, and influencing state and federal asset-building policy.

As we witness expansions of the federal EITC and other tax credits and growth in the number of state EITCs, policy-makers should consider the potential for federal and state tax policy to facilitate account ownership and asset accumulation for lower-income Americans. This study suggests that programs that link tax refunds to low-cost bank accounts can be effective tools to encourage the unbanked to open accounts. The large lump-sum nature of the tax refund presents a unique opportunity to connect taxpayers who are unbanked with the financial mainstream, as long as outreach occurs when individuals anticipate receiving a refund. Refund size is also important because programs such as the ECSP are likely to have particular appeal to those who receive large refunds. With the increase in the number of Americans who use direct payroll deposit and the growth in the Electronic Benefits Transfer and Electronic Funds Transfer systems, a growing number of lower-income Americans may be willing to use direct deposit for tax refunds.

Whether account ownership in turn leads to saving and asset building is still unclear, but data on ECSP account activity suggest that some saving has occurred. The question is, over time, will having a place to store refunds lead to additional asset accumulation? Or will it simply lead to more active use of financial institutions for routine transactions? From a bank's perspective, it is not yet clear whether these accounts will be profitable, or at least break-even. The fact that refunds tended to be large (over \$1,000), that one-third of the accounts had thirty-day balances greater than \$500, and that 19 percent of refund participants maintained or increased their balances in the first month could counter banks' concerns that low-income customers have account balances that are too low to cover the costs of opening and maintaining them. A larger initial deposit (e.g., from a larger tax refund) improves the chances of an account paying for itself, particularly if funds are spent down gradually. The fact that 24 percent withdrew their refunds fairly slowly and another 15 percent appeared to be attempting to save in these accounts is somewhat encouraging. In addition, 19 percent of refund recipients exhibited account usage patterns that suggest they might be willing to use other bank products, particularly checking accounts, which do not pay interest and provide banks with an opportunity to earn additional fee income.

The Extra Credit Savings Program aims to influence current bank practice by demonstrating how banks, non-profit organizations, and low-income consumers can develop mutually satisfying relationships—examples that can be replicated across institutions. Thus far, a limited number of banks have shown a willingness to open a small number of Individual Development Accounts or other types of low-cost access accounts, often as a way to enhance their Community

Reinvestment Act (CRA) ratings. However, the cost of servicing thousands of these accounts will likely outweigh the CRA benefits until transaction costs can be reduced and a business case can be made for serving low-income consumers. With 19 million low-income Americans already taking advantage of the EITC program, and given the large size of average tax refunds, programs that link tax refunds and low-cost bank accounts may provide one opportunity to take inclusive asset-building programs to scale.

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Table 1 Percent of Eligible Individuals Who Opened an Account, Completed Consent Process, and Completed Baseline Survey

Number of individuals filing taxes at CLHS-SB site	446	
Number of CLHS-SB filers opening ECSP account	89	
Percent of eligible individuals opening ECSP account		20%
Number of eligible study participants	86	
Number of ECSP account-openers who completed informed consent process	72	
Percent of eligible individuals participating in study		84%
Number of ECSP account-openers completing baseline survey	69	
Percent of study participants completing baseline survey		96%
Percent of ECSP account-holders completing baseline survey		80%

Table 2 Characteristics of ECSP Participants (N=70) and Non-Participants (N=357)

		Participants	Non-Participants	Statistic	p-value
Female		84%	77%	$\chi^2 = 1.79$	0.18
Race/Ethnicity				$\chi^2 = 7.25$	0.06
African-American		99%	97%		
Latino		0%	2%		
Native American		1%	0%		
Other Race		0%	1%		
Marital Status				$\chi^2 = 0.25$	0.97
Married		7%	9%		
Never Married		72%	72%		
Separated or Divorced		16%	15%		
Widowed		4%	4%		
Number of Dependents	Mean	1.2	1.1	$t = -0.69$	0.49
1999 Program Participation					
Social Security or Unemployment Insurance		9%	16%	$\chi^2 = 2.55$	0.11
TANF		29%	23%	$\chi^2 = 1.12$	0.29
Food Stamp		51%	33%	$\chi^2 = 8.29$	0.004
Medicaid		27%	28%	$\chi^2 = 0.38$	0.85
1999 Adjusted Gross Income	Mean	\$9,051	\$10,745	$t = 1.67$	0.10
	Median	\$8,570	\$9,312		
	Range	\$161 – \$31,590	\$0 – \$37,059		
Anticipated Federal Refund Amount	Mean	\$1,692	\$1,434	$t = -1.38$	0.17
	Median	\$1,206	\$841		
	Range	\$0 – \$4,688	-\$2,197 – \$5,557		
Unbanked ^a		61%	54%	$\chi^2 = 1.19$	0.28

Source: Tax return and intake form data collected by the Tax Counseling Project of CLHS.

^a Data on account ownership for participants come from the baseline survey. See text for explanation.

Table 3 Number and Percentage of ECSP Participants Citing Account Features as Important in Decision to Open an ECSP Account, by Account Ownership

	Ever-Mentioned (N=69)	Most Important		
		All (N=68)	Unbanked (n=41)	Banked (n=27)
Account has no fees	69 (100%)	16 (24%)	8 (20%)	8 (30%)
Money earns interest	68 (99%)	11 (16%)	9 (23%)	2 (7%)
Money earns 10% year-end bonus	64 (93%)	8 (12%)	3 (8%)	5 (19%)
Account has no minimum balance	61 (88%)	8 (12%)	3 (8%)	5 (19%)
Tax refund is opening deposit	57 (83%)	12 (18%)	11 (27%)	1 (4%)
Tax Counseling Project co-sponsored ECSP program	57 (83%)	1 (1%)	0	1 (4%)
Account comes with free ATM card	55 (80%)	1 (1%)	1 (3%)	0
Refund will arrive faster	53 (77%)	5 (7%)	3 (8%)	2 (7%)
Account provides access to other bank services	47 (68%)	4 (6%)	2 (5%)	2 (7%)
Other	9 (13%)	2 (3%)	1 (3%)	1 (4%)

Source: ECSP baseline survey data

Table 4 Attitudes of ECSP Participants Regarding Saving and Financial Institutions (N=69)

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Sure
It's hard to save because all or most of your money goes to necessities	36 (52%)	19 (28%)	11 (16%)	3 (4%)	0
It's hard to resist temptations to spend money	20 (29%)	22 (32%)	20 (29%)	5 (7%)	1 (2%)
Saving money is important	55 (80%)	14 (20%)	0	0	0
You could save a little, but not enough to make a difference to you and your household	21 (30%)	32 (46%)	11 (16%)	5 (7%)	0
It's easier for people to save money when they have a bank account	26 (38%)	25 (36%)	15 (22%)	0	3 (4%)
Money in a checking or savings account is secure	23 (33%)	39 (57%)	3 (4%)	2 (3%)	2 (3%)
Having payments directly deposited into a bank account is a good idea. Direct deposit means that payments are sent to the bank electronically	40 (58%)	23 (33%)	3 (4%)	2 (3%)	1 (1%)

Source: ECSP baseline survey data

Table 5 Number and Percentage of ECSP Participants Reporting Categories of Planned Tax Refund Uses (N=68)

	Ever-Mentioned Use	Most Important Use
Bills	28 (41%)	20 (29%)
Other saving and investment	22 (32%)	18 (27%)
Personal and household purchases	19 (28%)	3 (4%)
Vehicle-related uses ^a	15 (22%)	7 (10%)
Housing-related uses ^b	13 (19%)	10 (15%)
Educational uses	11 (16%)	5 (7%)
Special events	8 (12%)	2 (3%)
Social network-related uses	4 (6%)	3 (4%)
All saving ^c	35 (52%)	26 (38%)

Source: ECSP baseline survey data

^a Excludes payments for vehicle insurance and loans, which are defined as bills

^b Excludes rent and utility payments, which are defined as bills

^c Items in this category overlap items in other categories.

Table 6 Summary of Account Activity for Refund Recipients in First 30, First 60 Days, First 90, and First 120 Days Following Refund

	30 Days	60 Days	90 Days	120 Days
Withdrawals (N=58)				
Number (percent) with no withdrawals	9 (16%)	5 (9%)	4 (7%)	2 (3%)
Median number of withdrawals	3	5	6	6
Median withdrawal amount ^a	\$67	\$61	\$60	\$60
Median withdrawal amount as percent of refund ^a	8%	6%	6%	6%
Deposits (excluding interest payments) (N=58)				
Number (percent) with one or more deposits	15 (26%)	19 (33%)	22 (38%)	25 (43%)
Number (percent) who had received direct deposit paychecks or transfer payments	3 (5%)	4 (7%)	7 (12%)	8 (14%)
Ending Balance (N=57)				
Number (percent) with closed accounts	1 (2%)	1 (2%)	1 (2%)	1 (2%)
Number (percent) with ending balance less than \$5 ^b	7 (12%)	11 (19%)	13 (23%)	16 (28%)
Median ending balance	\$206	\$86	\$36	\$19
Median ending balance as percent of refund	13%	5%	4%	2%
Number (percent) with ending balance greater than refund	10 (18%)	7 (12%)	6 (11%)	4 (7%)

Source: SB account statements through November 15, 2000

^a Withdrawal amounts are calculated across the sample of withdrawals.

^b Includes those with closed accounts.

Table 7 Number and Percentage of ECSP Participants with Patterns of Account Activity in First 30 Days, by Account Ownership

	All (N=57)	Unbanked (n=34)	Banked (n=23)
Maintenance	11 (19%)	4 (12%)	7 (30%)
Decline	16 (28%)	10 (29%)	6 (26%)
Depletion	30 (53%)	20 (59%)	10 (43%)

Source: SB account statements through November 15, 2000

Note: See text for definitions of patterns.

Table 8 Number and Percentage of ECSP Participants with Overall Patterns of Account Activity, by Account Ownership

	All (N=58)	Unbanked (n=35)	Banked (n=23)
Rapid Spend-Down	24 (41%)	16 (46%)	8 (35%)
Slow Spend-Down	14 (24%)	8 (23%)	6 (26%)
Transaction	11 (19%)	9 (26%)	2 (9%)
Saving	9 (15%)	2 (6%)	7 (30%)

Source: SB account statements through November 15, 2000

Note: See text for definitions of patterns.