

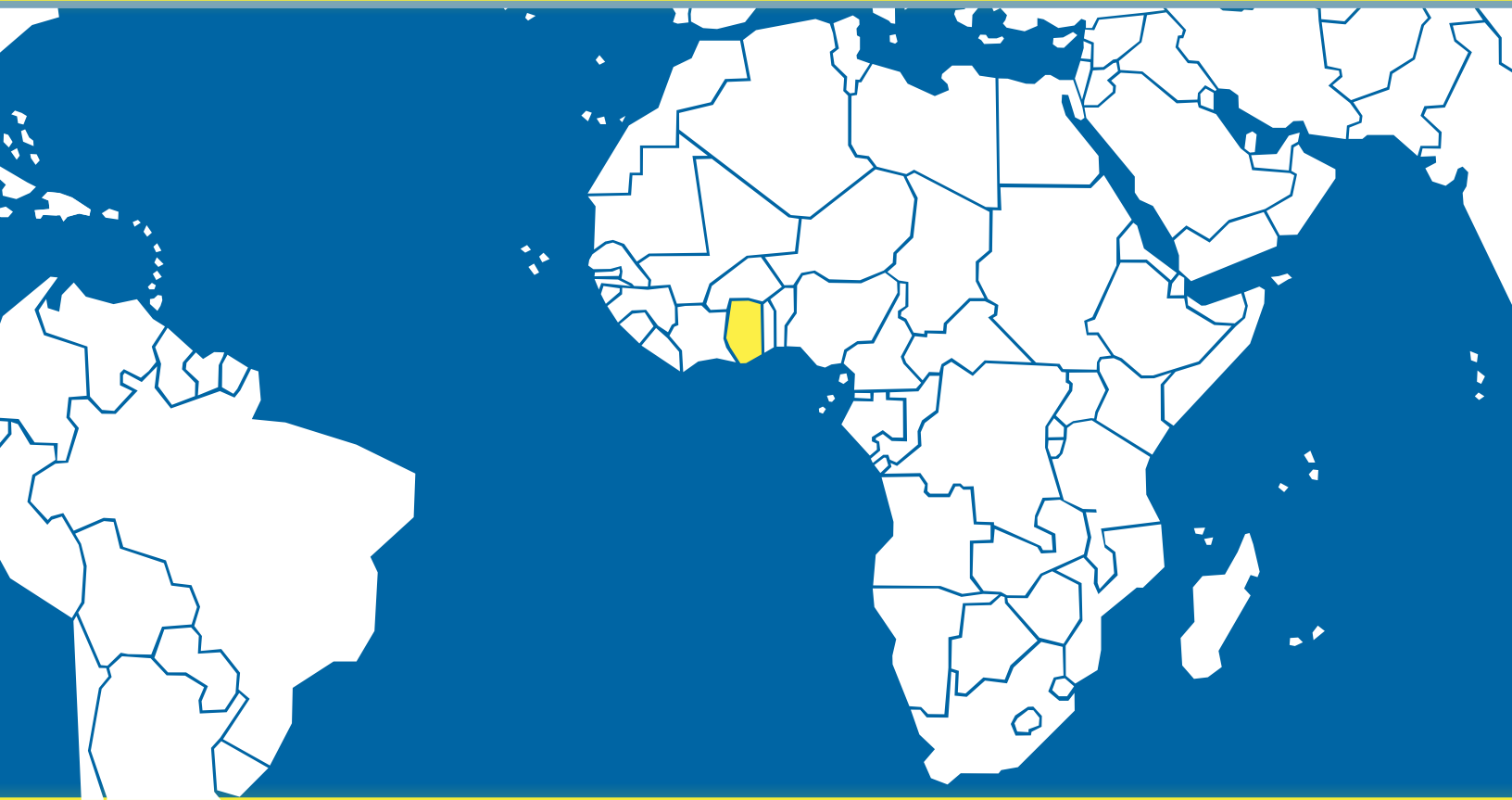


Center for Social Development

GEORGE WARREN BROWN SCHOOL OF SOCIAL WORK

YOUTH SAVINGS PATTERNS AND PERFORMANCE IN GHANA

A SUPPLEMENTARY REPORT



Washington University in St. Louis



Center for Social Development

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Youth Savings Patterns and Performance in Ghana: A Supplementary Report

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Acronyms used in the Report

AMNS – average monthly net savings
ATM – automatic teller machine
CSD – Center for Social Development
FC – financial capability
FE – financial education
FI – financial institution
GHS – Ghanaian cedi, Ghana’s currency

HOH – head of household
PPP – purchasing power parity
RP – research partner
SC – Save the Children
SD – standard deviation
SDA – savings demand assessment
USD – United States dollar

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Executive Summary

If provided an opportunity to save via formal financial services, do youth participate, save, and accumulate assets? This was a fundamental question in the YouthSave learning agenda. Created in partnership with The MasterCard Foundation, YouthSave investigated the potential of savings accounts as a tool for youth development and financial inclusion in developing countries by co-designing tailored, sustainable savings products with local financial institutions (FIs) and assessing their performance and development outcomes with local researchers. The project was an initiative of the YouthSave Consortium led by Save the Children (SC) in partnership with the Center for Social Development (CSD) at Washington University in St. Louis, the New America Foundation, and the Consultative Group to Assist the Poor (CGAP). Research partners (RPs) in the field included Universidad de los Andes in Colombia, Institute of Statistical, Social and Economic Research (ISSER) at the University of Ghana, Kenya Institute for Public Policy Research and Analysis (KIPPRA), and New ERA in Nepal. Participating FIs included Banco Caja Social (BCS) in Colombia, HFC Bank in Ghana, Kenya Post Office Savings Bank (Postbank) in Kenya, and Bank of Kathmandu Ltd. (BOK) in Nepal.

Findings from the four participating countries reflect data collected since product rollout through May 31, 2014 and are explored in the 2015 Savings Demand Assessment (SDA) research report *Youth Savings Patterns and Performance in Colombia, Ghana, Kenya, and Nepal* (Johnson et al., 2015). This supplemental report on Ghana's *Enidaso* account holders provides additional evidence on the youth response by incorporating data from HFC's product rollout in May 2012 through November 2014. The report highlights changes in results since the previous data collection in May 2014.

Account Uptake

As of November 30, 2014, HFC had opened 14,857 accounts since product launch in May 2012. The YouthSave savings demand assessment (SDA) research findings include 13,324 of account holders who consented to sharing their account information. Of the 13,324 research accounts, 2,231 were new accounts opened between June 1, 2014 and November 30, 2014. Only 131 of these accounts were opened between September and November, likely reflecting the reduction in HFC's school visits as YouthSave activities neared conclusion.

Youth and household characteristics of account holders are similar to those of account holders who opened accounts prior to May 2014 (Johnson et al., 2015). Overall, HFC reached its intended population of youth aged between 12 and 18 years of which 40% have an estimated poverty likelihood of living on USD 2.50 or less per day. Most of the youth account holders are in school, a reflection of HFC's outreach emphasis on in-school youth, and in grade levels ranging from primary to senior high school. The initiative generated new account holders with 93% indicating no prior experience with formal financial services. Females opened more accounts (54%) than males.

The HFC outreach program (targeted at schools) appears to have been successful with the majority of the youth (81%) indicating they learned about the account through the bank. Most of the youth also reported saving for their own education (79%). The fact that the majority reported saving for education may reflect having learned about the account through FI outreach activities at school, and may be an added advantage to conducting savings activities at school.

Consistently across reporting periods, the majority of youth have a nonrelative as cosignatory rather than a parent. Financial institutions that offer flexibility in the account opening process, such as allowing a trusted adult (e.g., teacher, other nonrelative) to cosign as an alternative to a parent or guardian, may reduce barriers and increase youth participation in the formal financial sector. Overall, results in account uptake affirm the potential for increasing youth financial inclusion through FI outreach.

Savings Outcomes

Youth continue to save steadily and keep their accounts open, with only 10 accounts having been closed since product rollout in May 2012. Accounts have been open an average of 13 months, and youth have saved a total of GHS 534,234 (USD 667,792). This is almost double the amount youth had saved as of May 2014.

Savings increased consistently each quarter with a spike between June and August 2014. The reason for the spike is not clear but is partially explained by a few account holders making large deposits. The rate of savings increased more slowly in the last quarter of the project (September to November 2014) and reflects a combination of increase in withdrawals and decline in account uptake and deposits. Both the average amount of deposits and withdrawals per account increased in the period between May and November 2014, resulting in an overall 17% increase in average net savings per account.

Transactions

About 73% of accounts have been active over the last year (between December 2013 and November 2014), and 32% have been active in the last six months (between June 2014 and November 2014). The lower number in the six-month period may reflect that the number of deposits averages about one every five months, a rate that has been fairly consistent over time. Deposits tend to decline during the school holiday and increase once youth are back in school. Those who make deposits are more likely to be youth who had completed or were in junior high school (JHS 1 and JHS 2) at the time of account opening and younger youth (aged younger than 13 years). Deposit activity for this group may reflect the larger number of youth at this grade level who opened accounts during this timeframe and HFC's outreach to open accounts and take deposits. Similarly, youth are more likely to deposit if they learned about the account through the HFC outreach program compared to learning through school or a youth club. This finding provides further evidence that HFC's outreach facilitates bank access.

The percentage of youth who have taken withdrawals is relatively low, but has increased from 2% as of data collected in 2013, to 3% as of May 2014, to 5% as of November 2014. Withdrawal rules likely influence overall withdrawal patterns. Youth are discouraged from taking withdrawals through restrictions in the first three months of account opening, and those aged younger than 18 require the presence of an adult. Youth in boarding school or living in other domestic situations may have less access to an adult or to a bank branch to make withdrawals. Over time, however, an increase in withdrawals would be expected as the youth begin to use their funds to pay for their savings goals or other expenses.

Those who take withdrawals are more likely to be aged 16 years or older, male, report the mother as the head of household (HOH), or have parent as cosignatory. Parents, especially mothers, may be more available to assist with the withdrawal process than another adult.

Youth are also significantly less likely to withdraw if their HOH has previous bank experience. This finding is consistent with the hypothesis that HOH experience with formal banking may have a positive influence on their child's savings experience.

In addition, youth who learned about the account through mass media (e.g., radio, television, newspaper), friends, or family are more likely to withdraw than if they learned about the account through the HFC outreach program or school. This finding suggests that some aspect of financial education and outreach activities at school may be helping to discourage withdrawal activity. Practically, however, one reason may be the long distance from some schools to a bank branch where withdrawals had to be made.

Savings Patterns

Overall, savings patterns by youth and household characteristics are similar to those previously reported. Notably, there are no significant differences in savings by gender or poverty likelihood.

Variation by grade and age suggests that younger youth within a grade level save more than their older counterpart, and youth in higher grades save more than youth of the same age. Over time, however, savings differences by age and grade decline with the result being a consistent gap in savings of youth aged between 13 and 16 years. Focused savings strategies may be particularly useful for this age group.

One of the strongest and most consistent associations with savings over time is having a parent as cosignatory on the youth account. These data reinforce the importance of parental involvement in youth savings.

Also in keeping with past findings, youth who learned about the account through mass media, friends, or family save more than youth who learned about the account through the bank outreach program or school. This latter group also has a higher estimated poverty rate than those who learned about the account in other ways; therefore, it is possible that these other ways attracted youth who have more resources to put into their savings. These findings suggest that HFC's efforts to target services to lower income families and communities worked, but also points to the importance of multiple marketing approaches to reach a broader youth population and to balance small deposit accounts with larger deposit accounts.

A key finding of this study is the relationship between the financial services offered and account uptake and savings. Youth who attend schools in which the FI provides in-school banking or outreach services have significantly higher account uptake than those in schools that receive no services. Given the barriers that youth face in accessing formal FIs, facilitating opportunities at school for youth to open accounts and make deposits, and allowing teachers to be cosignatory are strategies that have been effective in YouthSave for increasing youth financial participation, especially low-income youth.

Recommendations for Practice, Policy, and Research

The strategy of “bringing the bank to the youth” and allowing a trusted adult as cosignatory essentially solves the issue of access. However, a more inclusive alternative may be to engage the public and private sector in policy initiatives that establish a cost-effective savings structure for every citizen, preferably at a young age, when parents are more likely to help and teach their children to save. Structures such as the *Enidaso* savings product already exist, but political will and systems that ensure full inclusion require development. Once accounts are established, schools and FIs should continue to collaborate to provide youth with both financial education and an access point to make deposits and actively engage in the savings process.

To ensure that such structures are cost-effective, FIs should consider withdrawal restrictions. Only 5% of *Enidaso* account holders took withdrawals. Withdrawal rules and fees likely contributed to this low percentage.

Parental involvement in the savings process is critical. Although cosignature by a nonrelative increased account uptake, savings was associated with the parent as cosignature on the *Enidaso* account. Policies that can leverage parental involvement, such as conditional cash transfer programs, may be one way to engage parents in building their child’s assets. In YouthSave, local action included participation in parent–teacher meetings to provide information about the savings account and other community-wide financial education for adults. The HFC staff may have also encouraged parents with accounts to open *Enidaso* accounts with their children, a cross-sell strategy that can benefit both the client and the FI.

With an emphasis on in-school youth, the out-of-school population deserves further study. In addition, findings from this study suggest an age gap in the savings process. Additional research might explore how product features, outreach services, and policies can maximize savings at particular stages of youth development. A more comprehensive understanding of saving at different childhood and youth stages may contribute to positive youth development and more successful transition to adulthood.

Chapter 1: Introduction

If provided an opportunity to save via formal financial services, do youth participate, save, and accumulate assets? This was a fundamental question in the YouthSave learning agenda, explored fully across the four participating countries in the 2015 Savings Demand Assessment (SDA) research report *Youth Savings Patterns and Performance in Colombia, Ghana, Kenya, and Nepal* (Johnson et al., 2015). The purpose of this supplementary research report is to provide a final update on account uptake and savings performance of YouthSave account holders through the conclusion of the project activities in Ghana. The previous report reflected data through May 31, 2014; this report reflects an additional six months of account activity through November 30, 2014. These savings data are also the basis for the savings analysis in the YouthSave Ghana experiment (Chowa et al., 2015; Lee et al., 2015).

Created in partnership with The MasterCard Foundation, YouthSave investigates the potential of savings accounts as a tool for youth development and financial inclusion in developing countries by co-designing tailored, sustainable savings products with local financial institutions (FIs) and assessing their performance and development outcomes with local researchers. The project is an initiative of the YouthSave Consortium, led by Save the Children (SC) in partnership with the Center for Social Development (CSD) at Washington University in St. Louis, New America, and the Consultative Group to Assist the Poor (CGAP). Research partners (RPs) in the field include Universidad de los Andes in Colombia, Institute of Statistical, Social and Economic Research (ISSER) at the University of Ghana, Kenya Institute for Public Policy Research and Analysis (KIPPRA), and New ERA in Nepal.

Study Hypotheses

Research on children and youth savings is growing, but less is known about individual characteristics associated with account uptake and savings (Deshpande & Zimmerman, 2010). Research indicators on financial inclusion analyze populations starting with youth aged 15 years. These data and other research on adult populations highlight disparities in account ownership and savings for females, those with low education, low income, and low financial capability (Kaffenberger, 2014; Kilara, Magnoni, & Zimmerman, 2014; Sahn & Stifel, 2000; Sherraden, 2013; The World Bank, 2013; The World Bank, 2012). Informed by prior research, the research team identified youth and household characteristics hypothesized to affect account uptake and savings performance of the YouthSave population.

- *Age of youth.* Households are more likely to save in accounts of older youth, especially if the older youth can work.
- *Gender of youth.* Evidence of gender inequities suggests females are less likely to have access to formal banking and save.
- *Education level and school enrollment of youth.* Those with higher education levels may have higher savings performance.
- *Prior participation in formal savings.* Youth with more experience saving in a formal FI may be more likely to open accounts and have higher savings performance.

- *Income in the previous six months.* Youth who earn income may have more money to save and therefore higher savings performance.
- *Estimated consumption-based poverty rates.* Youth with a higher poverty likelihood are likely to have lower savings performance than those with a lower poverty likelihood.
- *Head of household (HOH) demographics.* The HOH's gender, level of education, and employment status are associated with socioeconomic status. Youth whose HOH is male, educated, and employed are likely to have higher savings performance than youth whose HOH is less educated, unemployed, or works in the agriculture sector.
- *Head of household's prior involvement in formal savings.* The HOH's prior experience with savings in a formal savings product may have a higher level of household financial capability that will positively influence their child's savings performance.

Results of the SDA research include descriptive information on the number of youth who open YouthSave accounts and their savings performance. Through statistical analyses, we assess youth and household characteristics associated with savings.

Savings product design, financial education, and outreach characteristics

Research has shown that characteristics of financial products and services matter in account uptake and savings performance (Karlán, Ratan, & Zinman, 2013; Prina, 2014; Schreiner & Sherraden, 2007; Weidrich, Collins, Rosen & Rademacher, 2014). The research team hypothesized the influence of the Ghana YouthSave account characteristics on savings, which include the following criteria:

- *Access* – existence of an account that youth are eligible and have access to use. If youth are eligible to open and operate a youth-friendly savings account offered at an FI, they will sign up and save in the accounts.
- *Information* – information about the account to make an informed decision about opening the account. Providing financial education and information to youth about the opportunity to save in a formal savings account will increase account uptake and savings performance.
- *Facilitation* – facilitation to easily open accounts and make deposits. Facilitating access for youth to open accounts and make deposits, such as providing financial services at schools, youth organizations, or through other alternate service-delivery mechanisms, will increase account uptake and savings performance.
- *Restrictions* – restrictions or rules to discourage dissaving. Withdrawal rules, such as fees or restriction on allowable withdrawals, will reduce the number of withdrawals taken, thereby increasing savings performance.

Country Characteristics

The environment in which youth live could affect saving outcomes. Table 1.1 presents characteristics about Ghana that provide context for SDA findings. About half of the population lives in urban areas; HFC branches are located primarily in urban areas. Those living in rural areas may have greater difficulty accessing HFC services. The percentage of individuals living on USD 1.25 a day or less is 28.6%. The average number of years of schooling is seven, and the primary school dropout rate is 27.8%.

Table 1.1. Country Characteristics*

	Ghana
Population (millions) (2012)	25.5
Urban population (percentage of total) (2012)	52.6
Median age (2010)	20.5
GDP per capita (2005, PPP USD)	1,652
GNI per capita (2005, PPP USD)	1,684
% living on USD 1.25/day or less (2002–2011)	28.6
% living at or below national poverty line (2002–2012)	28.5
Gender inequality index (2012)	.565
Primary school dropout rate (2002–2011)	27.8
Expected years of schooling, children (2011)	11.4
Mean years of schooling (persons 25 years and older) (2010)	7.0
% with account at a formal financial institution**	29.4
% with account at a formal financial institution (income, bottom 40%)**	15.4
Human Development Index rank (2012)	0.558

GDP, gross domestic product; *GNI*, gross national income

*Data from United Nations Development Programme, 2013, unless otherwise noted.

**Data from Demirguc-Kunt & Klapper, 2012b.

In terms of financial access, less than 30% of those aged 15 years or older had an account at a formal FI. Youth cannot independently open or manage an account until they are aged 18 years. Instead, youth must have a parent or other trusted adult assist in opening an account and provide cosignature. A further hindrance can be fulfilling the FI's requirements of a citizenship identification number or associated identification papers. However, FIs in developing countries have increased their focus on youth financial products and services, especially on savings products that are designed for greater youth participation (Abeywickrema, 2009; Griffin, 2014; Masa, 2009). YouthSave was designed to investigate pathways to financial inclusion for lower income youth. Through support from SC, HFC conducted market research with the goal of developing a more inclusive, accessible, and youth-friendly financial product and associated services to attract lower income youth (Deshpande, 2012).

Program Description

Enidaso account

The participating YouthSave FI in Ghana is HFC Bank. Originated in 1990 as a home mortgage finance company, HFC received its universal banking status in 2003. Since the beginning of YouthSave in 2010, HFC has grown from operating in seven regional capitals with 26 branches and 30 automated teller machines (ATMs) to 42 branches and 44 ATMs in eight regions (N. A. Mark-Sowah, personal communication, June 8, 2015). The YouthSave account HFC Bank offers in Ghana is called *Enidaso*, which means “hope” in the Twi language. The *Enidaso* product integrates a younger age group into the youth market segment of HFC Bank and helps prepare youth to be the next generation of customers. HFC actively marketed the *Enidaso* product to 25 of the original 26 branches over the course of the project. Because the other branches were new, HFC allowed walk-in customers to open the *Enidaso* account but did not include them in the study.

The product targets youth aged between 12 and 18 years with marketing outreach focus on low-income youth. The account requires a minimum opening balance of GHS 2 (USD 1.04) and an

operating balance of at least GHS 5 (USD 2.60). Savings earn interest (1% to 2.5%) after the account has at least GHS 20 (USD 10.42). Withdrawals from the account are restricted for the first three months, and only monthly withdrawals can be made thereafter. However, the three-month restriction was waived for the youth who reside in boarding schools because they generally need consistent access to their funds. A parent or trusted adult of the youth must be the primary signatory for account opening and withdrawal of funds. The youth can deposit into these accounts by themselves, but cannot withdraw from the account without the adult guardian.

HFC issues *Enidaso* clients a view-only ATM card upon request for a one-time fee of GHS 2.50 (USD 1.26). This ATM card enables them to check their balance and account statement but does not allow withdrawals from the ATM. HFC also provides savings booklets to account holders for a fee of GHS 3.50 (USD 1.76). Statements are provided every six months for free and on demand for a fee of GHS 2 (USD 1.01) per statement. Appendix A provides details on account features.

Outreach includes use of mass media (e.g., radio, newsprint, television), direct sales (e.g., presentations and account opening in schools), social media (e.g., Facebook), and awareness-building campaigns (e.g., street floats, distribution of fliers on main streets) to introduce the account and educate youth about it. Incentives (e.g., piggy banks, pens, t-shirts, slings, waist bands) are given to youth upon opening an account. In addition, HFC partners with youth-focused organizations to conduct savings fairs and implement youth programs.

In March 2013, HFC employed four direct sales agents (DSAs) to sell the *Enidaso* account in two selected branches. Based on the positive outcome in terms of accounts opened, HFC recruited 13 more in June 2013 and another 20 in November 2013. The DSAs were responsible for assisting branches to sell and open *Enidaso* accounts in schools and making scheduled follow-ups for in-school banking activities. A total of 17 branches had DSAs. Cash incentives were given to branches and DSAs who were able to meet targets.

Financial education and outreach

For the YouthSave initiative, HFC Bank has focused almost exclusively on financial services outreach to schools. Branch representatives visited schools, requested Parent-Teacher Association (PTA) meetings from school authorities, met the PTA (for schools that show interest in the product and welcome the bank), and subsequently opened accounts for interested students.

In March 2013 and March 2014, HFC Bank joined the global community to celebrate Global Money week. As part of the celebration, some branches of HFC organized savings fairs at selected senior high schools to open accounts and take initial deposits. These branches made periodic visits to the selected senior high schools to take additional deposits (N. A. Mark-Sowah, personal communication, October 2, 2014). The bank also refreshed its branding in September 2014 to attract more senior high school students and has since focused outreach on this older youth population.

In addition, HFC has participated in an experiment to test different types of outreach offered at junior high schools. With the schools participating in the experiment, HFC offered two sets of services in 50 randomly selected schools across seven regions of the country. In 25 schools, HFC offered in-school banking, which comprised basic financial education, account enrollment, and periodic depository services. In the other 25 schools (control group), HFC provided outreach about

the *Enidaso* account through informational visits to schools and offered the opportunity to open an account and make an initial deposit, but they provided no financial education or subsequent depository services in these schools. Between September 2013 and August 2014, the number of bank staff visits to in-school banking schools ranged from an average of 5.90 to 7.32. Bank staff visits to schools receiving only marketing services ranged from 2.4 to 3.26. The number of bank staff dedicated to the experiment schools was 11 in September 2013 and declined to seven in August 2014 (Chowa et al., 2015).

In nonexperiment (neither treatment nor control) schools, once youth open accounts and make initial deposits, branches make subsequent visits to the schools approximately once every two weeks. During these visits, the branches offer account holders the opportunity to make additional deposits and to complete pending account opening documentation.

In May 2014, HFC stopped using DSAs in the three branches—Legon, Ebankese, and Dansoman—that were not serving experiment schools. In the other branches, the DSAs continued to visit both experiment and nonexperiment schools (primary, JHS, and SHS schools) until November 2014.

Chapter 2: Research Methods

During the planning stage of YouthSave, the research team—the Center for Social Development and in-country partner Institute for Statistical, Social and Economic Research (ISSER) at the University of Ghana—reviewed existing savings account applications and determined that HFC was collecting very little demographic information about their clients. Therefore, the research team added key youth and household demographic questions to the account-opening application, and HFC subsequently developed software to electronically enter the data at the time of account opening.

The research team vetted the new questions with HFC to determine whether they were clear and understandable and whether HFC would be interested in the results. With data collection across four countries, the questions also had to be refined to ensure consistency and cultural compatibility. The research team then pilot-tested and revised the questions to increase comprehension and reduce the length of time needed to complete data collection (see Appendix C for research questions). Pilot-testing occurred over the six-month period prior to product rollout and resulted in product and process modifications designed to increase account uptake and question completion.

HFC obtained permission from the youth and cosignatory (if the youth were a minor) to provide identifying account information for participation in the study. Because permission was not obtained for all account holders, the resulting dataset is a subset of total accounts opened and identified in this report as “research accounts.”

The research team cleaned the data for quality control and merged transaction records with demographic records for analyses. Transaction records were restructured so that each account holder had a monthly transaction record with variables of monthly; quarterly; and total cumulative amounts of deposits, withdrawals, fees, and interest. The research team converted the original savings outcomes based on the national currency from the national currency amount into comparable USD using 2011 purchasing power parity (PPP) conversion rates.¹

Measures

The key dependent variable of the analysis is average monthly net savings (AMNS), defined as net savings per month an account has been open (Schreiner et al., 2001). Two additional dependent variables are based on transaction activity. Active depositors include those who made one or more deposits per quarter (excluding initial deposits) compared to all others. Withdrawers include those who made at least one withdrawal compared to those that made no withdrawals.

Independent variables include youth and household characteristics collected at the time of account opening. Youth characteristics include gender, age, school enrollment, income earned in the prior six months before account opening, previous formal account held by youth, source of savings, source for learning about the account, and reason for saving. Household characteristics include relationship of the head of household (HOH) to the youth, previous formal account held by the HOH,

¹ Researchers used the purchasing power parity (PPP) conversion rates for 2011 drawn from the International Monetary Fund World Economic Outlook dataset (<http://www.imf.org/external/pubs/ft/weo/2012/01/index.htm>). Rates from 2011 were used to maintain comparability with findings from previous years.

education level of the HOH, employment status of the HOH, whether the HOH is employed in the agricultural sector, number of household members, mode of transportation ownership, relationship of the cosignatory on the account to the youth account holder, and estimated consumption-based poverty rate.

The estimated poverty rate measure has been specified from poverty scoring techniques in developing countries (similar to credit scoring) wherein poverty scorecards use household characteristics to assess the likelihood that per-capita household expenditure is below a given poverty line (Caire, Schreiner, Chen, & Woller, 2009; Schreiner, 2012; Schreiner, 2011; Schreiner & Woller, 2010). The scoring measure is constructed from national expenditure survey data matched with responses to the savings demand assessment (SDA) account opening questionnaire, and linked to commonly used poverty lines. The measure for each account holder indicates the percentage likelihood that the individual lives at or below a particular poverty line.

Statistical Procedures

The research team used descriptive statistics to examine account uptake and demographic characteristics of the youth. Descriptive statistics were also used to investigate savings activities and performance. The research team also used a series of bivariate analysis including t-tests and ANOVA to examine whether savings were different by length of account holding.

Researchers used a series of multivariate analyses to examine which youth characteristics are associated with various savings outcomes. Researchers recoded the continuous independent variables into categorical variables because they were more conceptually and analytically meaningful. Researchers first conducted multivariate analyses using generalized linear modeling (e.g., binary or multinomial logistic regression depending on the level of categories in the dependent variables) to investigate which demographic characteristics are associated with active depositor and withdrawer, controlling for effects of other characteristics (Chapter 5). Researchers also examined which demographic characteristics are associated with AMNS using ordinary least square regression (Chapter 6). To control for unobserved heterogeneity across branches within each country, branch-level fixed effects were included in the regression model where possible. Finally, researchers conducted school-level analyses to examine how financial education and outreach are associated with account uptake and savings performance (Chapter 6).

Limitations

The SDA introduced a new process to the FI for collecting additional information on its account holders. This new process and accompanying required informed consent from account holders to share their data limited the ability for researchers to report on all accounts.

The SDA dataset affords a unique opportunity to identify factors associated with saving patterns and performance over time, but it is not possible to assess causally which product features influence savings patterns most because there was not a control condition to serve as a sound counterfactual. (YouthSave does have a full experiment in Ghana, which is examined in a separate report.)

Despite these limitations, the study offers a unique opportunity to explore patterns of account uptake and youth savings in four developing countries.

Chapter 3: Account Uptake

This chapter presents information on the number of accounts opened, and characteristics of the youth who opened accounts. HFC Bank opened 14,875 *Enidaso* accounts between May 11, 2012, and November 30, 2014. Of those, 13,324 account holders agreed to participate in the YouthSave savings demand assessment (SDA) study. Research accounts have been open for an average of 13 months. Table 3.1 shows the number of accounts opened each quarter, and Table 3.2 shows the number of accounts opened and closed each month since product rollout.

Table 3.1. Ghana Account Information by Quarter*

Quarter	Total accounts opened since rollout (as reported by FI)	Number of research accounts	Number of research accounts closed
Q1	820	734	0
Q2	403	334	0
Q3	254	286	0
Q4	628	543	0
Q5	2,157	2,123	1
Q6	1,329	1,114	4
Q7	3,855	3,493	0
Q8	2,716	2,466	1
Q9	2,444	2,101	0
Q10	269	131	4
Total	14,875	13,324	10

FI, financial institution

*Q1 is May 11, 2012, to August 31, 2012; Q2 is September 1, 2012, to November 30, 2012; Q3 is December 1, 2012, to February 28, 2013; Q4 is March 1, 2013, to May 31, 2013; Q5 is June 1, 2013, to August 31, 2013; Q6 is September 1, 2013, to November 30, 2013; Q7 is December 1, 2013, to February 28, 2014; Q8 is March 1, 2014, to May 31, 2014; Q9 is June 1, 2014, to August 31, 2014; Q10 is September 1, to November 30, 2014.

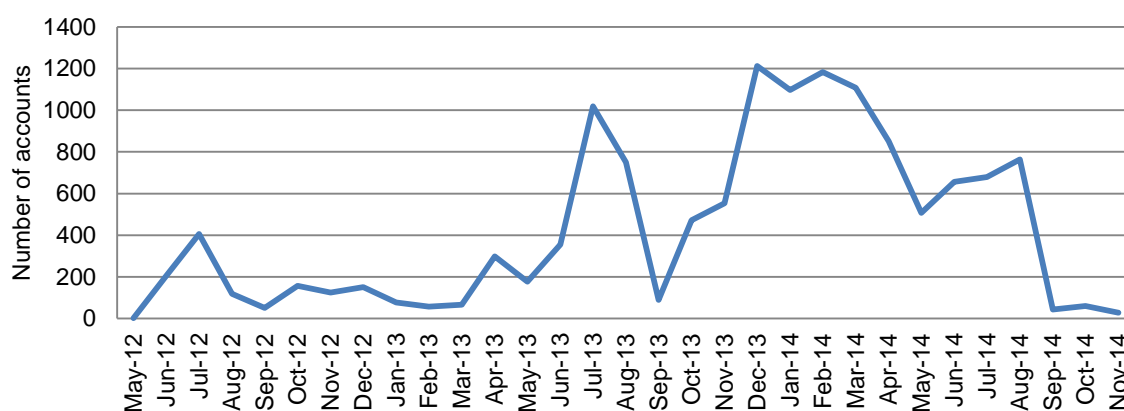
Table 3.2. Research Accounts Opened and Closed by Month

	Research Account Opened by Month	Research Account Closed by Month
May 2012	2	0
June 2012	207	0
July 2012	406	0
August 2012	119	0
September 2012	52	0
October 2012	157	0
November 2012	125	0
December 2012	151	0
January 2013	77	0
February 2013	58	0
March 2013	67	0
April 2013	298	0
May 2013	178	0
June 2013	355	0
July 2013	1,018	0
August 2013	750	1
September 2013	89	2

	Research Account Opened by Month	Research Account Closed by Month
October 2013	472	1
November 2013	553	1
December 2013	1,212	0
January 2014	1,097	0
February 2014	1,183	0
March 2014	1,107	0
April 2014	851	0
May 2014	508	1
June 2014	657	0
July 2014	680	0
August 2014	764	0
September 2014	43	2
October 2014	60	2
November 2014	28	0
Total	13,324	10

Figure 3.1 presents research accounts opened by month. As noted in prior reporting, most accounts were opened in the second year of product rollout because of the slow start of HFC’s product-outreach strategy to junior high schools (JHSs) (Johnson et al., 2015). Developing an outreach strategy with schools took longer than anticipated and included challenges arranging Parent–Teacher Association (PTA) meetings to obtain parental approval to open accounts. Extended school holidays in August, December, and April also reduced outreach opportunities as reflected in the lower number of accounts opened. The increase in the second year is attributed to the positive outcome of using direct sales agents (DSAs) to sell the accounts. Low uptake in the last quarter (Q10) likely reflects project termination. As HFC noted, “. . . the last quarter was dedicated to project closing and so the focus was more on closing the project in the participating schools.” (N. A. Mark-Sowah, personal communication, June 8, 2015). Other than to particular senior high schools (SHSs), HFC planned to discontinue most school visits after November 2014.

Figure 3.1. Research Accounts Opened by Month



Account Holder Characteristics

Table 3.3 presents detailed demographic characteristics of account holders by quarter. Between June 2014 and November 2014, the number of accounts increased by 2,232, but account holder characteristics changed little.

- Of the total 13,324 research account holders, 7,230 are female (54.3%) and 6,093 are male (45.7%). Interestingly, the percentage of males increased by 13% in Q10, the first quarter during which more males opened accounts (58%) than females (42%). According to HFC, this increase may reflect greater outreach activities at boys schools (N. A. Mark-Sowah, personal communication, June 8, 2015).
- The largest group of account holders (47.3%) was aged 13 to 15 years at time of account opening, followed by those aged 16 to 18 years (34.4%) and those aged 10 to 12 years (13.7%). A larger number of youth aged 16 to 18 years signed up for accounts in the second year, which may reflect the increased focus on SHS youth. The average age is 15 years.
- All but 52 (0.4%) youth are enrolled in school, which likely is a result of HFC's targeted marketing to schools through the HFC outreach program.
- Account holders are almost equally distributed between SHS (23.4% each), JHS 1 (23%), and JHS 2 (22.6%), followed by Upper Primary (17.6%) and JHS 3 (13.3%). Fewer youth are in the "upper primary" group because they tend to be younger than the targeted age range of 12 to 18 years. The JHS 3 group reflects a transition year; youth may have missed the school visit, were preparing for final exams, or had transitioned out of school (N. A. Mark-Sowah, personal communication, June 8, 2015). A substantial increase in SHS began in the fourth quarter of rollout, and particularly in Q7, which is consistent with HFC's increased emphasis on reaching SHS students.

Table 3.3. Ghana Account Holder Characteristics by Quarter, Years One through Three

	Q1 N = 734	Q2 N = 334	Q3 N = 286	Q4 N = 543	Q5 N = 2,123	Q6 N = 1,114	Q7 N = 3,492	Q8 N = 2,466	Q9 N = 2,101	Q10 N = 131	Total N = 13,324
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Gender											
Male	324 (44.1)	149 (44.6)	136 (47.6)	236 (43.5)	933 (44.0)	522 (46.9)	1,593 (45.6)	1,172 (47.5)	952 (45.3)	76 (58.0)	6,093 (45.7)
Female	410 (55.9)	185 (55.4)	150 (52.4)	307 (56.5)	1,190 (56.0)	592 (53.1)	1,898 (54.4)	1,294 (52.5)	1,149 (54.7)	55 (42.0)	7,230 (54.3)
Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.03)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.01)
Age (years)											
Younger than											
10	1 (0.1)	0 (0.0)	1 (0.4)	1 (0.2)	34 (1.6)	30 (2.7)	23 (0.7)	27 (1.1)	7 (0.3)	1 (0.8)	125 (0.9)
10–12	84 (11.4)	44 (13.2)	52 (18.2)	102 (18.8)	325 (15.3)	221 (19.8)	397 (11.4)	369 (15.0)	208 (9.9)	22 (16.8)	1,824 (13.7)
13–15	395 (53.8)	193 (57.8)	152 (53.2)	225 (41.4)	903 (42.5)	574 (51.5)	1,739 (49.8)	1,076 (43.6)	979 (46.6)	59 (45.0)	6,295 (47.3)
16–18	221 (30.1)	91 (27.2)	75 (26.2)	203 (37.4)	743 (35.0)	261 (23.4)	1,230 (35.2)	909 (36.9)	809 (38.5)	44 (33.6)	4,586 (34.4)
19–21	28 (3.8)	5 (1.5)	4 (1.4)	11 (2.0)	110 (5.2)	24 (2.2)	95 (2.7)	77 (3.1)	91 (4.3)	4 (3.0)	449 (3.4)
22–24	5 (0.7)	1 (0.3)	1 (0.4)	1 (0.2)	4 (0.2)	2 (0.2)	2 (0.06)	5 (0.2)	4 (0.2)	1 (0.8)	26 (0.2)
25–30	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (0.2)	2 (0.2)	1 (0.03)	1 (0.04)	3 (0.1)	0 (0.0)	11 (0.1)
Older than 30	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	5 (0.1)	2 (0.08)	0 (0.0)	0 (0.0)	8 (0.1)
Education level											
No formal education	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	6 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	7 (0.1)
Preschool	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.05)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.01)
Primary	177 (24.1)	53 (15.9)	39 (13.6)	102 (18.8)	471 (22.2)	268 (24.1)	388 (11.1)	495 (20.1)	332 (15.8)	17 (13.0)	2,342 (17.6)
JHS 1	228 (31.1)	84 (25.1)	71 (24.8)	98 (18.1)	457 (21.5)	337 (30.2)	748 (21.4)	423 (17.2)	586 (27.9)	37 (28.2)	3,069 (23.0)
JHS 2	174 (23.7)	97 (29.0)	78 (27.3)	73 (13.4)	588 (27.7)	226 (20.3)	823 (23.6)	464 (18.8)	454 (21.6)	27 (20.6)	3,004 (22.6)
JHS 3	86 (11.7)	65 (19.5)	65 (22.7)	48 (8.8)	202 (9.5)	136 (12.2)	675 (19.3)	308 (12.5)	158 (7.5)	22 (16.8)	1,765 (13.3)
SHS	65 (8.9)	33 (9.9)	33 (11.5)	220 (40.5)	388 (18.3)	147 (13.2)	856 (24.5)	773 (31.4)	569 (27.1)	28 (21.4)	3,112 (23.4)
Other	3 (0.4)	2 (0.6)	0 (0.0)	2 (0.4)	10 (0.5)	0 (0.0)	2 (0.06)	3 (0.1)	2 (0.1)	0 (0.0)	24 (0.2)

JHS, junior high school; *SHS*, senior high school

*Q1 is May 11, 2012, to August 31, 2012; Q2 is September 1, 2012, to November 30, 2012; Q3 is December 1, 2012, to February 28, 2013; Q4 is March 1, 2013, to May 31, 2013; Q5 is June 1, 2013, to August 31, 2013; Q6 is September 1, 2013, to November 30, 2013; Q7 is December 1, 2013, to February 28, 2014; Q8 is March 1, 2014, to May 31, 2014; Q9 is June 1, 2014 to August 31, 2014; Q10 is September 1, 2014 to November 30, 2014; Q9 is June 1, 2014, to August 31, 2014; Q10 is September 1, 2014, to November 30, 2014.

Estimated poverty rates

In the Ghana YouthSave population, approximately 40%—contrasted with 58% of the general population—live on less than USD 2.50 per day PPP (Table 3.4). This estimated poverty rate is consistent with the rate reported in May 2014.

Table 3.4. Estimated Consumption-Based Poverty Rates

	National population (%)*	YouthSave population (%)
USD 1.25/day 2005 PPP	29	11
USD 2.50/day 2005 PPP	58	40

PPP, purchasing power parity; USD, U.S. dollar

*(Schreiner, 2011, 2012, 2013; Schreiner & Woller, 2010; UNDP, 2013)

Labor market participation of youth

Table 3.5 presents labor market participation reported by the youth.

- Only 8% of account holders indicate that they have earned income in the past six months.
- Almost all account holders (92.7%) had no experience with formal banking before opening an *Enidaso* account.
- Most youth (91.8%) report that funds for saving come from parents, while a small percentage (5%) report using earned income.

Table 3.5. Youth Labor Market Participation

	(N = 13,324)
	n (%)
Income in past six months	
Yes	1,064 (8.0)
No	12,103 (90.8)
Don't know	157 (1.2)
Previous formal account	
Yes	613 (4.6)
No	12,357 (92.7)
Don't know	185 (1.4)
Missing	169 (1.3)
Source of funds	
Earned income	650 (4.9)
From family	12,225 (91.8)
Other	449 (3.4)

Household Characteristics

Table 3.6 presents detailed account holders' household and HOH characteristics. Highlights follow:

- Most account holders (75.2%) report fathers as the HOH, while 19.3% report mothers. About 5% of youth head their household or live in a household in which an individual other than a parent is the HOH.
- Most youth (65.4%) live in households with five or more members. About 26% have a household size of seven or more, 39.3% live in households of five or six, and 31.8% live in households with four or fewer members.
- Many account holders (28.1%) did not know their HOH's education level. Those who did report the following: 26.2% technical, college, or university education; 26.2% secondary school; 11.2% primary education; and 8.4% no formal education.
- About half of households (51%) report owning no mode of transportation. Among those who do own a form of transportation, 30.5% own motorized and about 10% own only nonmotorized (e.g., bicycle) transportation.

Table 3.6. Household Demographic Composition

	(N = 13,324)
	n (%)
HOH	
Father	10,019 (75.2)
Mother	2,571 (19.3)
Self or other	661 (5.0)
Don't know	73 (0.6)
Number of household members	
3 or fewer	1,663 (12.5)
4	2,569 (19.3)
5	3,054 (22.9)
6	2,184 (16.4)
7 or more	3,480 (26.1)
Don't know	374 (2.8)
Number of household members (mean [SD])	5.22 (1.44)
HOH education level	
No formal education	1,116 (8.4)
Primary	1,487 (11.2)
Secondary	3,487 (26.2)
Technical school	1,597 (12.0)
University	1,887 (14.2)
Don't know	3,750 (28.1)
Mode of transportation owned	
None	6,782 (50.9)
Nonmotorized	1,322 (9.9)
Motorized	4,064 (30.5)
Both (motorized/nonmotorized)	1,156 (8.7)

HOH, head of household; SD, standard deviation

Labor market participation of the head of household

Table 3.7 presents labor market participation by the HOH as reported by the youth.

- Over half of youth (63.2%) indicate that the HOH had prior experience with formal banking, either with HFC or another financial institution, 18.2% indicate that the HOH had no experience with formal banking, and 18.6% did not know.
- The majority of youth (78.6%) indicate that their HOH is not employed in the agricultural sector, and 14.5% are employed in the agricultural sector. About 7% provided no information.
- Over half of the HOHs are reported as being self-employed (55.8%), and 29.6% employed. Only 2.8% indicate the HOH as not employed.

Table 3.7. Head of Household Labor Market Participation

	(N = 13,324)
	n (%)
Previous bank account	
Yes (this or other FIs)	8,422 (63.2)
No	2,425 (18.2)
Don't know	2,477 (18.6)
Work in agricultural sector	
Yes	1,928 (14.5)
No	10,470 (78.6)
Don't know	926 (6.9)
Employment status	
Employed	3,944 (29.6)
Self-employed	7,436 (55.8)
Not employed	369 (2.8)
Other	664 (5.0)
Don't know	911 (6.8)

FI, financial institution

Cosignatory on Account

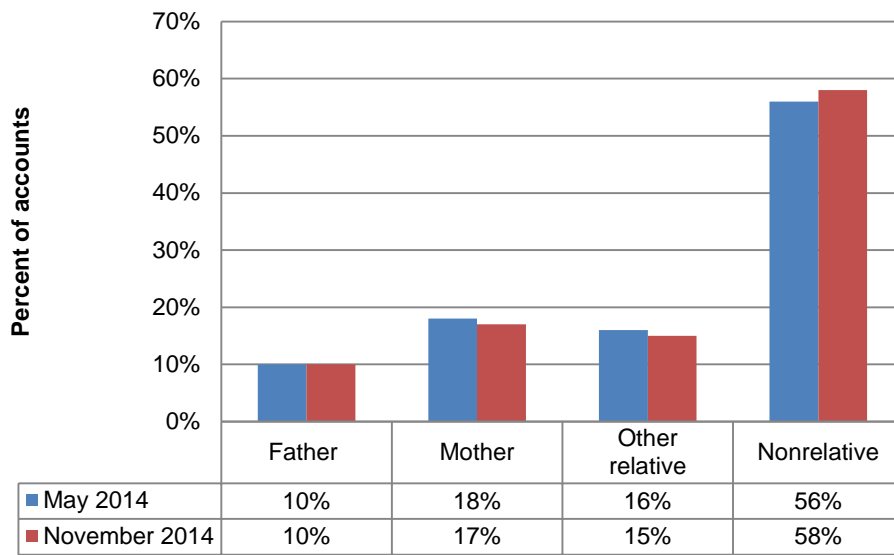
For over half of the youth (58%), a nonrelative was cosignatory on the account (Table 3.8), and this percentage has increased slightly from 56% since May 2014 (Figure 3.2). One likely explanation is that teachers can be named as the trusted adult instead of the parent or guardian, thus contributing to higher numbers of nonrelative cosignatory. Parents may simply not have the time, or their children live in other households as domestic helpers or at boarding schools where parents are not available. In some cases, the parent authorized school teachers to act as trusted adults (N. A. Mark-Sowah, personal communication, June 8, 2015). On the other hand, parents may be reluctant to help their children open accounts because they are concerned that youth might start to steal money to make deposits. It is also possible that the results reflect the market research findings that youth want the option for a trusted adult other than a parent (Deshpande, 2012).

Of those whose cosignatory was a parent, mothers (16.9%) signed more often than fathers (9.7%). A likely explanation is that mothers are more available than fathers to participate with the youth in the account opening process.

Table 3.8. Cosignatory on Account

	(N = 13,324)
	<i>n</i> (%)
Father	1,297 (9.7)
Mother	2,249 (16.9)
Other relative	2,053 (15.4)
Nonrelative	7,725 (58.0)

Figure 3.2. Cosignatory on Account



Savings Goals

The majority of youth (79.1%) are saving for their own education, followed by 13.7% saving for emergencies, and 2.5% saving for a business (Table 3.9). A few indicate saving for day-to-day expenses (1.6%), a relative’s education (1%), or another reason (1.7%). The percentages are essentially the same as in May 2014.

Table 3.9. Youth Savings Goals

	(N = 13,324)
	<i>n</i> (%)
Own education	10,535 (79.1)
Emergencies	1,824 (13.7)
Business	331 (2.5)
Day-to-day expenses	210 (1.6)
Relative's education	136 (1.0)
Trip/vacation	54 (0.4)
Job-related training	23 (0.2)
Other	141 (1.1)
Missing	70 (0.5)

How Youth Learned about the Account

The HFC outreach program has contributed to informing the youth about the benefits of operating a formal bank account, with 81.5% of the youth indicating they learned about the account through the program (Table 3.10). An additional 12.9% learned in their school or college. These percentages are similar to data reported previously from the data collection in May 2014.

Table 3.10. Source for Learning about YouthSave Account

	(N = 13,324)
	<i>n</i> (%)
HFC outreach program	10,860 (81.5)
School/college	1,723 (12.9)
FE workshop/youth club	250 (1.9)
Radio/TV/newspaper	236 (1.8)
Friend/family	156 (1.2)
Church/mosque/temple	59 (0.4)
Internet	3 (0.02)
Mobile phone	0 (0.0)
Others	36 (0.3)
Missing	1 (0.01)

FE, financial education

To better assess whether HFC's activities reached low-income youth, the research team analyzed estimated poverty likelihood of youth responding to each category (Table 3.11). The estimated poverty rate of those learning about the account through HFC's outreach program is the highest (41%), followed by others (40.8%), friend/family (39.1%), mass media (38.8%), school/college (37.8%), and financial education workshop (35.3%). The overall F-test for group differences is statistically significant ($p < .001$) as presented in Table 3.11.

Table 3.11. Estimated Poverty Rate and Source for Learning about YouthSave Account

	(N = 13,324)
	Estimated Poverty Rate (SD)***
HFC outreach program	41.0 (22.6)
School/college	37.8 (20.7)
FE workshop/youth club	35.3 (22.3)
Radio/TV/newspaper	38.8 (20.8)
Friend/family	39.1 (21.6)
Others	40.8 (22.9)

FE, financial education

***One-way ANOVA indicated that estimated poverty rates were significantly different across groups ($p < .001$). Post-hoc tests further showed that there was a statistically significant difference between bank outreach and FE workshop/youth club ($p < .001$), and between bank outreach and school/college ($p < .01$).

Exposure to Formal Financial Services

Some youth indicated their previous exposure to formal banking from either having owned a prior bank account themselves or by their HOH. To assess differences between those who have or have not had exposure to formal banking, the researchers compared characteristics of account holders that indicated exposure (self and HOH have had prior experience with a formal account) to those that indicated no exposure (neither self nor HOH have had prior experience with a formal account). As shown in Table 3.12, the number of youth who indicated having prior experience with an account and whose HOH also had experience with an account is 459 (3.3%), and the number who reported no prior experience by the youth or the HOH is 2,315 (17.3%). More of the youth who reported neither they nor their HOH had prior banking experience are younger and indicated saving for their own education. More of them also learned about the account through the bank campaign, suggesting that FI outreach to schools may be an effective alternative for reaching unbanked households.

Table 3.12. Characteristics of Ghana Youth Exposure to Formal Financial Services

	With prior experience with an account(youth and HOH) N = 459 (%)	No prior experience with an account (youth and HOH) N = 2,315 (%)
Gender		
Male	240 (52.3)	1,129 (48.8)
Female	219 (47.7)	1,185 (51.2)
Missing	0 (0.0)	1 (0.04)
Age (years)		
Younger than 10	4 (0.9)	24 (1.0)
10–12	50 (10.9)	288 (12.4)
13–15	170 (37.0)	1,090 (47.1)
16–18	204 (44.4)	808 (34.9)
19–21	29 (6.3)	91 (3.9)
22–24	1 (0.2)	8 (0.4)
25–30	1 (0.2)	4 (0.2)
Older than 30	0 (0.0)	2 (0.1)
Education level		
No formal	0 (0.0)	7 (0.3)

	With prior experience with an account(youth and HOH) N = 459 (%)	No prior experience with an account (youth and HOH) N = 2,315 (%)
Preschool	0 (0.0)	0 (0.0)
Lower primary (1–3)	0 (0.0)	50 (2.2)
Upper primary (4–6)	58 (12.6)	488 (21.1)
JHS 1	73 (15.9)	634 (27.4)
JHS 2	74 (16.1)	573 (24.8)
JHS 3	50 (10.9)	356 (15.4)
SHS	203 (44.2)	204 (8.8)
Other	1 (0.2)	3 (0.1)
Income in past six months		
Yes	59 (12.8)	313 (13.5)
No	395 (86.1)	1,984 (85.7)
Don't know	5 (1.1)	18 (0.8)
Savings goal		
Emergencies	82 (17.9)	253 (10.9)
Business	27 (5.9)	39 (1.7)
Own education	306 (66.7)	1,949 (84.2)
Relative's education	8 (1.7)	26 (1.1)
Day-to-day expenses	17 (3.7)	15 (0.7)
Trip/vacation	2 (0.4)	6 (0.3)
Job-related training	1 (0.2)	3 (0.1)
Other	9 (2.0)	21 (0.9)
Missing	7 (1.5)	3 (0.1)
Source for learning about account		
Radio/television/newspaper	9 (2.0)	40 (1.7)
HFC outreach program	332 (72.3)	1,938 (83.7)
FE workshop/youth club	17 (3.7)	33 (1.4)
School/college	92 (20.0)	268 (11.6)
Church/mosque/temple	1 (0.2)	13 (0.6)
Friend/family	7 (1.5)	20 (0.9)
Mobile phone	0 (0.0)	0 (0.0)
Internet	0 (0.0)	0 (0.0)
Others	1 (0.2)	3 (0.1)

FE, financial education; HOH, head of household; JHS, junior high school; SHS, senior high school

Summary of Findings

Since product rollout, 13,324 account holders agreed to participate in the YouthSave SDA study. Accounts have been open for an average of 13 months. Of these research accounts, 2,232 accounts were opened between the previous reporting of May 2014 and November 2014. Only 131 accounts were opened (Q10, between September and November 2014) which, as reported by HFC, is likely due to reduction in school visits as the project neared conclusion.

In terms of account holder characteristics, little has changed from previous reporting. The majority of the youth are aged between 13 and 18 years and in school, and an estimated 40% of youth have a poverty likelihood of living on USD 2.50 or less per day. The population is made up of youth with little experience in the economic sector; most reported no income in the six months before account opening (91%) or prior experience with formal financial services (93%). However, for the first time in the study, the last quarter (Q10) reflected a higher percentage of males than females who opened accounts, likely from HFC's increased outreach to boys schools.

This chapter provides a picture of who opened *Enidaso* accounts and changes in characteristics from those who previously opened accounts (before June 2014). The next chapter describes how much youth have saved.

Chapter 4: Savings Outcomes

This chapter presents several measures of savings outcomes. Findings reflect cumulative and average amounts as well as savings based on the length of time accounts have been held. Totals reflect savings from product rollout in May 2012 through November 2014, and highlights changes since data collection in May 2014.

Total net savings across all 13,324 accounts as of November 30, 2014 is GHS 534,234 (USD 667,792), almost twice the amount from the previous May 2014 (Table 4.1). Table 4.2 and Figure 4.1 present total net savings by quarter. Savings increased consistently each quarter with a spike in savings in Q9 (June to August 2014). Reasons for the spike are unknown but may be partially because of large deposits from a few account holders (Table 4.3). New accounts during the six month-period include USD 41,034 (an estimated USD 18 per account), which indicates that the savings increase primarily reflects savings from longer held accounts. Total net savings declined in Q10 but only relative to Q9. The rate of savings slowed in Q10, which reflects a combination of increase in withdrawals and decline in account uptake.

Table 4.1. Total Savings in Ghana National Currency (PPP-Converted USD)

Totals	As of May 2014 (N = 10,866)	As of November 2014 (N = 13,324)
Amount of deposits	415,957 (519,946)	793,238 (991,547)
Amount of interest	1,706 (2,133)	6,313 (7,891)
Amount of withdrawals	121,059 (151,324)	256,208 (320,260)
Amount of service fees	6,767 (8,458)	9,108 (11,386)
Net savings	289,837 (362,297)	534,234 (667,792)

GHS, Ghanaian cedi; *PPP*, purchasing power parity; *USD*, U.S. dollar

*Researchers used the purchasing power parity (PPP) conversion rates for 2011 drawn from the International Monetary Fund World Economic Outlook dataset (<http://www.imf.org/external/pubs/ft/weo/2012/01/index.htm>).

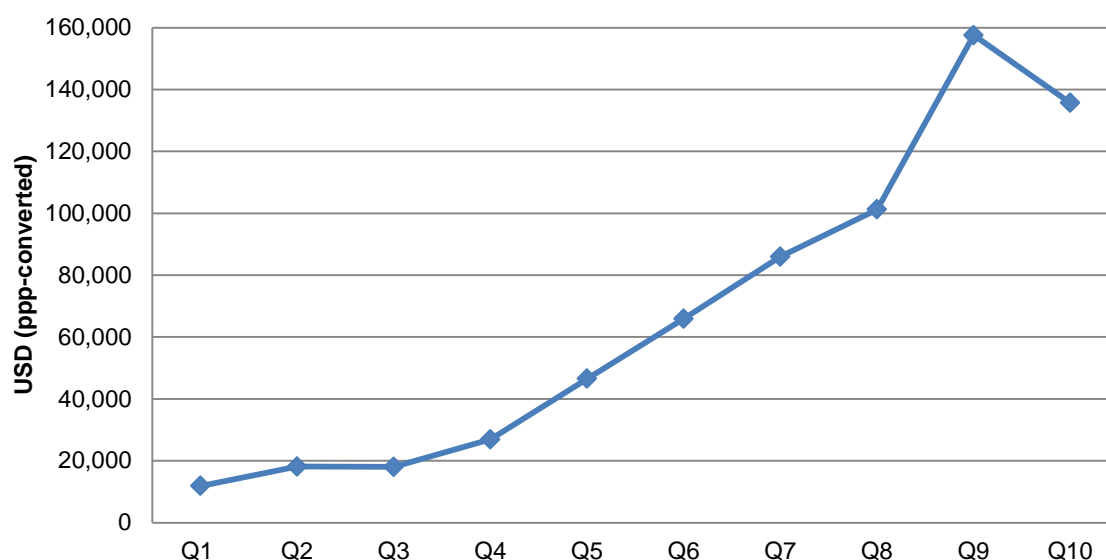
Table 4.2. Total Net Savings* by Quarter in Ghana National Currency (PPP-Converted USD)**

Quarter	Ghana (N = 13,324) GHS
Q1	9,498 (11,873)
Q2	14,497 (18,121)
Q3	14,400 (17,999)
Q4	21,546 (26,933)
Q5	37,225 (46,531)
Q6	52,724 (65,905)
Q7	68,792 (85,990)
Q8	80,981 (101,226)
Q9	126,044 (157,555)
Q10	108,528 (135,660)
Total	534,234 (667,792)

*Net savings = deposits + interest – withdrawals – service fees

**Q1 is May 11, 2012, to August 31, 2012; Q2 is September 1, 2012, to November 30, 2012; Q3 is December 1, 2012, to February 28, 2013; Q4 is March 1, 2013, to May 31, 2013; Q5 is June 1, 2013, to August 31, 2013; Q6 is September 1, 2013, to November 30, 2013; Q7 is December 1, 2013, to February 28, 2014; Q8 is March 1, 2014, to May 31, 2014; Q9 is June 1, 2014, to August 31, 2014; Q10 is September 1, to November 30, 2014.

Figure 4.1. Total Net Savings by Quarter in USD (ppp-converted)



As shown in Table 4.3, average total net savings per account is GHS 40 (USD 50), and median savings per account holder is GHS 4 (USD 5). Since May 2014, average total net savings per account increased by GHS 13.43 (USD 16.78) or about 17%. Average amount of withdrawals almost doubled, from GHS 11.14 (13.93) to GHS 19.23 (24.04), and average amount of deposits increased by about 40%, from GHS 38.44 (48.05) to GHS 60 (75.01).

Table 4.3. Ghana Average Savings per Account in GHS (PPP-Converted USD)

Averages	Mean	Median	Minimum	Maximum
Amount of deposits (including interest)	60.00 (75.01)	4.00 (5.00)	0 (0.00)	72,870 (91,087)
Amount of withdrawals	19.23 (24.04)	0.00 (0.00)	0 (0.00)	28,600 (35,750)
Amount of service fees	0.68 (0.85)	0.00 (0.00)	0 (0.00)	139 (173)
Total net savings (balance) per account	40.10 (50.12)	4.00 (5.00)	0 (0.00)	59,081 (73,852)

GHS, Ghanaian cedi; PPP, purchasing power parity; USD, U.S. dollar

The average monthly net savings (AMNS) per account is GHS 3.41 (USD 4.27), and the median is GHS 0.40 (USD 0.50) (Table 4.4). The maximum AMNS in an account is GHS 6,797 (USD 8,496). The AMNS decreased slightly by GHS 0.20 (USD 0.24) since May 2014.

Table 4.4. AMNS per Account in National Currencies (PPP-Converted USD)

	(N = 13,325)			
	GHS			
	Mean	Median	Minimum	Maximum
Average monthly deposits (including interest)	4.81 (6.01)	0.42 (0.52)	0 (0.00)	6,798 (8,497)
Average monthly withdrawals (including fees)	1.40 (1.75)	0.00 (0.00)	0 (0.00)	2,228 (2,785)
Average monthly net savings (AMNS)	3.41 (4.27)	0.40 (0.50)	0 (0.00)	6,797 (8,496)

AMNS, average monthly net savings; GHS, Ghanaian cedi; PPP, purchasing power parity; USD, U.S. dollar

*AMNS = (deposits + interest – withdrawals – service fees)/months account has been open

Note. Since interest and fees are negligible amounts, they are added to overall deposits and withdrawals, respectively.

Figure 4.2 provides greater detail of the pattern of deposit and withdrawal amounts per account per month. Although total net savings shows an overall increase in savings, deposits and withdrawals are more erratic with spikes in particular months. Consistently, deposit amounts decrease in August and increase in September, likely reflecting the school holiday. Withdrawals do not show a consistent pattern by month but amounts have increased over time.

Figure 4.2. Average Amount of Deposits and Withdrawals by Month

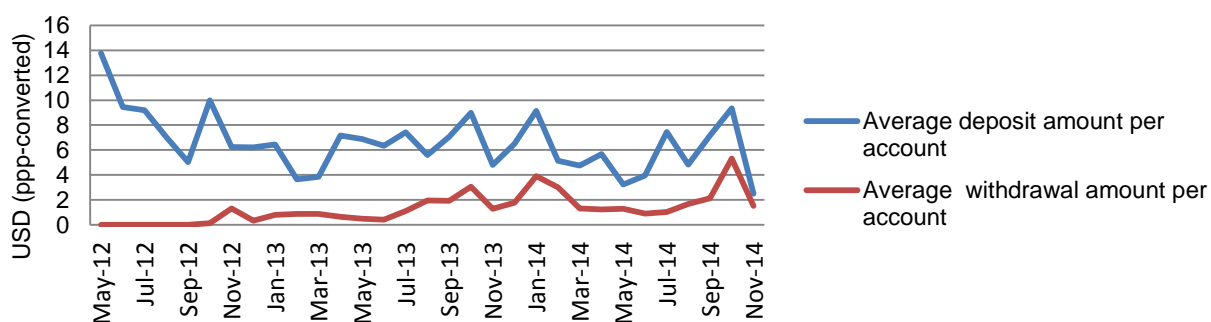


Table 4.5 presents frequency and savings by average length of time that an account is held. Average monthly savings is not significantly different between an account held a shorter (less than six months) or longer period of time.

Table 4.5. Frequency and Savings by Length of Account Holding

	Average Total Net Savings – PPP Mean (SD)	Average Monthly Net Savings – PPP Mean (SD)
Ghana (<i>N</i> = 13,324)		
Less than six months (<i>n</i> = 1,575)	15.79 (72.68)	4.09 (17.38)
Between six and 12 months (<i>n</i> = 5,403)	46.33 (1,084.71)	5.23 (126.86)
12 month or longer (<i>n</i> = 6,346)	61.87 (984.70)	3.49 (57.27)

Note. The differences in savings across length of account holding are not statistically significant.

Summary of Findings

As of November 2014, the 13,324 account holders had total net savings of GHS 534,234 (USD 667,792), almost twice the amount from May 2014. Savings have steadily increased with a spike in Q9, partially reflecting large deposits by a few account holders.

Deposit amounts tend to decrease in August and increase in September each year, likely reflecting the school holiday. Withdrawal amounts have increased over time.

Total net savings declined in Q10 (the last quarter), but only relative to Q9. The rate of savings increased more slowly in Q10, which reflects an increase in withdrawal and a decline in accounts opened and deposits made during that quarter. Both the average amount of deposits and withdrawals per account increased in the period between May and November 2014, resulting in an overall 17% increase in average net savings per account.

This chapter presents findings on total savings, average savings per account, and average monthly savings per account. The next chapter provides a more detailed look at account holder transaction activity.

Chapter 5: Transactions

The previous chapters provide a picture of who opens accounts and how much they save. This chapter analyzes account activity, deposit and withdrawal patterns, and characteristics associated with transaction activity.

Tables 5.1 and 5.2 show transactions by active, inactive, and closed account status. Over the prior 12-month period between December 1, 2013, and November 30, 2014, 73% of accounts had transaction activity. Over the past six months, between June 1, 2014, and November 30, 2014, 32% of accounts had transaction activity. Ten accounts have been closed.

Table 5.1. Account Activity over Previous 12 Months

	(N = 13,324)
Active accounts	9,719
Inactive accounts (for 12 months or more)	3,595
Closed accounts	10

Table 5.2. Account Activity over Previous Six Months

	(N = 13,324)
Active accounts	4,264
Inactive accounts (for past 6 months)	9,050
Closed accounts	10

Table 5.3 presents transactions for the 13,324 accounts. Youth made an average number of 2.6 deposits in the average 13 months an account was open, or about one deposit every five months. Deposit averages have been consistent over time although this average has increased slightly from the average (2.3) reported as of May 2014. A total of 715 youth (5%) made withdrawals and each averaged about one withdrawal every six months. Over time, the number of withdrawals has increased from an average of 1.3 as of February 2013 to an average of 2.2 as of November 2014 (Johnson et al., 2015; Johnson et al., 2013).

Table 5.3. Transactions

	(N = 13,324)
Total number of deposits	33,984
Total number of withdrawals	1,577
Number of youth that made deposits	13,313*
Number of youth that made withdrawals	715
Percent of youth that made withdrawals	5%
Average number of deposits per account	2.6
Average number of withdrawals per account by those who made a withdrawal	2.2
Average monthly number of deposits per account	0.2
Average monthly number of withdrawals per account by those who made a withdrawal	0.2

*All youth made at least one deposit with the exception of eleven cases in Ghana where there are fees or interest transactions, but no deposits.

Deposits

In terms of deposit activity shown in Table 5.4 and Figure 5.1, about 11% of the youth deposit at least quarterly and less than 2% deposit monthly. These results are a decline in deposit activity from May 2014, which indicated 18% of youth made one or more deposits per quarter and 4% made one or more deposits per month. Figure 5.2 shows this decline in deposits and withdrawals per account over time. The decline could be explained by a reduction in the number of accounts opened, school holidays, and the reduction in HFC outreach as the project neared completion.

Table 5.4. Deposits (excluding initial deposits)

Averages	(<i>N</i> = 13,324) <i>n</i> (%)
One or more deposits per quarter	1,498 (11.2)
One or more deposits per two months	853 (6.4)
One or more deposits per month	215 (1.6)

Figure 5.1. Deposits and Withdrawals in 2014

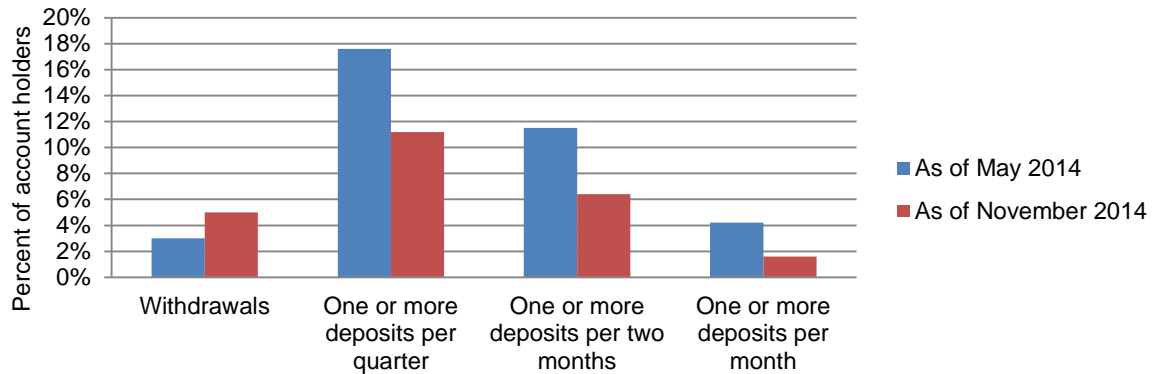


Figure 5.2. Average Number of Deposits and Withdrawals by Month

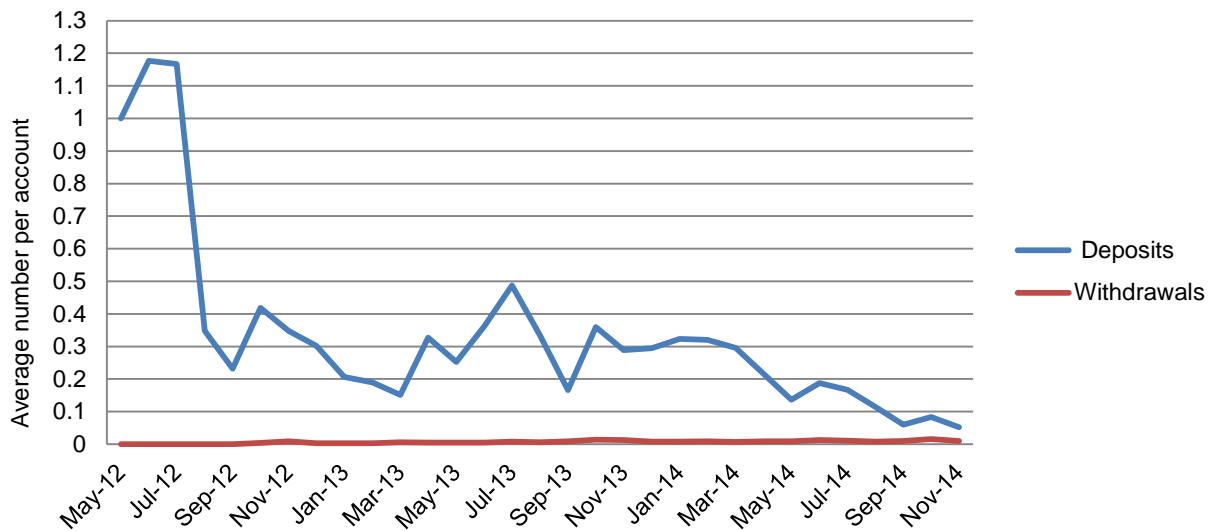


Table 5.5 shows youth characteristics associated with deposit activity in Ghana. Depositors in this analysis include those who made one or more deposits per quarter (excluding initial deposits) as discussed in the method section. Findings are similar to data as of May 2014 with one exception. In previous findings, there was no difference in deposit activity by grade level. In current findings, youth in junior high school (JHS) Levels 1 and 2 are associated with deposit activity. This result may reflect the large number of youth at this grade level who opened accounts, but also may be that the HFC outreach program facilitated deposit access for this group. By age, older youth are less likely to deposit than younger youth (aged younger than 13 years).

Youth who indicated their parents as the source of savings were also more likely to make deposits. Interestingly, the 3% of youth whose head of households (HOHs) were not employed were also more likely to make deposits. While a possible explanation is that youth may be more conscious of the need to save, youth were most likely working to support the family, and therefore may have had more money from their jobs to save. Further analysis supports this explanation. Youth whose HOHs were unemployed were more likely to have earned income in the past six months, and more likely to have indicated earned income as the source of funds for their savings.

Youth were more likely to deposit if they learned about the account through the HFC outreach program compared to learning through school or a youth club. This finding provides evidence that outreach may facilitate bank access.

Table 5.5. Youth and Household Characteristics Associated with Active Depositors in Ghana

	EST (SE)
Male	-0.03 (0.08)
Currently enrolled in school	-0.50 (0.56)
School enrollment	
(Primary or below)	
JHS 1	0.42 (0.13)**
JHS 2	0.49 (0.14)***
JHS 3	-0.01 (0.17)
SHS	-0.09 (0.17)
Age	
(Younger than 13)	
13–15	-0.30 (0.12)*
16–18	-0.41 (0.15)**
Older than 18	-0.50 (.26) [†]
Past income	-0.01 (0.18)
Past account	-0.30 (0.21)
Source of fund	
(Earned income)	
From parents	0.50 (0.25)*
Other source	0.62 (0.33) [†]
HOH	
(Father)	
Mother	0.01 (0.16)
Other	-0.53 (1.05)
Poverty likelihood at USD 2.50/day	0.001 (0.004)
Number of household members	

	EST (SE)
(1–3)	
4–5	0.14 (0.13)
Older than 5	0.11 (0.16)
HOH previous formal bank account	0.08 (0.11)
HOH education level	
(No formal education)	
Primary	-0.08 (0.17)
Secondary	0.18 (0.19)
Technical school	0.22 (0.21)
University	0.06 (0.22)
HOH employment in agriculture	-0.17 (0.13)
HOH employment	
(Employed)	
Self-employed	0.14 (0.10)
No employment	0.91 (0.22)***
Other	-0.24 (0.22)
Mode of transportation owned	
(None)	
Nonmotorized	-0.02 (0.14)
Motorized	-0.03 (0.09)
Both	0.26 (0.14) [†]
Cosignatory	
(Others)	
Parents	0.02 (0.09)
Savings goal	
(Emergency)	
Business	0.21 (0.28)
Education	0.07 (0.12)
Day-to-day expense	-0.07 (0.33)
Other	-0.67 (0.44)
Source for learning about account	
(HFC outreach program)	
Radio/TV/newspaper	0.15 (0.25)
FE workshop/youth club	-0.79 (0.37)*
School/college	-0.76 (0.15)***
Friend/family	0.25 (0.30)
Others	0.56 (0.35)

EST, parameter estimates; *FE*, financial education; *SE*, standard error; *HOH*, head of household; *JHS*, junior high school; *SHS*, senior high school

[†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Withdrawals

Table 5.6 and Figure 5.2 on page 33 show withdrawal activity. Almost 95% of youth account holders have not made any withdrawals. Despite the increase in amount of withdrawals over time noted in the previous chapter, the number of withdrawals and the number of youth taking withdrawals has been consistently low across the life of the project. The highest number of withdrawals occurred in October 2014.

Characteristics associated with the 5% who have withdrawn are noted in Table 5.7. Withdrawers are more likely to be male and aged 16 years or older. They are more likely to report the mother as the HOH, and have a parent as cosignatory on the account. Since making a withdrawal requires the presence of a parent or trusted adult, a parent, and especially a mother, may be more willing and available to support their child with transactions than some other adult. A youth is also more likely to withdraw if he or she heard about the account through mass media, friends or family, or some other means. Interestingly, a youth is less likely to be a withdrawer if he or she reported that the HOH previously had a formal bank account.

Table 5.6. Withdrawals

Averages	(N = 13,324) n (%)
No withdrawal	12,609 (94.6)
One or more withdrawal per 24 months	651 (4.9)
One or more withdrawal per 12 months	440 (3.3)
One or more withdrawal per quarter	90 (0.7)
One or more withdrawal per month	10 (0.0)

Table 5.7. Youth and Household Characteristics Associated with Withdrawals in Ghana

	EST (SE)
Male	0.34 (0.11)**
Currently enrolled in school	-0.97 (0.64)
School enrollment	
(Primary or below)	
JHS 1	0.51 (0.25)*
JHS 2	0.85 (0.25)**
JHS 3	0.87 (0.27)**
SHS	1.16 (0.27)***
Age	
(Younger than 13)	
13–15	-0.09 (0.22)
16–18	0.56 (0.24)*
Older than 18 or above	1.02 (0.31)**
Past income	0.51 (0.19)**
Past account	0.07 (0.22)
Source of fund	
(Earned income)	
From parents	0.25 (0.27)
Other source	0.30 (0.39)
HOH	
(Father)	
Mother	0.54 (0.22)*
Other	0.82 (0.80)
Poverty likelihood at USD 2.50/day	-0.01 (0.006)†
Number of household members	
(1–3)	
4–5	0.22 (0.18)
Older than 5	0.28 (0.22)
HOH previous formal bank account	-0.39 (0.15)**

	EST (SE)
HOH education level	
(No formal education)	
Primary	0.13 (0.27)
Secondary	0.28 (0.28)
Technical school	0.51 (0.30)†
University	0.22 (0.31)
HOH employment in agriculture	-0.17 (0.18)
HOH employment	
(Employed)	
Self-employed	0.20 (0.13)†
No employment	0.26 (0.42)
Other	0.02 (0.29)
Mode of transportation owned	
(None)	
Nonmotorized	0.02 (0.20)
Motorized	-0.06 (0.13)
Both	0.27 (0.18)
Cosignatory	
(Others)	
Parents	0.64 (0.12)***
Savings goal	
(Emergency)	
Business	-0.30 (0.38)
Education	-0.08 (0.15)
Day-to-day expense	0.25 (0.34)
Other	0.41 (0.35)
Source for learning about account	
(HFC outreach program)	
Radio/TV/newspaper	0.90 (0.26)**
Financial education/youth club	0.01 (0.34)
School/college	-0.69 (0.19)***
Friend/family	0.97 (0.31)**
Others	0.94 (0.39)*

EST, parameter estimates; *FE*, financial education; *SE*, standard error; *HOH*, head of household; *JHS*, junior high school; *SHS*, senior high school

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

In terms of transaction activity by account status, Table 5.8 shows that active account holders are more likely to be depositing than withdrawing. They make significantly more deposits than withdrawals. Those who are withdrawing are more likely to be doing so to close their account. Compared to data collected in May 2014, active account holders make up a lower percentage of the total but are more active in depositing. The maximum number of deposits by an account holder increased from 150 to 219, and the overall average increased from 2.4 to 2.8.

Table 5.8. Ghana Transactions by Account Status

	Mean	Median	Minimum	Maximum
Cumulative number of deposits***				
Active ($n = 9,719$)	2.8	1	0	219
Closed ($n = 10$)	4.2	4	1	13
Inactive ($n = 3,595$)	1.8	1	0	21
Total ($N = 13,324$)	2.5	1	0	219
Cumulative number of withdrawals***				
Active ($n = 9,719$)	0.1	0	0	44
Closed ($n = 10$)	1.2	1	1	3
Inactive ($n = 3,595$)	0.03	0	0	6
Total ($N = 13,324$)	0.1	0	0	44

*** $p < 0.001$.

Summary of Findings

In the 12-month period between December 1, 2013, and November 30, 2014, 73% of accounts showed transaction activity—deposit, withdrawal, or both. Between June 1, 2014, and November 30, 2014, only 32% of accounts had transaction activity. This percentage appears consistent with the average deposit of about one every five months and the low percentage (5%) of withdrawals.

The average number of deposits per account holder has been relatively consistent across the life of the project. Withdrawals have increased, from an average of 1.3 in 2013 to an average of 2.2 as of November 2014. The percentage of youth that have taken withdrawals increased from 3% in May 2014 to 5% in November 2014. It is logical to assume withdrawals will continue to increase over time as the youth use their funds to pay for their savings goals or other expenses.

Characteristics of active depositors and withdrawers reflect similarly to previous reporting. One exception is that youth in JHS1 and JHS2 are more likely to make deposits than youth in other grade levels. This result may reflect the larger number of youth at this grade level who opened accounts and, HFC's outreach to facilitate opening accounts and taking deposits. Similarly, youth were more likely to deposit if they learned about the account through the HFC outreach program compared to learning through school or a youth club. This finding provides additional evidence that outreach may facilitate bank access.

In terms of transaction activity by account status, active account holders are more likely to be depositing than withdrawing. They make significantly more deposits than withdrawals. Compared to data collected in May 2014, active account holders make up a lower percentage of the total but are more active in depositing. Those who are withdrawing are more likely to be doing so to close their account. The highest number of withdrawals occurred in October 2014.

This chapter explores account activity and characteristics associated with depositing and withdrawing. The next chapter examines youth and household characteristics that are associated with savings outcomes.

Chapter 6: Savings Patterns

This chapter presents a series of multivariate analyses that examine youth and household characteristics associated with average monthly net savings (AMNS). Researchers further conducted two separate analyses by the length of account holding, for accounts that have been held six months or more, and for accounts held 12 months or more. The second set of analyses includes a school-level analysis to examine how financial education and outreach services are associated with account uptake and AMNS. Generally, savings patterns are similar to findings from data collected as of May 2014.

Youth and Household Characteristics and Savings

Table 6.1 displays the results from the analysis of savings patterns based on youth and household characteristics. Younger youth (aged younger than 13 years) save more than youth aged between 13 and 18 years; youth in higher grades save more than those in lower grades. Further analysis indicates that within a grade level, younger youth save more, and within an age group, youth in higher grade levels save more. It may be that parents help younger children to save, and those in higher grades may have more resources to save because they are able to stay in school. Youth aged between 13 and 18 years may have increasing daily expenses and less income support from family or the labor market.

Youth who indicated that the mother is the HOH tend to save more than those who report that the HOH is the father or another person. Youth also save more when the parent is the cosignatory compared to a relative, nonrelative, or other cosignatory. These results also reflect the characteristics associated with withdrawers. Again, parents, and particularly mothers, may be more available and invested to support their child in the savings process. Parental involvement continues to be an important component for youth savings.

In the research questionnaire, ownership of motorized transportation is used as a potential indicator for wealth. Assuming households who own motorized transportation are likely to be wealthier than those who own nonmotorized transportation or do not own any form of transportation, youth in these households may have more resources to save. The data support this hypothesis; youth who live in households that own motorized transportation save more than other youth.

Finally, youth who indicated that they learned about the account through mass media, family, friends or other means, save more than those who learned about the account through the HFC outreach program.

Table 6.1. Multivariate Analysis Results (with Branch-Level Fixed Effects)

	EST (SE)
Male	-0.04 (0.04)
Currently enrolled in school	0.13 (0.34)
School enrollment	
(Primary or below)	
JHS 1	0.08 (0.07)
JHS 2	0.20 (0.07)**
JHS 3	0.22 (0.08)**
SHS	0.41 (0.09)***
Age	
(Younger than 13)	
13–15	-0.29 (0.07)***
16–18	-0.23 (0.08)**
Older than 18	-0.17 (0.13)
Past income	0.07 (0.09)
Past account	-0.10 (0.09)
Source of fund	
(Earned income)	
From parents	0.10 (0.11)
Other source	-0.18 (0.16)
HOH	
(Father)	
Mother	0.20 (0.08)*
Other	0.04 (0.40)
Poverty likelihood at USD 2.50/day	-0.004(0.002)†
Number of household members	
(1–3)	
4–5	-0.004 (0.07)
Older than 5	0.01 (0.08)
HOH previous formal bank account	-0.01 (0.06)
HOH education level	
(No formal education)	
Primary	-0.08 (0.09)
Secondary	-0.09 (0.10)
College	-0.07 (0.11)
University	0.02 (0.11)
HOH employment in agriculture	-0.06 (0.06)
HOH employment	
(Employed)	
Self-employed	0.02 (0.05)
No employment	0.19 (0.13)
Other	-0.07 (0.10)
Mode of transportation owned	
(None)	
Nonmotorized	0.001 (0.07)
Motorized	0.11 (0.05)*
Both	0.32 (0.08)***
Cosignatory	
(Others)	
Parents	0.50 (0.05)***
Savings goal	
(Emergency)	

	EST (SE)
Business	0.11 (0.14)
Education	0.01 (0.06)
Day-to-day expense	-0.30 (0.16) [†]
Other	0.09 (0.16)
Source for learning about account	
(HFC outreach program)	
Radio/TV/news/Internet	0.57 (0.14) ^{***}
FE workshop/youth club	-0.25 (0.14) [†]
School/college	-0.09 (0.07)
Friend/family	0.75 (0.17) ^{***}
Other	0.89 (0.22) ^{***}

EST, parameter estimates; *FE*, financial education; *SE*, standard error; *HOH*, head of household; *JHS*, junior high school; *SHS*, senior high school

[†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Note. Branch-level fixed effects are added to the model (i.e., the analysis controls for unobserved characteristics associated with the branches); Dependent variable is transformed using a square-root transformation due to non-normal distributions.

Table 6.2 shows the relationships between demographic and household characteristics and AMNS by the length of account holding. Statistical significance by age and grade decrease the longer the accounts are held. This result may reflect the increasing likelihood of taking withdrawals over time. Having a parent as cosignatory on the account is the one variable that has the strongest association consistently over time.

Table 6.2. Multivariate Analysis Results (with Branch-Level Fixed Effects): Account Holding by Number of Months

	Six Months or More EST (SE)	Twelve Months or More EST (SE)
Male	-0.05 (0.04)	-0.06 (0.07)
Currently enrolled in school	0.09 (0.35)	0.03 (0.53)
School enrollment		
(Primary or below)		
JHS 1	0.09 (0.07)	0.04 (0.11)
JHS 2	0.19 (0.08)*	0.14 (0.11)
JHS 3	0.22 (0.09)*	0.27 (0.13)*
SHS	0.36 (0.10) ^{***}	0.40 (0.14) ^{**}
Age		
(Younger than 13)		
13–15	-0.26 (0.07) ^{***}	-0.27 (0.10)*
16–18	-0.19 (0.09)*	-0.18 (0.12)
Older than 18	-0.18 (0.14)	-0.21 (0.21)
Past income	0.15 (0.09)	-0.02 (0.12)
Past account	-0.04 (0.10)	0.03 (0.14)
Source of fund		
(Earned income)		
From parents	0.16 (0.11)	-0.05 (0.16)
Other source	-0.02 (0.17)	-0.29 (0.24)
HOH		
(Father)		
Mother	0.17 (0.09)*	0.31 (0.13)*
Other	0.06 (0.42)	0.34 (0.70)

	Six Months or More EST (SE)	Twelve Months or More EST (SE)
Poverty likelihood at USD 2.50/day	-0.003(0.002)	-0.005(0.003)
Number of household members (1–3)		
4–5	-0.06 (0.07)	-0.09 (0.11)
Older than 5	-0.04 (0.09)	0.04 (0.13)
HOH previous formal bank account	-0.01 (0.06)	0.02 (0.09)
HOH education level (No formal education)		
Primary	-0.16 (0.10)	-0.11 (0.14)
Secondary	-0.13 (0.10)	-0.18 (0.15)
College	-0.11 (0.12)	-0.15 (0.17)
University	-0.004 (0.12)	0.05 (0.17)
HOH employment in agriculture	-0.05 (0.07)	-0.02 (0.11)
HOH employment (Employed)		
Self-employed	-0.02 (0.05)	-0.03 (0.08)
No employment	0.06 (0.15)	0.02 (0.22)
Other	-0.09 (0.11)	-0.02 (0.15)
Mode of transportation owned (None)		
Nonmotorized	0.02 (0.08)	-0.02 (0.12)
Motorized	0.12 (0.05)*	0.05 (0.08)
Both	0.33 (0.08)***	0.30 (0.12)*
Cosignatory (Others)		
Parents	0.56 (0.06)***	0.60 (0.08)***
Savings goal (Emergency)		
Business	-0.01 (0.15)	-0.01 (0.23)
Education	-0.03 (0.07)	0.12 (0.11)
Day-to-day expense	-0.33 (0.17)†	-0.23 (0.27)
Other	0.09 (0.17)	0.26 (0.24)
Source for learning about account (HFC outreach program)		
Radio/TV/news/Internet	0.61 (0.15)***	0.45 (0.19)*
FE workshop/youth club	-0.19 (0.15)	-0.22 (0.19)
School/college	-0.10 (0.08)	-0.19 (0.12)
Friend/family	0.76 (0.18)***	0.81 (0.24)**
Other	0.82 (0.24)***	0.75 (0.29)**

EST, parameter estimates; *FE*, financial education; *SE*, standard error; *HOH*, head of household; *JHS*, junior high school; *SHS*, senior high school

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Note. Branch-level fixed effects are added to the model (i.e., the analysis controls for unobserved characteristics associated with the branches); dependent variable is transformed using a square-root transformation due to non-normal distributions.

Financial Education and Outreach and Savings

Enidaso was actively marketed in 25 of its 42 branches in Ghana (the 16 new branches added between 2014 and 2015 were not included in the study). The majority of accounts were opened in Greater Accra (5,489) followed by Ashanti (2,229), Central (1,978), Northern (1,166), Eastern (1,374), Western (734), and Brong Ahafo (354) regions (Appendix B). Only six branches did not open any accounts.

As previously noted, a portion of HFC account holders are participating in an experiment testing in-school banking on youth in primarily low-income junior high schools. Though we separately identify the schools participating in the experiment, we report on all YouthSave account holders who opened an account based on the school they indicated attending at time of account opening.² This represents 1,058 schools. Of these schools, 25 are part of the in-school banking treatment of the experiment (and include 1,160 account holders), 25 are part of the outreach treatment (and include 825 account holders), 50 receive no financial services (and include 25 account holders [control group]) and 958 are nonexperiment schools (and include 11,314 account holders).

Comparing experiment schools that receive in-school banking, experiment schools that receive outreach, experiment schools that receive no services, and all other schools reveals significant difference in account uptake, but not in average monthly net savings. Table 6.3 shows that schools have higher account uptake when the financial institution provides in-school banking or outreach services. The difference in average monthly savings between the nonexperiment schools and the experiment schools appears high. However, the standard deviation (SD) is quite large, reflecting wide variation in savings across nonexperiment schools, reducing the ability to accurately assess differences.

Table 6.3. School-Level Analysis in Ghana ($N = 1,058$)

	Account uptake*** mean (SD)	AMNS-USD(PPP) mean (SD)
Experiment treatment schools in-school banking ($n = 25$)	46.40 (40.05)	1.65 (1.57)
Experiment treatment schools, outreach only ($n = 25$)	33.00 (24.10)	1.50 (1.69)
Experiment control schools (no services) ($n = 50$)	0.50 (1.96)	0.78 (3.82)
Nonexperiment schools ($n = 958$)	11.81 (31.25)	15.61 (152.07)

AMNS, average monthly net savings; SD, standard deviation.

*** Account uptakes are significantly different across groups at $p < .001$. Post-hoc tests indicate that account uptake is significantly different between “experiment schools with outreach” and “control group” schools ($p < .001$), between “experiment schools with in-school banking” and “control group” schools ($p < .001$), between “experiment schools with outreach” and “other nonexperiment schools” ($p < .01$), and between “experiment schools with in-school banking” and “other nonexperiment schools” ($p < .001$).

² The research team did not conduct branch-level analysis because all branches participated in some form of outreach to schools and some branches conducted multiple forms of outreach.

Summary of Findings

Overall, savings patterns are similar to reporting as of May 2014. The six-month time period may be too short of time to see significant change. Over time, however, other patterns emerge.

For accounts held 12 months or more, significance by age and grade decrease over time. This is consistent with findings that withdrawals increase with age, and logical that youth may start taking withdrawals for savings goals or other expenses. Interestingly, savings by youth who were in SHS when they opened their account remains statistically significant over time. These youth may be especially motivated to save or, because they are able to attend high school, may have more resources to save.

Having a parent as cosignatory on the account has the strongest association with savings consistently over time. Identification of the mother as head of household as opposed to the father is also consistently associated with savings. Given that the majority of youth have a nonrelative as cosignatory, these findings have important implications. The data indicate that parental involvement is a critical element in youth savings. The strong association with the mother may reflect her being more available on a daily basis to assist the youth in the savings processes.

In terms of financial education and outreach, school visits by HFC make a positive and significant difference on account uptake. This finding has important implications for facilitating youth access to formal FIs. In terms of savings, the analysis did not detect significant difference among the four groups because of wide variability in savings in nonexperiment schools. Further analysis of data from the experiment will yield more extensive findings.

This chapter analyzes savings patterns associated with youth and household characteristics, and with account uptake and financial education and outreach. Chapter 7 includes a discussion of the findings and implications for practice, policy, and research.

Chapter 7: Discussion

The savings demand assessment (SDA) offers a rich set of data for understanding and informing youth financial inclusion. This supplemental report on Ghana's *Enidaso* account holders provides additional evidence on the youth response to a savings product designed to attract their use. This report incorporates account activity since product rollout in May 2012 through November 2014 and highlights changes in results since data collection in May 2014. Findings from each chapter address questions about who opens accounts, how much they save, and characteristics associated with savings.

Account Uptake

As of November 30, 2014, HFC had opened 14,857 accounts since product launch in May 2012. The YouthSave SDA research findings include 13,324³ of these account holders. Of the 13,324 research accounts, 2,231 were new accounts opened between June 1, 2014, and November 30, 2014. Only 131 accounts were opened between September and November, likely reflecting the reduction in HFC's school visits as YouthSave activities neared conclusion.

In terms of youth characteristics, findings are similar to previous reports and reflect the population that HFC intended to reach: low-income youth aged between 12 and 18 years. The data show that the majority of the youth are aged between 13 and 18 years and in school, and an estimated 40% of youth have a poverty likelihood of living on USD 2.50 or less per day. In addition, the population is made up of youth with little experience in the economic sector; most reported no income in the six months before account opening (91%) or prior experience with formal financial services (93%). The product and outreach services generated new youth account holders.

In terms of gender, female youth have opened more accounts (54%) than male youth (46%). Consistently across quarters, females have opened more accounts than males. However, female participation declined by approximately 12% in the last quarter and more males opened accounts than females. Per HFC, this result is likely from HFC's outreach to boys schools (N. A. Mark-Sowah, personal communication, June 8, 2015). In terms of age and grade, a higher percentage of youth aged 16 to 18 years and those in SHS opened accounts in the second year, reflecting increasing focus by HFC on this population. Overall, the patterns in youth account holder characteristics highlight the influence that FI outreach activities can have on who signs up for accounts.

Consistently across the life of the initiative, youth account holders reported learning about the account primarily through the HFC outreach program (targeted at schools) (81%) or from their schools (13%), both of which may be attributed to the prevalence of FI outreach activities at schools. Also consistently, most of the youth reported saving for their own education (79%) or for emergencies (14%). The fact that the majority reported saving for education may reflect that many learned about the account through FI outreach activities at school, and may be an advantage to conducting savings activities at school. In addition, because the majority of the youth indicated learning about the account through the bank program rather than through school, even though

³ These youth consented to participate in the YouthSave research.

outreach occurred at a school, it appears HFC was successful in marketing its product and services as an FI relationship.

Findings on household characteristics are also similar to previous reports. Notably, a nonrelative is cosignatory on more than half of the accounts (58%), and a parent is cosignatory on only 26% of the accounts. This trend has continued with a 2% increase in nonrelative cosignatory since May 2014. This finding has important implications in terms of account access. Financial institutions that offer flexibility in the account opening process, such as allowing a trusted adult (e.g., a teacher) to cosign as an alternative to a parent or guardian, may reduce barriers and increase youth participation in the formal financial sector.

Savings Outcomes

Overall, youth steadily continue to save and keep their accounts open. Accounts have been open an average of 13 months, and youth have saved a total of GHS 534,234 (USD 667,792). This is almost double the amount of GHS 289,837 (USD 362,297) youth had saved as of May 2014.

Savings increased consistently each quarter with a spike between June and August 2014. The reason for the spike is not clear but is partially explained by a few account holders making large deposits. Total net savings declined in the last quarter of the project (between September and November 2014) but only relative to the previous quarter. The rate of savings slows in the last quarter and reflects a combination of increase in withdrawals, decline in deposits, and decline in account uptake. Both the average amount of deposits and withdrawals per account increased in the period between May and November 2014, resulting in an overall 17% increase in average net savings per account. Average monthly net savings as of November 2014 was GHS 3.41 (USD 4.27), only slightly lower than the previous report of GHS 3.61 (USD 4.51).

Transactions

About 73% of accounts had been active over the past 12 months (between December 1, 2013 and November 30, 2014), and 32% had been active in the past six months (between June 1, 2014 and November 30, 2014). Only 10 accounts have been closed since product launch.

In terms of transaction activity by account status, active account holders are more likely to be depositing than withdrawing. They make significantly more deposits than withdrawals. Those who are withdrawing are more likely to be doing so to close their account.

On average, youth make deposits once every five months. Deposit averages have been consistent over time although this average has increased slightly from the average (2.3) reported as of May 2014. Between June and November 2014, those who make deposits are more likely to be youth who had completed or were in junior high school (JHS 1 and JHS 2) and younger youth (aged younger than 13 years) at the time they opened their account. This result may reflect the larger number of youth at this grade level who opened accounts and, HFC's outreach to open accounts and take deposits. Similarly, youth are more likely to deposit if they learned about the account through the HFC outreach program compared to learning through school or a youth club. This finding provides further evidence that HFC's outreach may facilitate bank access.

Depositors are also associated with heads of households (HOHs) who are unemployed. This latter result may be counterintuitive, but a possible explanation is that the youth may be more conscious of the need to save or are working to support family, and therefore may have more money from their jobs to save. Further analysis supports this latter explanation. Youth whose HOHs are unemployed are more likely to have earned income in the past six months, and more likely to have indicated earned income as the source of funds for their savings.

The percentage of youth who have taken withdrawals is relatively low, but has increased from 2% as of data collected in 2013, to 3% as of May 2014, to 5% as of November 2014. Over time, the number of withdrawals per account has increased from an average of 1.3 as of February 2013 to an average of 2 as of both May 2014 and November 2014. Withdrawal rules likely influence these results. Youth are discouraged from taking withdrawals through restrictions on withdrawing in the first three months of account opening, and those aged younger than 18 years require the presence of an adult. Youth in boarding school or living in other domestic situations may have less access to an adult for withdrawals. Over time, an increase in withdrawals would be expected as the youth begin to use their funds to pay for their savings goals or other expenses.

Those who take withdrawals are more likely to be aged 16 years or older, male, report the mother as HOH, or have parent as cosignatory. Parents, especially the mother, may be more available to assist with the withdrawal process than another adult. Interestingly, youth are significantly less likely to withdraw if their HOH has previous bank experience. This finding is consistent with the hypothesis that HOH experience with formal banking may have a positive influence on their child's savings experience.

In addition, youth who learned about the account through mass media, friends, or family are more likely to withdraw than if they learned about the account through the HFC outreach program or school. This finding suggests that some aspect of the HFC outreach program at schools may be helping to discourage withdrawal activity. One reason may be distance to the nearest bank branch. Based on experience with the experiment, some schools where HFC conducted outreach were located far from a bank branch (Chowa et al., 2015). The only practical way some youth could transact with HFC was during HFC's visit to the school, yet HFC did not allow withdrawals at the school. Because youth who learned about the account through HFC's program have a higher estimated poverty rate, it is possible also that youth in the other groups have more funds to save and withdraw.

Savings Patterns

Overall, savings patterns are similar to those reported in May 2014. Contrary to study hypotheses, there is no significant difference in savings by gender or poverty likelihood. However, the data from the question that was used as an indicator for wealth, transportation ownership, confirms that youth living in households that own motorized transportation are likely to have more savings than youth living in households that do not own motorized transportation.

In terms of age, younger youth (aged younger than 13 years) have significantly higher average monthly savings than youth aged between 13 and 18 years. By grade, youth in higher school grade levels (from JHS 2 to SHS) save significantly more than those in JHS 1 or lower. This ostensible contradiction is explained by the variation in grade level within the same age group, and variation in

age within the same grade level. Within a grade level, younger youth save more, and within an age group, youth in higher grade levels save more.

A six-month time period may be too short of time to see much significant change, but over time, patterns emerge and stabilize. These patterns may also help to explain differences by age and grade.

Savings differences by age and grade decline over time, but after 12 months or more of account holding, younger youth save significantly more than only youth aged between 13 and 15 years, and only youth in the highest two grade levels save significantly more than those in lower grades. The convergence of these two variables suggests that youth may age with their savings and save in stages. Younger youth tend to make more deposits and take fewer withdrawals, likely from financial support of family members. Older youth tend to deposit less frequently and withdraw more often but as they get closer to age 18 (age of majority), they also increase their earning potential. Youth attending high school at the time of account opening may have greater earning potential or family resources to save because they are able to attend high school, thus evening out differences in savings. These results indicate a consistent gap over time in savings activity of youth aged between 13 and 16 years. Implementing savings strategies to increase deposits, such as incentive schemes, may be particularly useful during this stage of youth development.

Despite the high percentage of youth with a nonrelative as cosignatory, youth whose parent is cosignatory on the account consistently save more than youth who have some other cosignatory. This finding is one of the strongest and most consistent associations with savings over time. Identification of the mother as head of household as opposed to the father, is also consistently associated with savings. The strong association with the mother may reflect her being more available on a daily basis to assist the youth in the savings processes. These data indicate that parental involvement continues to be a critical element in youth savings, and support other evidence of the importance of involving parents in youth savings (Zou et al., 2015).

Also in keeping with past findings, youth who learned about the account through mass media, friends, or family save more than youth who learned about the account through the bank outreach program or school. The youth who learned about the account through the bank outreach program have a higher estimated poverty rate than those who reported learning about the account in other ways; therefore, it is possible that these other ways attracted youth who are less poor and have more resources to put into their savings. These findings suggest that HFC's efforts to target services to lower income families and communities worked, but also points to the importance of multiple marketing approaches to reach a broader youth population and to balance small deposit accounts with larger deposit accounts.

Financial Education and Outreach

A key finding of this study is the relationship between the financial services offered and account uptake and savings. Youth who attend schools in which an FI provides in-school banking or outreach services have significantly higher account uptake than those in schools that receive no services. Given the barriers that youth face in accessing formal FIs, facilitating opportunities at school for youth to open accounts and make deposits, and allowing teachers to be cosignatory, is a strategy that has been effective in increasing youth financial participation, especially low-income youth. Further analysis of the savings impacts on youth outcomes are presented in reports from the Ghana experiment (Chowa, et al., 2015; Lee et al., 2015).

Recommendations for Practice, Policy, and Research

Findings from the SDA have contributed to understanding youth financial participation in the YouthSave initiative in Ghana. This report reinforces findings from previous reports. With the availability of a youth-friendly savings account that is easy to access, affordable, and relevant to youth goals, youth are able to save.

For youth to successfully participate in formal savings, they must be able to open an account, and make deposits. In YouthSave, HFC was able to ease the account opening process by allowing a “trusted adult” to be cosignatory on the *Enidaso* account, and by “bringing the bank to the youth.” Essentially, this solves the issue of access. However, this type of implementation may be neither cost-effective nor inclusive on a large scale. A more inclusive alternative may be to engage the public and private sector in policy initiatives that establish a cost-effective savings structure for every citizen, preferably at a young age, when parents are more likely to help and teach their children to save. Structures such as the *Enidaso* savings product already exist, but political will and systems that ensure full inclusion require development. Once accounts are established, schools and FIs could continue to collaborate, providing youth with both financial education and an access point to make deposits and actively engage in the savings process.

To ensure that such structures are cost-effective, withdrawal restrictions should be considered. Only 5% of *Enidaso* account holders took withdrawals. Withdrawal rules and fees likely contributed to this low percentage.

Parental involvement in the savings process is critical. Although cosignature by a nonrelative increased account uptake, savings was associated with the parent as cosignature on the *Enidaso* account. Policies that can leverage parental involvement, such as conditional cash transfer programs, may be one way to engage parents in building their child’s assets. In YouthSave, local action included participation in parent–teacher meetings to provide information about the savings account. YouthSave strategies in other countries included community-wide financial education to parents and other adults. The HFC staff may have also encouraged parents with accounts to open *Enidaso* accounts with their children, a cross-sell strategy that can benefit both the client and the FI.

This study has generated new evidence but also more questions. With an emphasis on in-school youth, the out-of-school population deserves further study. Findings from this study suggest an age gap in the savings process. Additional research might explore how product features, outreach services, and policies can maximize savings at particular stages of youth development. A more comprehensive understanding of saving at different childhood and youth stages may contribute to positive youth development and more successful transition to adulthood.

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Appendix A. Ghana *Enidaso* Account Features

	Feature detail
Financial institution	HFC Bank
Product name	<i>Enidaso</i>
Type of account	Regular savings
Eligible youth	12–18 years
Owner	<ul style="list-style-type: none"> • Custodian is primary signatory and can be any trusted adult • Youth also must sign account opening forms
Account opening requirements	<ul style="list-style-type: none"> • Account opening and KYC form completed and signed by adult and youth • Youth and adult photos taken at branch • ID for adults include national ID, voter ID, passport, driver's license, or health insurance card • ID for youth include national ID, NHIS card, school ID, letter from local government official, or letter from school
Deposit/ withdrawal requirements	<ul style="list-style-type: none"> • Youth can deposit independently • An adult must be present for youth to make a withdrawal
Interest rate	<ul style="list-style-type: none"> • 1.25% per year subject to Asset and Liability Management Committee(ALCO), which meets monthly to set rate, minimum GHS 20 to earn interest
Fees	<ul style="list-style-type: none"> • Withdrawal: GHS 3.50 • ATM card: GHS 2.50 <ul style="list-style-type: none"> • Withdrawal booklet: GHS 3.50 • Paper statements: GHS 2
Minimums	<ul style="list-style-type: none"> • Opening balance: GHS 2 • Operating balance: GHS 5 • Balance to earn interest: GHS 20
Withdrawal restrictions	<ul style="list-style-type: none"> • No withdrawals for first three months • Monthly withdrawals are allowed thereafter
Incentives	<ul style="list-style-type: none"> • Account holders are offered a free piggy bank, T-shirt, or pen
Other features	<ul style="list-style-type: none"> • Youth receive an ATM card to check balances (fee-free) • Statements are given every six months
Delivery strategy	<ul style="list-style-type: none"> • Branches and Boafo agents • In-school delivery in certain locations
Marketing Strategies	<ul style="list-style-type: none"> • Prizes were offered during promotional campaigns • Direct marketing occurred during school visits and through print and electronic media
Conversion upon majority	<ul style="list-style-type: none"> • No automatic conversion • HFC offers adult products into which youth can be migrated. KYC will be upgraded to reflect new status. Same account code will apply, but a new account number is assigned.

KYC, Know Your Client; NHIS, National Health Insurance Scheme.

Data provided by Save the Children (2014).

Appendix B. Accounts and Savings by Branch in Ghana

District	Branch	Total research accounts	AMNS	Accounts from in-school banking schools	Accounts from in-school marketing schools	Accounts from schools receiving no services (control group)
Greater Accra Region						
Accra Metro	Abossey Okai	223	2.22	94	5	0
Accra Metro	Accra Central	58	8.60	0	0	0
Accra Metro	Adabraka	284	2.14	0	27	0
Ashaiman	Ashaiman	468	2.70	46	6	12
Accra Metro	Baastonaa (Spintex Road)	1,044	3.01	100	0	2
	Dansoman	318	7.71	0	1	0
Accra Metro	Ebankese (Head Office)	360	3.78	0	0	0
Accra Metro	Legon	503	4.52	0	19	0
Accra Metro	Post Office Square	799	2.00	0	1	4
Accra Metro	Ridge	1,312	5.78	0	85	0
Accra Metro	South Industrial (Boafo)	12	0.76	0	0	0
Tema Metro	Tema, Harbour City	91	3.67	40	0	0
Accra Metro	Tudu (Boafo)	17	1.42	0	0	0
Ashanti Region						
Kumasi Metro	KNUST	558	1.85	58	11	0
Kumasi Metro	Kumasi Main Branch	222	3.86	81	0	0
	Magazine	1,449	2.30	48	161	0
Central Region						
Awutu Effutu Senya	Kasoa	457	1.59	0	0	0
Agona West	Swedru	850	2.63	50	160	6
Kumasi Metro	Winneba	49	78.91	2	0	0
	Cape Coast	622	2.43	0	0	0
Western Region						
Sekondi Takoradi	Takoradi	734	1.75	185	46	0
Northern Region						
Tamale	Tamale	1,166	2.30	239	81	0
Brong Ahafo Region						
Techiman	Techiman	354	3.03	72	68	1
Eastern Region						
West Akim	Asamankese	724	4.46	17	85	0
New Juabeng	Koforidua	650	20.57	128	69	0
<i>Total</i>		13,324	4.27	1,160	825	25

Appendix C. Research Instrument



YouthSave Savings Demand Assessment

Account Number -----

No	Intake Question	Ghana
1	Name	
2	Date of birth	dd-mm-year
3	Gender	Male/female
4	Correspondence/current address (Postal code, town or village)	
5	Do you attend school?	1=Yes 2=No
6	What is the highest grade/class did you last complete?	00=Never been to school 10=Pre-school 11=Primary 1 12=Primary 2 13=Primary 3 14=Primary 4 15=Primary 5 16=Primary 6 21=JHS 1 22=JHS 2 23=JHS 3 31=SHS 1 32=SHS 2 33=SHS 3/4 41=Other, specify
7	If not in school, what trade or activity are you engaged in?	1= None 2= Street hawking 3= Trading in market 4= Apprenticeship 5= Family business 6= Trading in lorry parks 7= Youth sports clubs 8= Other club 99=N/A
8	Name of current or most recent school attended	
9	Have you earned income from working at any time in the past six months?	1=Yes 2=No 3=Don't know
10	Primary source of funds for the account?	1= Earned income 2= Money from parents/relatives 3= Money from friends/others 4= Other
11	Have you ever had an account at a bank or other financial institution?	1=Yes 2=No 3=Don't know
12	Who is the head of your family's household?	1=Father 2=Mother 3=Self 4=Other 5=Don't know
13	Has the head of household ever had an account at a bank or other financial institution?	1=Yes, HFC, 2=Yes, Other bank 3=No 4=Don't know 5=HFC & another Financial Institution

14	Head of Household highest level of education	1=No formal education 2=Primary 3=Secondary 4=College/Technical 5=University 6=Don't know
15	Is head of household's primary employment in agriculture sector?	1=Yes 2=No 3=Don't know
16	What is the primary employment status of head of household?	1= Public sector salaried (includes civil service) 2= Private sector salaried 3=Self employed 4=Day laborer 5=Pensioner/retired 6=Unpaid helper 7=Not employed 8=Other 9=Don't know
17	What is your average monthly household income?	1=Less than GHC75 2= GHC75-149 3= GHC150-220 4= GHC221-300 5=GHC301-370 6= More than GHC370 7= Don't know
18	How many people live in your household?	1=One 2=Two 3=Three 4=Four 5=Five 6=Six 7=Seven or more 8=Don't know
19	What mode of transportation does your household own? (a) Does your household own a Bicycle? (b) Does your household own a Scooter/Motorcycle? (c) Does your household own a Motor Car?	1= Yes, 2= No 1= Yes, 2= No 1= Yes, 2= No
20	Relationship of adult who signed for account with minor	1=Father 2=Mother 3= Other relative 4=Non-relative
21	How did you learn about this account?	1= Radio/television/newspaper 2=HFC Outreach Program 3=Youth club 4= Financial education workshop 5= School/College 6=Church/Mosque 7=Friend/family 8=Internet 9=Mobile phone 10=Other (specify)
22	Why did you choose to open this account?	1=Saving for emergencies 2=Saving for starting a business 3=Saving for own education 4=Saving for relative's education 5=Saving for day-to-day expenses 6=Saving for a trip/vacation 7=Saving for job related training 8=other (specify).....



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