Advancing Integrated Microfinance for Youth (AIM Youth)

Financial Diaries Research Report

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“In youth we learn; in age we understand.”—Marie Von Ebner-Eschenbach
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Executive Summary

Introduction
Young people living in poverty face many challenges as they transition from economic dependence to economic independence and increased financial responsibilities. But access to savings services and financial education at an early age can improve the likelihood they will make better money-management decisions on their own in the future. To address these needs, Freedom from Hunger, a recognized expert in integrated financial and non-financial services for the chronically hungry poor, launched the Advancing Integrated Microfinance for Youth (AIM Youth) initiative in partnership with The MasterCard Foundation in December 2009. The project was designed to meet the financial needs of youth between the ages of 13 and 24 years with appropriate and locally adapted financial education curricula integrated with savings.

This report highlights key findings from financial diaries research completed with program participants from four AIM Youth partners, two in Mali (Conseils et Appui pour l’Éducation à la Base (CAEB) and Nyèsigiso) and two in Ecuador (Cooperatives San Jose and Coopprogreso). The financial diaries, high-frequency quantitative surveys administered at regular intervals over several months, were designed to answer the following questions:
1. How did the amount of money youth receive fluctuate over time?
2. How did youth report using their money over time?
3. How did youth report saving their money over time and for what reasons?
4. How did their financial knowledge, specifically regarding the educational objectives of the financial education, change over time?

The primary purpose of this report is to describe differences and similarities seen between Mali and Ecuador youth as well as among youth accessing different types of integrated financial services and financial education programs. The four key questions are answered throughout the description of outcomes from both countries.

Mali Results
The analysis of outcomes from Mali focuses on the comparison of youth participating in the CAEB youth saving groups (YSGs) versus Nyèsigiso youth group savings accounts (GSAs) in order to highlight how two different populations can use similar savings services. CAEB targeted rural communities where adult savings groups already existed and Nyèsigiso targeted areas of the capital city Bamako where youth participated in apprenticeships. These two groups of youth are therefore quite different. CAEB youth fall below the national poverty line, are food-insecure, vulnerable to seasonal fluctuations, tend to be younger than 18 years of age, and half are female, while Nyèsigiso youth live in an urban center, are above the national poverty line, food-secure, mostly male and tend to be older than 18 years of age. As anticipated, Nyèsigiso youth have more income, expenses and savings than CAEB youth, and they made greater gains in savings in a smaller period of time. Data on income, expenses and savings over time show that, on average, both groups consistently maintain relatively high savings levels and keep expenses lower than income. CAEB youth experienced some improvement in financial knowledge whereas Nyèsigiso youth did not because of already high levels of knowledge at the beginning of the diaries. CAEB youth also experienced an increase in confidence for some expenses and savings attitude indicators from the beginning of the diaries until
the coup d'état and military intervention in the north of the country, when there was a drop in confidence and then a subsequent recovery. This “recovery” suggests a certain level of resilience in the youth. Age and gender may account for differences in the needs and economic activities of these youth, but they did not necessarily account for differences in benefits from the financial services. Overall, the comparison shows that both groups participating the YSGs and GSAs are saving more money over time, despite typical seasonal fluctuations in income and an atypical coup d'état during the time frame of the study.

Ecuador Results

The program in Ecuador differed from Mali in that youth in the program received financial education first and then were offered a voluntary individual savings account (ISA). Ecuadorian youth in this sample are fairly food-secure and less than 25 percent likely to fall below the national poverty line. Most are unmarried and on average 18 years of age; almost half are girls. Youth report consistent weekly amounts of money received and spent. Similarly, they also report consistent, yet small amounts of weekly savings. Over time, youth also report saving more often and saving more money. However, they report having a total amount saved that is almost ten times higher or greater than the amount they report saving in a week’s time. While small amounts saved from the amount they receive each week can definitely grow a savings balance over time, the data suggests that parents or others are giving youth larger amounts of money to save in addition to the money they might receive for basic weekly expenses. The financial education trends show very little knowledge change occurred during the financial diary period; however, by this time, the financial education sessions had been implemented one year prior to this assessment.

Analysis

Three different models of integrated financial education and financial services for youth were tested during the AIM Youth project: YSGs, GSAs and individual youth savings accounts. Despite obvious contextual differences between Mali and Ecuador that explain most variations in the youth, the financial diaries completed with the four partners in this project revealed interesting similarities. First, youth across Mali and Ecuador are similar in that they have high capacities to save and accumulate savings (ranging from US$1 to $450), but the majority of them still report saving at home. We also found in both countries that financial attitudes appear to be strong indicators of a young person’s financial situation. Complementing self-reported financial data, or even substituting it, with financial attitudes when monitoring a program’s impact might be very useful for understanding a youth person’s real financial status. Finally, evaluating knowledge change as a result of the financial education presented mixed results in both Ecuador and Mali. Since the sample sizes are quite small, it is impossible to suggest whether the improvements or lack thereof are actually meaningful. However, they point to the potential benefit of additional touch-points or nudges to continually help improve financial knowledge over time.

Conclusion

It was expected that youth would likely save in small amounts from the beginning, but the financial diary methodology provided the opportunity to see that youth have the necessary perseverance, often with assistance from parents, to stay active in savings services. When thinking about the objective of AIM Youth and its goals for building a more financially capable generation, the financial diary data seems to imply that some important short- and long-term strategies for building savings are emerging as part of complementary savings and financial education approaches. However, it will be important to identify strategies for sustaining the momentum as well as continue evolving savings services and financial education that will help youth address upcoming significant life stages.
Acknowledgments

The AIM Youth Financial Diaries Project was a learning experience. We went into this research with some basic knowledge of what we might find due to already-completed market research conducted in Mali and Ecuador, but we were still not sure what to expect. We labored over how to best design surveys and data-collection processes that would be interesting and relevant to the youth participating as well as provide reliable data that was feasible to collect over a relatively long period. We felt it has been a rich learning experience.

First, we want to thank The MasterCard Foundation for partnering with Freedom from Hunger to conduct this research.

In Mali, we have several people and organizations to thank. The research institute in Mali, CERCAD, was instrumental in helping us navigate the data-collection through particularly trying times and carried this torch even after the coup d'état. The data-collection efforts would not have been possible without Freedom from Hunger's valued partnership with Nyèsigiso and CAEB and the parents and youth who participated in this research. Our key staff member Oumar Maazou focused on youth services in Bamako and acted as liaison to the partners, the research firm and our staff in California.

In Ecuador, we would also like to thank the three universities that collected the data. In particular, many thanks to Youry Rezabala from the Universidad Técnica de Manabí; Rene Mesias Villacres Borja from the Universidad de Bolívar; and Luis Alcivar from the Universidad de Babahoyo for their steadfast coordination with their own universities and teams of students who collected this data as well as their insight into interpretations of the data and the challenges and benefits of using financial diaries with youth. To Rocio Chavez and Amelia Kuklewicz, our Freedom from Hunger colleagues, this research would not have been possible without your assistance with the multi-faceted coordination that was necessary for this work.

Finally, we want to thank our colleagues who reviewed this paper to ensure it would contribute to the literature: Rossana Ramirez and Oumarou Maazou from Freedom from Hunger; Bella Lam from Plan Canada; William Elliott and Melinda Lewis from the Assets and Education Initiative (AEDI) at the University of Kansas’s School of Social Welfare; and Ruth Dueck-Mbeba, Machal Karim and Paula Tjossem from The MasterCard Foundation.

Reviewers and their organizations do not necessarily endorse all of the content of this report.

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Freedom from Hunger
Introduction

Young people living in poverty face many challenges as they transition from economic dependence to increased household responsibility. Their need to contribute to the household well-being is in constant tension with their limited access to financial resources and opportunities. This combination of factors can severely inhibit a young person’s ability to break the vicious cycle of intergenerational poverty.¹

But young adulthood and adolescence can be a “window of opportunity” for youth to obtain knowledge, skills and opportunities to overcome earlier disadvantages.² To surmount factors that contribute to chronic poverty, a young person can be encouraged to form behaviors earlier in life so that positive habits become automatic during adulthood.³ One positive outcome sought by organizations and practitioners that focus on youth is financial capability, which is the combination of access to appropriate financial services and knowledge, skills, attitudes and behaviors that help a person make sound personal decisions.⁴ Therefore, access to savings services and financial education, for example, provided to individuals at an early age can impact their financial capability as adults and improve the likelihood that they save money and make better money-management decisions.⁵

Freedom from Hunger, a recognized expert in integrated financial and non-financial services for the chronically hungry poor, launched the Advancing Integrated Microfinance for Youth (AIM Youth) initiative in partnership with The MasterCard Foundation in 2009 to address these needs with appropriate and locally adapted financial education curricula integrated with customized financial services—beginning with savings.

Description of Services and Outreach

The AIM Youth project targeted 37,000 young people in Mali and Ecuador through savings services. In Mali, there were two different approaches to savings services. In both, financial education was provided to youth who were brought together to save in groups. Through two Malian non-governmental organizations (NGOs), Conseils et Appui pour l’Education à la Base (CAEB) and Le Tonus, youth engaged in youth savings groups (YSGs) based on Saving for Change, a community-based savings program originally developed for adults by Freedom from Hunger, Oxfam America, and the Strømme Foundation. Through the self-managed savings and lending groups, youth met weekly over the course of a year to save a specified amount of money, which is placed in a lockbox and periodically to borrow from the pooled savings to meet such needs as emergencies, income-generating activities and goals for the future. Loans were repaid with interest, which was split evenly at the end of the savings cycle when members received their accumulated savings. Through the microfinance institution (MFI) Nyësigiso, participating Malian youth saved in a group-based savings account (GSA). The youth who held the account participated in a savings group mechanism similar to that of the NGOs, where they saved set amounts together weekly. The main difference between the GSA from the YSG is that youth could not take periodic loans or split savings at the end of a year; all the money went into the GSA (instead of a locked box) and remained there until the group jointly decided to withdraw money. If one member left, guidance was provided to help the group manage the departure without closing the account. See Table 1 for additional details.
In Ecuador, four cooperatives (Cooperativa San Jose, Cooperativa Cooprogreso, San Miguel de los Bancos and Cooperativa Santa Ana) provided financial education through middle and high schools and the students were encouraged to open ISAs. Financial education sessions were therefore provided to groups of youth prior to having access to the youth savings accounts.

Table 1 provides a summary of the services and their outreach as of September 2013. The majority of the outreach was achieved through YSGs in Mali, followed by the ISAs in Ecuador. While the average percentage of girls in the programs combined was slightly over half, more girls were reached through the YSGs in Mali and ISAs in Ecuador, both of which had more than three-quarters of their outreach represented by girls. Half or less than half of the youth in Mali were in school while almost all youth in Ecuador were in school (either middle school, high school or at a university/trade school).

<table>
<thead>
<tr>
<th></th>
<th>Mali</th>
<th>Ecuador</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outreach</strong></td>
<td>24,070</td>
<td>2,646</td>
<td>38,843</td>
</tr>
<tr>
<td><strong>Percentage of girls</strong></td>
<td>64</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td><strong>Percentage of youth between ages 13 and 17</strong></td>
<td>78</td>
<td>32</td>
<td>87</td>
</tr>
<tr>
<td><strong>Percentage in school</strong></td>
<td>50</td>
<td>47</td>
<td>99</td>
</tr>
<tr>
<td><strong>Savings</strong></td>
<td>Weekly meetings to save a specified amount of money in a locked box; individual savings distributed at end of savings cycle.</td>
<td>Weekly meetings to save a specified amount of money in a savings account; no distribution unless group withdraws money.</td>
<td>Students were encouraged to open ISAs.</td>
</tr>
<tr>
<td><strong>Credit</strong></td>
<td>Met periodically to borrow from the pooled savings for emergencies, income-generating activities and goals for the future. Loans repaid with interest and divided evenly at the end of the savings cycle.</td>
<td>No credit available.</td>
<td>No credit available.</td>
</tr>
<tr>
<td><strong>Financial Education</strong></td>
<td>Provided to groups of youth brought together to save in groups.</td>
<td>Provided to groups of youth brought together to save in groups.</td>
<td>Provided to groups of youth prior to having access to the ISAs.</td>
</tr>
</tbody>
</table>
To demonstrate progress and document the impact and affect of the program on young people, Freedom from Hunger included a multiple-methods research design with four of the partners (Mali: CAEB and Nyèsigiso; Ecuador: Cooperatives San Jose and Cooprogreso). The purpose of this paper is to present outcomes from the financial diaries, which describe differences and similarities seen between Ecuador and Mali youth as well as among youth accessing different types of integrated financial services and financial education programs. A wider look at program outcomes, triangulated by multiple types of research activities, is covered in comprehensive research papers. The intended audience for this paper includes financial-service providers, technical assistance providers, and donors interested in learning more about how youth interact with financial services as well as those interested in understanding the value of a financial diaries methodology for tracking change and progress over time. Studying trends for financial behaviors over time helps to explain the demand and need for financial services to help financial-service providers and NGOs assist in better serving beneficiaries.

The paper is structured as follows:
- Part I outlines the financial diaries methodology
- Part II covers the Mali financial diary results
- Part III covers the Ecuador financial diary results
- Part IV consists of an analysis that looks at the data collected across both countries
- Part V contains annexes that include qualitative case studies for both countries
Part I: Purpose and Role of Financial Diaries

The financial diaries methodology has proven to be useful for understanding short-term transactions and behaviors and for describing these in “real time.” The methodology was first featured in the publication *Portfolios of the Poor* and has since been used with numerous other studies, featuring both adults and youth. Financial diaries typically are quantitative surveys that are repeated at a high frequency, unlike the traditional baseline and end line approach to research that include only two surveys, spaced one to two years apart. Some researchers have used financial diaries as a way to track behaviors every two weeks or once a month, for example. This variation often has its pros and cons. High-frequency surveys will gather data closer to the timing of related behaviors, thereby improving recall; however, with higher frequency comes a greater risk of survey fatigue for respondents. With surveys implemented farther apart, you do not build as much rapport and trust with a participant as with the higher frequency surveys, and you are unlikely to uncover as much detail about issues covered in the surveys. Since this methodology is just now being tested with youth, it was unclear whether there would be enough financial “transactions” to follow on a frequent basis. Biweekly and monthly interviews were used in Ecuador and Mali, respectively. Both provided interesting insights.

The primary research questions explored in the financial diaries were meant to support the overall research objective of evaluating the changes in financial knowledge, attitudes and behaviors over time of youth participation in integrated financial services and financial education programs. A much smaller subset of the respondents from separate baseline surveys were randomly selected to participate in the financial diaries, except in the case of Nyézigiso, which had no baseline survey and instead youth were otherwise identified for diary participation. Given the small sample sizes used in the financial diaries, it is important to note that the objective of the financial diaries was not to demonstrate or prove program impact, but to more deeply understand youth behaviors and attitudes. In short, the financial diaries were designed to document short-term financial decisions and behaviors as a way to develop a richer understanding of the financial management habits of youth in general, and potentially their habits as a result of their access and use of the services.

The financial diaries research was designed to answer the following questions:
1. How did the amount of money youth receive fluctuate over time?
2. How did youth report using their money over time?
3. How did youth report saving their money over time and for what reasons?
4. How did their financial knowledge, specifically regarding the educational objectives of the financial education, change over time?

Two questions in the original plan for financial diaries were dropped for this report—one regarding the difference between treatment and comparison youth, and the other regarding the difference between age and gender. They are not included in this report because of the decision to only present data from the youth who participated in the program. Since the aim of this report is not to evaluate the program insomuch as to describe youth who have access to a program, the decision to only look at the treatment group was decided as a way to simplify the presentation of findings. Because of data-entry errors, it was also impossible to link the Ecuador financial diary data to the baseline dataset to align demographics of the youth participating in the financial diaries. Therefore, some age and gender data is presented for Mali, but not for Ecuador. The purpose of the financial diary report is to describe differences and similarities seen between Mali and Ecuador youth, as well as among youth accessing different types of integrated financial services and financial education programs.
Financial Diary Methodologies and Sample Sizes

Mali

The financial diary methodology consisted of using the high-frequency surveys at regular intervals over several months. The Mali data-collection was divided into two time frames, one for each institution. For CAEB, 36 youth participated in monthly financial diaries from July 2011 to July 2012, and all were members of YSGs. The sample was split equally among youth in villages near the city of Bougouni (south of Bamako) and Kolokani (north of Bamako); 18 youth in each area. For Nyèsigiso, 36 youth also participated in monthly financial diaries, but only for six months, from July 2012 to December 2012. All of the youth lived in Bamako. Although it would have been ideal to track the Nyèsigiso group for 12 months, similar to the CAEB groups, timelines for service roll-out compared to timelines to process data, plus changes in the project end date, allowed for only six months of diary collection. The sampling for both sets of diaries was purposeful, yet participants in the surveys were randomly selected, to include a composition of males and females, and younger and older youth, who closely represented the program demographics at the start of the study. The local Malian research firm Centre d’Études, de Recherche, de Communication et d’Animation pour le Développement (CERCAD) managed the monthly data-collection. Dr. Benjamin Crookston from Brigham Young University managed most of the data analysis. It is important to note that during the implementation of the financial diaries, a coup d’état occurred in March 2012 and disrupted data-collection for a few weeks. It is easy to see that this major event, plus the ensuing military intervention in the north of the country, affected outcomes as well. A map of the program areas for Mali is provided in Figure 1.

Figure 1: Map of Mali with partner locations
**Ecuador**

Between September 2012 and February 2013, 30 program youth in Ecuador participated in a series of five to six biweekly financial diaries. Because three different universities participated in the data-collection, the implementation of the financial diary methodology was slightly staggered during this period, even though it took approximately three months to complete the biweekly youth interviews. Participants in the program were from middle or high schools and were provided financial education from the Cooperatives during school hours. They were subsequently provided access to ISAs. Two universities collected data for Cooperative San Jose: the Universidad de Babahoyo collected data in the sub-tropic region of the program from two key communities (Ventanas, Montalvo) and the Universidad de Bolivar collected data from communities in the highlands (San Miguel, Chillanes, Guaranda and Chimbo). One university, the Universidad Técnica de Manabí, collected the data for Cooperativa Cooprogreso, representing the coastal area. In all cases, the data for both Cooprogreso and San Jose are combined given the similarity of their strategies. In total, 20 youth were interviewed with Cooperative San Jose and ten were interviewed with Cooprogreso. While data was collected for six periods, only the first five periods will be shared because in the last period, data points were lost for ten of the youth due to difficulty in locating some youth because of school holidays. A map of the program areas for Ecuador is provided below.

[Figure 2: Map of Ecuador with partner locations]
A summary timeline of the data-collection periods is outlined in Table 2 for both countries, along with a description of key events that may be referenced in the interpretation of the findings in this paper.

Table 2. Seasonal calendar and financial diaries timeline

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<tr>
<td>CAEB data-collection</td>
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<tr>
<td>Nyèsigiso data-collection</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Key events, activities and holidays in Mali</td>
<td>School out of session; Ramadan, July 30–Aug 28</td>
<td>School in session; <em>Tabaski</em> Nov 5–6</td>
<td>School in session; coup d’Etat Mar 21</td>
<td>School out of session; Ramadan Jul 20–Aug 19</td>
<td>School in session; <em>Tabaski</em> Oct 26</td>
<td>School in session</td>
<td>School in session</td>
<td></td>
</tr>
<tr>
<td>Agricultural seasons and weather</td>
<td>Rainy season/ Hungry season (<em>soudure</em>) begins</td>
<td>Harvest</td>
<td>Cold Season</td>
<td>Rainy season/ Hungry season (<em>soudure</em>) begins</td>
<td>Harvest</td>
<td>Cold season</td>
<td>Hot season</td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
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<tr>
<td>Cooperativa Cooprogreso data-collection</td>
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<td>Cooperativa San Jose data-collection</td>
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<td></td>
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<tr>
<td>Key events, activities and holidays in Ecuador</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>School in session for San Jose youth starting in September</td>
<td>Christmas holiday and short break for all students</td>
<td>School out of session for Cooprogreso youth</td>
</tr>
</tbody>
</table>

A summary of the financial diary sample sizes is included in Table 3 below.

Table 3. Financial diaries for *AIM Youth* and sample sizes

<table>
<thead>
<tr>
<th></th>
<th>Financial Diaries Sample Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mali</strong></td>
<td></td>
</tr>
<tr>
<td>CAEB</td>
<td>36 youth (interviewed 15 times each)</td>
</tr>
<tr>
<td>Nyèsigiso</td>
<td>36 youth (interviewed 7 times each)</td>
</tr>
<tr>
<td><strong>Ecuador</strong></td>
<td></td>
</tr>
<tr>
<td>Cooperative San Jose</td>
<td>20 youth (interviewed 5 or 6 times each)</td>
</tr>
</tbody>
</table>
Study Considerations and Limitations

A few issues are important to keep in mind to better understand the presentation of this data. First, the time frames for data-collection for Mali and Ecuador were quite different and therefore outcomes speak for seasonality issues to varying degrees. Second, the strength of this methodology is not about impact analysis but about descriptions of the knowledge and behaviors of these youth. The value is in the insights gained in observing trends, not in the numbers behind the outcomes. Third, comparisons for some questions presented within Mali data differ from that of Ecuador data; this is due both to variations in survey questions as well as which outcomes made for a more insightful discussion. Fourth, prior experiences with diary approaches to collecting data indicate that the first one to three interviews conducted generally are the least reliable because of the need to develop trust between interviewer and respondent. Data appears to fluctuate more and more unexplainably for the first data-collection periods than for the final data points. The data collected in this financial diary project has similar fluctuations for the first data periods; therefore, the results section will be describing a general trend of the data and will not try to explain why the first data points appear to be more variable than the final ones.
Part II: Mali Financial Diary Data

This section describes observations and trends gleaned from the financial diaries conducted with youth participants in CAEB’s YSG program and Nyèsigiso’s GSA program. As mentioned earlier, the CAEB financial diaries were conducted between July 2011–July 2012, and the Nyèsigiso diaries between July 2012–December 2012. While reviewing the outcomes, it is important to keep in mind that sample sizes were small (36 respondents for each set of diaries), and the profile of youth as a group selected for participation in the surveys was meant to reflect that of the program at the start of the surveying. See Table 4 for a summary of the sampling strategy for both CAEB and Nyèsigiso.

Table 4. Summary of Mali sampling strategy

<table>
<thead>
<tr>
<th></th>
<th>CAEB=36 respondents</th>
<th>Nyèsigiso=36 respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bougouni</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Kolokani</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Bamako</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>3 villages</td>
<td>3 villages</td>
<td>6 Districts</td>
</tr>
<tr>
<td>6 respondents per village</td>
<td>6 respondents per village</td>
<td>6 respondents per district</td>
</tr>
</tbody>
</table>

Respondent Characteristics

The sample of CAEB youth participants in the financial diaries live in rural areas, most are very poor, as measured by the Progress Out of Poverty Index (PPI), and high numbers are food-insecure at least part of the year. A little more than one-half are female, and most are between ages of 13 and 17 years. About two-thirds live more than 5 kilometers away from a main road, and about half were in school during the diaries. Table 5 summarizes characteristics for both CAEB and Nyèsigiso respondents. Note that the data provided here is from the first financial diaries survey, which was underway in July 2011 for CAEB and July 2012 for Nyèsigiso.

All of the youth in the Nyèsigiso group live in Bamako, the capital of Mali. The demographic characteristics of these youth are quite different from that of CAEB youth; they are urban, mostly male and ages range from 18 to 24 years, most live above the poverty line and very few are food-insecure during the July–December 2012 timeline. About half were in school during the diaries. For those not in school, about half had no schooling and the rest stopped at primary or secondary school. Almost all were unmarried and expect to be married by 23, although they preferred to get married at 27.
### Table 5. Average CAEB and Nyèsigiso youth characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>CAEB</th>
<th>Nyèsigiso</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Demographics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>47%</td>
<td>83%</td>
</tr>
<tr>
<td>Female</td>
<td>53%</td>
<td>17%</td>
</tr>
<tr>
<td>Average age</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>Ages 13–17 years</td>
<td>83%</td>
<td>31%</td>
</tr>
<tr>
<td>Ages 18–24 years</td>
<td>17%</td>
<td>69%</td>
</tr>
<tr>
<td>Not married</td>
<td>89%</td>
<td>94%</td>
</tr>
<tr>
<td>In school</td>
<td>55%</td>
<td>44%</td>
</tr>
<tr>
<td>Rural</td>
<td>100%</td>
<td>100% Urban</td>
</tr>
<tr>
<td><strong>Food Security</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Periodic food insecurity</td>
<td>44% (July 2011)</td>
<td>6% (July 2012)</td>
</tr>
<tr>
<td>Chronic food insecurity</td>
<td>36% (July 2011)</td>
<td>6% (July 2012)</td>
</tr>
<tr>
<td><strong>PPI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated percentage of group living below national Poverty Line</td>
<td>65%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Although many of the respondent characteristics stayed static over the course of the diaries, food-security levels fluctuated. Food security for both CAEB and Nyèsigiso youth were measured using the Freedom from Hunger food-security scale (FSS). Figure 3 highlights some key differences in food security for CAEB and Nyèsigiso youth. Not only are CAEB YSG youth much more food-insecure than the Nyèsigiso GSA youth in general, but their food-security level fluctuates more during the July to December period. The Nyèsigiso youth in urban Bamako have lower and more stable rates of food security. This sharp contrast points to a vulnerability that CAEB rural youth deal with that the Nyèsigiso youth do not. During the lean times, from September to November, managing day-to-day life while coping with food shortages likely makes priorities change and capabilities limited. See Table 2: Seasonal calendar & financial diaries timeline for additional information on important events that occurred during the time frames of the diaries to further understand some of the fluctuations.

**Figure 3. Food insecurity over time—CAEB and Nyèsigiso**
Earnings

How Malian Youth Earn Money

In July 2011, when rural CAEB youth were asked about income-earning activities, about 40 percent said they did not do work outside of the household, although this grew to 60 percent by July 2012. It is not certain why there was a change, but perhaps the economic strain from the coup d'état resulted in fewer youth being able to find paid work. Some youth found work as agriculture laborers, sold agriculture products, did manual labor or domestic work. In July 2011, the majority worked in their village and a few in a neighboring village, but by the following July, those numbers changed with about half working in their village and half in a neighboring village.

Due to the nature of the financial diary method needing data collected over several months, those CAEB youth in the sample who migrated were replaced. Of those who remained, at each survey they were asked whether they intended to migrate in the next three months. The number of youth who said they intend to migrate ranged from 13 percent in the October data to 40 percent in the July data (44% in July 2011; 40% in July 2012). October is the time of harvest when rural youth are often busy working in the fields (and are less likely to need to migrate for work) and July is the rainy season before harvest, also known as soudure or the hungry season (when they are more likely to need to migrate for work). See Table 3 for more information on seasons.

The youth in the Nyęsigiso diaries were working in a wide variety of areas. Many worked in carpentry, general repairs, construction, sold snacks and drinks, or were apprentices in one of several trades. Almost none had left Bamako in the past year, which is not uncommon for Bamako youth. However, it was likely that many youth from the Nyęsigiso group were already migrants from rural areas. A few planned to migrate in the coming months, likely back to their home villages. As for enjoying their work, 70 percent said they liked it a lot, 30 percent said a little or none.
**Income Estimates**

For youth who receive or earn money through parents, as gifts from others or as income from working outside the home, Figure 4 shows an estimate of median monthly income for participants in CAEB YSGs compared with participants in Nyèsigiso GSAs. For CAEB youth, the amounts are about US$5 in July 2011, peaking in October during harvest at about $11 then dropping by January to $2. It is somewhat flat until the following July, although rising to about $3. The peak in October is likely due to youth being employed in the fields. **The story for Nyèsigiso youth is much different, with the total amounts of median income much higher, and declining from July to December with no peak at harvest time.** Obviously, harvest time is much less relevant for those in urban areas. Since about half of the Nyèsigiso youth are in school, it is likely this general trend downward is due to lower employment for those youth in school.

**Figure 4. Median income per month—CAEB and Nyèsigiso**

![Graph showing median income per month for CAEB and Nyèsigiso youth](image)

**Expenses**

**Common Expenses**

Both CAEB and Nyèsigiso youth buy a variety of items throughout the month (Figures 5 and 6). Food or beverages for themselves was the most common purchase and remained consistent for both groups. Clothing is also a common purchase, and both CAEB and Nyèsigiso respondents reported spending much less money on it by the end of the diaries than at the beginning. For CAEB youth, most monthly expenses declined in frequency near October and then peaked again in January, similar to the pattern with income. For Nyèsigiso youth, most expenses also declined during July to December. Note in Table 2 that *Tabaski* occurred in October of this year, and October is also when the school year begins.
Some differences between the two groups include mobile phone and mobile phone credit being a much more common expense for the urban Nyèsigiso youth, and more CAEB youth report giving money to parents. **Food and clothing were typically the largest expenses for both groups, with food surpassing clothing over time.** Overall, in terms of total expenses, CAEB youth median total expenses are only a small amount over the year, ranging from $0.60–$3.60, with more expenses in July 2011 than July 2012, and increased or peaked near January. For Nyèsigiso youth, total median expenses for July 2012 were at $21, and dropped to $6.30 by December 2012. The trend downward for Nyèsigiso youth expenses is likely because both of the seasonal trend downward in income (therefore no money to purchase things) since half of the sample are in school (not specified what type of school) and have their parents covering general expenses.

**Figure 5. Most common expenses per month—CAEB**

**Figure 6. Most common expenses per month—Nyèsigiso***
Data for Nyèsigiso is only for six months, whereas the data for CAEB is for 12 months.

**Unexpected Expenses**
Youth in these groups did not report having to often deal with unexpected costs. Only a few from both CAEB and Nyèsigiso reported having them, and for CAEB youth, it was often for supporting the family or for food when someone visits. The size of the costs varied, as did the ways they financed them, from using savings to taking a loan to having a parent help out.

**Attitudes about Expenses**
Outcomes for attitudes about expenses are mixed. Figures 7 and 8 show outcomes for CAEB and Nyèsigiso youth, respectively. The results are displayed in such a way that increases mean improvements in attitudes. For CAEB youth, there are overall improvements in two out of four indicators from July 2011 to July 2012, although those two drastically decrease in April 2012 as a result of the coup d’État. These include indicators on having difficulty paying for daily expenses, worrying about using long-term savings when unexpected expenses arise, and paying unexpected expenses for themselves or a family member. What is notable, though, is that they “recover” after the coup, and by July 2012, are higher than they were the previous year. This recovery suggests a certain level of resilience in the youth to be able to feel confidence about their expenses after a significant event. The indicator on paying for unexpected expenses starts “recovering” after April 2012 but does not end in an overall increase by the end of data collection. The one indicator that contradicts these trends is “often regretting purchases.” This indicator at first improved like the others, stays constant at April, then declined by July—although ends in a similar range of as where it started. For Nyèsigiso youth, those three attitudes that improved for CAEB youth seem to have worsened or stayed about the same. “Often regretting purchases” starts high and stays high, however. Overall, attitudes about expenses improved for CAEB youth, but stayed about the same or got slightly worse for Nyèsigiso youth.

**Figure 7. Attitudes about expenses—CAEB**
Figure 8. Attitudes about expenses—Nyèsigiso

- I have a hard time paying for daily expenses = disagree
- I worry about using the money I have saved for my long term goals when an unexpected expense occurs = agree
- I often regret purchases I make = disagree
- I can pay an unexpected expense, like a sickness, for me or a member of my family = agree
Savings

The youth were asked to report the amount they have in savings in the following places: a bank, with their savings group, at home, with someone such as a guardian, in livestock (estimated value of the animals at the time of the survey), in other objects (like jewelry) and “other.” The survey asked for these totals in terms of cumulative estimates for amounts adding up over time, not estimates for the amount saved in a discreet one week or one month. The median total estimated savings in Figure 9 illustrates a few interesting trends.

First, both groups increased total savings over time. The role of livestock as a savings mechanism plays an important role for CAEB, however. In rural Mali, there is a strong culture of saving in-kind, such as in livestock, and a weaker culture of saving in cash. When looking at cash savings for CAEB, the July 2011 median amount is $5, and the July 2012 median amount is $4.70. It can be said that in terms of cash, the youth have not increased their savings overall; however, when you add livestock that respondents consider as savings (asked directly in that manner), the total savings amount increases over time. However, the survey did not distinguish whether the youth had shared or full ownership of the livestock in question. The jump in the amount of savings with livestock is quite large from October to January, for instance, equaling $13, which is an amount larger than the median income estimates. This indicates that there is shared ownership, or that the youth have income that they are not reporting. The Nyèsigiso respondents increased from a little over $40 to about $60, within six months. The value of livestock as savings also matters for the urban youth at Nyèsigiso, showing an increase as well.

Second, savings fluctuated for each group depending on the seasons, although more so for CAEB youth than Nyèsigiso youth for July through December. CAEB youth savings dipped in October 2011, likely spent during the lean season just before harvest or for the Tabaski celebration (although younger youth likely received gifts here, too). Savings peaked in April, about the time of the end of the savings cycle for many YSGs. Despite the seasonal fluctuations, the CAEB youth saved more money overall. The Nyèsigiso youth, during July through December, showed neither a decrease nor increase in savings in October. They could be spending money and receiving money at Tabaski, but it is likely that the urban youth are not subject to the same constraints of a lean season as CAEB youth are.

Figure 9. Median total estimated savings—CAEB and Nyèsigiso
Location of Savings
Malian youth keep their money in a variety of places simultaneously. CAEB youth save with their savings group, at home, with a guardian and in livestock. These amounts fluctuated over time, but the greatest proportion was kept in livestock (about 40 percent). The proportion with the YSG, at home or with a guardian averaged between 15 and 25 percent. None of the rural youth said they saved in banks. Nyèsigiso youth reported keeping 42 percent of their savings at home, 29 percent with a guardian, 12 percent in their GSA and livestock, and 6 percent in a bank (for those few who saved in a bank or credit union besides Nyèsigiso). This shows that youth are keeping the majority of their savings outside of the financial services in this project.

When asked, “If you had the choice, where would you most prefer to save,” their answers changed over time. For CAEB youth, a preference for banks declined (from 36 to 17 percent) while preference for savings groups increased, far surpassing any other preferences (from 42 to 60 percent). The preference for banks decreased (86 to 58 percent) while preferences for GSAs increased (from 11 to 39 percent) for Nyèsigiso youth as well, but overall more urban youth still preferred banks. This latter estimate about the preference for banks may not be entirely accurate, however, since no distinction was made for “bank” (an individual account at a bank) versus “GSA with a credit union” in the survey.

Savings Goals
CAEB youth savings goals focused on clothing, trousseau or dowry, paying for food, buying livestock and supporting their family. For livestock they already owned, the goal or purpose was to have savings in a secondary place—an alternative to other places. For Nyèsigiso youth savings goals, clothing, trousseau or dowry, business costs, savings (as in saving for the sake of saving) and “no particular goal” were the most common.

Saving for Emergencies
Saving for emergencies was another area demonstrating an interesting difference between CAEB and Nyèsigiso youth. When asked whether they save money in a separate place for emergencies,
about 11 percent and 31 percent of CAEB and Nyèsigiso youth, respectively, said they did. When asked about goals for their savings, CAEB youth did not indicate that any of the savings in the different places were for emergencies, but 31 percent of the Nyèsigiso youth who had savings at home said it was for emergencies, and 38 percent of those with livestock said it was for emergencies.

**Attitudes about Savings**
Outcomes on attitudes about savings are mixed. Figures 10 and 11 show outcomes for CAEB and Nyèsigiso youth, respectively. Similar to the attitudes about expenses, the results show increases are improvements in attitudes. Youth were given statements and asked whether they agree or disagree with them. Again for CAEB youth, there were overall improvements in three out of four indicators from July 2011 to July 2012, and those three drastically decreased in April 2012 as a result of the coup d'état. The increases in confidence did not “recover” the same way as the aforementioned attitudes about expenses, although overall the outcomes were higher than they were when the diaries began. The indicator that shows a decline is “It is not necessary to save if you live with your parents.” For Nyèsigiso youth, the outcomes are different; the improvements are so small that there is basically no change. However, there was not as much room for improvement since many attitudes were already high at the beginning of the diaries. As to it not being necessary to save if “you live with parents,” almost 100 percent of the youth disagreed. As with the attitudes about expenses, the CAEB youth seemed to have shown greater improvement than Nyèsigiso youth, but at the same time there was more room for improvement in the CAEB group since the attitudes were more negative at the onset of the surveys.

**Figure 10. Attitudes about savings—CAEB**

**Figure 11. Attitudes about savings—Nyèsigiso**
Financial Education

As part of both the GSAs and YSG programs, the youth participated in seven financial education sessions that focused on savings. The seven sessions focused on the following 1) creating steps to achieve a goal; 2) examining different savings strategies; 3) categorizing ways youth save as more or less safe; 4) identifying when financial pressures are greatest and deciding how to save for difficult times; 5) differentiating between good and bad borrowing decisions; 6) comparing advantages of borrowing and using savings; and 7) making decisions on how they will achieve their next goal.

The surveys in Mali captured improvements in financial education knowledge in the following areas for CAEB respondents: 1) recognizing safe places in which to save their money; and 2) identifying strategies for protecting long-term savings. Table 6 shows an upward trend in the percentage of respondents who answered questions on these two topics. The outcomes were different for Nyèsigiso, however. The knowledge levels for these indicators were high for Nyèsigiso youth at the first point of data-collection and stayed high throughout the six months of the diaries (note that there a downward trend in percentage outcomes, but with the small sample sizes, changes of these magnitudes are not significant). One could say there was room for improvement with CAEB respondents, but not for Nyèsigiso respondents.

Table 6: Select financial education outcomes

<table>
<thead>
<tr>
<th>NGO and Indicator</th>
<th>OCT</th>
<th>JAN</th>
<th>APR</th>
<th>JULY</th>
<th>OCT</th>
<th>DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saving for more than a month is too hard = disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My money is not safe enough = disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is difficult to save because my friends and family ask me for money = disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is not necessary to save if you live with your parents = disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Although trends in the data showed increases in knowledge for the two specified areas, finding effective indicators for concepts such as achieving goals, identifying when financial pressures are high, deciding how to save for difficult times and issues around decision-making for borrowing and savings proved difficult. Youth provided answers to questions on these topics that both corresponded to the education, as well as to relevant outside concepts, personal circumstances and preferences. For instance, they may have provided a correct answer (for their personal financial preferences and situation), even if their response was not explicitly conveyed in the financial education sessions. Therefore, their answers demonstrated that they understood and considered the material in the education, and they had the ability to apply it to their lives. However, this issue made evaluating their answers difficult since there sometimes was no “correct” answer.

**Cash-flow Comparisons**

Combining median income, expense and savings provides some interesting, but complicated observations about the reported financial behaviors of these youth. It is worth pointing out that the comparison of these estimates is not equal; it compares monthly income and monthly expenses with cumulative savings. Even though it is not a perfect comparison, it provides some interesting insight.

For most of the year, the CAEB youth have reported more monthly income than monthly expenses, although in January, the two are about equal. In theory, income minus expenses should equal the cash available for saving. Cash savings can be kept as cash or put towards the purchase of livestock as savings. The October data shows that this is not the case, and suggests youth are under-reporting income. For data points from January 2012 through July 2012, since cumulative savings is compared here, it makes sense that the savings amount is higher than the income minus expenses since it is cumulative, but the two do not fluctuate as closely as expected. Overall, the findings are a bit confusing and indicate that not all of the cash flows are reported.

**Figure 12. Cash flow—CAEB (median estimates)**
The cash flow for Nyèsigiso participants is also challenging to understand. The youth consistently report more monthly income than monthly expenses but again, the changes in income minus expenses is not entirely consistent with the changes in reported savings, also indicating a possible under-reporting of savings.

**Figure 13. Cash flow—Nyèsigiso (median estimates)**

Savings Group and Group Savings Account Membership

In the financial diaries, youth were also asked about the benefits they see in being members of a YSGs. The most common answer from CAEB youth was that a YSG “helps me to save,” with
the second most common answer as YSG gives access to loans. Although these two reasons were consistently the most common responses, others remarked learning about finances, how to solve problems and having an enjoyable experience. CAEB youth noted that some people in their group struggled to pay the weekly contribution or pay the loans on time, with more expressing concern about the weekly payment than about whether the loan was repaid. Qualitative and monitoring data collected during the project (outside of the financial diaries) have revealed that money used for the weekly contributions often comes from the parents. At the times they could not pay, it likely was because their parents did not have the money or did not give it to them on time. They reported that missing the weekly contribution bothered them because it puts the group in danger, money was lacking to give others loans, and that it showed a lack of respect. How they plan to use their savings at distribution fluctuated over time, with more common answers being to purchase clothing, livestock, trousseau or dowry and to help support their families.

For Nyèsigiso youth, “helps me to save” was the most common benefit to GSA participation, with some mentioning that it is difficult to save money on their own and that the groups give them support (note that Nyèsigiso youth cannot take out loans with their GSA the way the CAEB youth can in savings groups). Disadvantages of saving in a group included that it can be difficult to participate every week, youth can have difficulty finding the money to save weekly, and that it can be difficult to make decisions about money as a group. Participating weekly was the most common difficulty noted. Many agreed that their money was safe in these accounts, although half felt their money was easily accessible while the other half thought the opposite. A fair number felt it was very important that they gained interest on savings, although the vast majority did not know the amount of interest they earned. Several of the youth noted that in the past, someone had missed a weekly contribution, but for the majority, the missed contribution did not bother them. This answer differs from CAEB, where missing a weekly contribution seems to have more dire consequences in the eyes of other members. As to how the youth would to use their money if they withdrew it, the most common answer was for business costs, which consistently was the most common answer for six months of diaries.

Gender and Age Differences Among Malian Youth

As stated earlier in this paper, participant samples were selected to generally reflect the demographics in the program at the time of the survey. The overall numbers of respondents are small in terms of statistical analysis; however, their stratification made sub-groups such as gender and age even smaller. For instance, in the CAEB sample only six were between the ages of 18 and 24 years, and in the Nyèsigiso sample, only six were female. Since conclusions based on such small numbers can be misleading, the following tables outline general trends we saw in age and gender overall, mixing both CAEB and Nyèsigiso participants.
Table 7. Summary of main differences between young males and females in the programs

<table>
<thead>
<tr>
<th>Topics</th>
<th>Young Males</th>
<th>Young Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomes and expenses</td>
<td>Higher income, expenses and savings amounts than girls (especially if livestock is included)</td>
<td>Lower incomes, expenses and savings amounts than boys</td>
</tr>
<tr>
<td>Common ways to earn money outside the home</td>
<td>Working in the fields, selling agricultural products, apprenticeships</td>
<td>Caring for children, cleaning homes, braiding hair, selling juice, working in the fields (for those in rural areas)</td>
</tr>
<tr>
<td>Migration for work</td>
<td>Rural boys migrate somewhat more than girls</td>
<td>Rural girls migrate less, but are just as interested in migration as boys</td>
</tr>
<tr>
<td>Savings goals</td>
<td>Livestock more common</td>
<td>Trouseau more common</td>
</tr>
<tr>
<td>Setting aside money for emergencies</td>
<td>More likely to have money set aside separately for emergencies</td>
<td>Less likely to have money set aside for emergencies</td>
</tr>
<tr>
<td>Expectations regarding family</td>
<td>More pressure to support family financially</td>
<td>Generally marry at a younger age than boys</td>
</tr>
</tbody>
</table>

Table 8. Summary of main differences between younger and older youth in the programs

<table>
<thead>
<tr>
<th>Topics</th>
<th>Younger Youth</th>
<th>Older Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomes and expenses</td>
<td>Lower income, expenses and savings amounts than older youth</td>
<td>Higher income, expenses and savings amounts than younger youth (especially if livestock is included)</td>
</tr>
<tr>
<td>Common ways to earn money outside the home</td>
<td>Do not earn much money; often money for savings comes from parents</td>
<td>In rural areas, often work in fields; in urban areas engaged in a variety of activities to earn money</td>
</tr>
<tr>
<td>Migration for work</td>
<td>Less likely to migrate than older youth</td>
<td>Migrate more than younger youth</td>
</tr>
<tr>
<td>Savings goals</td>
<td>Clothing is most common savings goal</td>
<td>Have more productive-oriented savings goals such as livestock and business costs</td>
</tr>
<tr>
<td>Expectations regarding family</td>
<td>Fewer financial pressures than older youth</td>
<td>More pressure to lend money to friends and family; more worries about unexpected expenses</td>
</tr>
<tr>
<td>Setting aside money for emergencies</td>
<td>Less likely to have money set aside for emergencies</td>
<td>More likely to have money set aside for emergencies than younger youth</td>
</tr>
</tbody>
</table>

In general, the older male participants in these programs earn more money outside of the home, migrate for work more and are able to save more. They have more pressure to give or lend money to family and friends. They also have more pressure to have savings to respond to emergencies, and therefore worry more about unexpected expenses. Malian girls are just as interested in migration as
boys, although do it less, and do different work while away. In rural Mali, girls migrate (or move) more because of marriage than boys, and therefore may seem less desirable as members of a group savings approach. The concern of girls leaving because of marriage may be just as great as boys leaving to find work and therefore, many groups have learned to quickly respond to someone who leaves by replacing them (at least in the case of CAEB YSGs).

**General Conclusions and Implications for AIM Youth Financial Services in Mali**

The comparison of CAEB and Nyèsigiso youth participants demonstrates a few key points about providing financial services to youth. **First, it illustrates the difference in the two populations.** Even if overall Mali is considered a low-income country, ranking 182 out of 186 on the United Nations Development Programme’s Human Development Index, there is a lot of variability in the population. CAEB youth live in rural areas and are vulnerable to seasonal fluctuations that affect income, expenses, savings and food security. They do not have many economic opportunities or access to formal financial services. Nyèsigiso youth live in urban areas, may be poor but are not very poor, are somewhat protected from seasonal variations, and generally have higher income, expenses and savings. Many are not in school, but they have many more economic opportunities and some access to formal financial services (although age is a barrier here).

**Second, age and gender may account for differences in needs and economic activities, but they do not necessarily translate into differences in savings amounts, savings knowledge and attitudes and money management.** The analysis of changes in these areas did not show many differences among the various demographics. Considering that the sample sizes were quite small, a closer comparison of age and gender differences would be useful on a larger population; in terms of the general trends for these diaries, the differences are not remarkably apparent.

**Third, youth are saving money, despite constraints on income and an unstable enabling environment (national political instability).** CAEB youth have small amounts and receive some of this money to save from parents, but overall their savings are increasing. Nyèsigiso youth have more money to save, although some also probably receive the money from parents, yet overall they are also increasing their savings. Both groups show a high capacity to manage their money well by keeping expenses below income. The youth expressed their interest and appreciation in the financial education since it enabled them to learn about money management and savings. They grew savings through the services and outside of them.
Part III: Ecuador Financial Diary Data

**Respondent Characteristics**

Due to missing unique respondent identifiers in the financial diary database, it was not possible to link the financial diary dataset to the baseline dataset that contained all the personal demographic information about each young person, such as their age and gender. Therefore, the baseline data demographics are presented here instead.

At baseline (Table 9), 59 percent of the youth in the sample were male and the average age was 18 years old. Overall, very few youth reported being married and having children, and most were in school. Less than one-quarter experienced food insecurity in the month prior to the survey and approximately one quarter were estimated as falling below the national poverty line based on their PPI data.

### Table 9. Baseline respondent characteristics

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>59%</td>
</tr>
<tr>
<td>Female</td>
<td>41%</td>
</tr>
<tr>
<td>Average age</td>
<td>18</td>
</tr>
<tr>
<td>Ages 13–17</td>
<td>64%</td>
</tr>
<tr>
<td>Ages 18–25</td>
<td>36%</td>
</tr>
<tr>
<td>Not married</td>
<td>96%</td>
</tr>
<tr>
<td>In school</td>
<td>96%</td>
</tr>
<tr>
<td>Have children</td>
<td>2%</td>
</tr>
<tr>
<td>Full week of school last week</td>
<td>61%</td>
</tr>
<tr>
<td>Food Security</td>
<td></td>
</tr>
<tr>
<td>Periodic food insecurity</td>
<td>20%</td>
</tr>
<tr>
<td>Chronic food insecurity</td>
<td>13%</td>
</tr>
<tr>
<td>PPI</td>
<td></td>
</tr>
<tr>
<td>Estimated percentage of group living below the national poverty line</td>
<td>23%</td>
</tr>
<tr>
<td>Estimated percentage below $1.25 poverty line</td>
<td>0.82%</td>
</tr>
<tr>
<td>Estimated percentage below $2.50 poverty line</td>
<td>8.52%</td>
</tr>
</tbody>
</table>

**Earnings**

Unlike Mali where many youth work, very few youth work in Ecuador. Therefore, youth were first asked about money they received, whether it was from an income-generating activity, money from parents or elsewhere (see Table 14).

**Money Received**
Youth in Ecuador received between $10 and $20 during the seven days prior to the survey and continually estimated they would receive more money in the next seven days compared to the previous seven days, perhaps demonstrating optimism about their financial future. There also appears to be a relationship between the relative amounts they are reporting, such that if they received less money in the last seven days compared to a prior survey period, they also predicted they would receive less money for the coming seven days.

**Figure 14. Money received—Ecuador**

![Graph showing money received in last 7 days and amount they will receive in next 7 days over five interview periods.]

**Money Earned**
From Figure 15 below, we see that at any given time, no more than 35 percent of the youth are working, with or without compensation. At the high point, only 25 percent report actually looking for work (if they were not already working). The percentage of youth working decreases yet remains somewhat stable at about 20 percent for both those working to earn money and those working without pay. As school attendance dips, it appears more youth begin to report looking for work during this period. And those working for pay and those without indicate that they work “a lot” during the school year. Migration appears to be uncommon among this population during this short research period; leaving one’s community for work was reported at about 3 percent.

**Figure 15. Relationships between working and school attendance—Ecuador**
**Economic Activities**

For youth reporting they are working (Figure 16), they consistently report the type of work they do starting at interview three. Most of the youth report earning money working in the home; in the form of household chores or helping with family businesses. The majority of the youth report earning between $0 and $25, with less than 10 percent reporting earning more than $100.

**Figure 16. Income Generating Activities—Ecuador**

![Graph showing economic activities](image)

**Expenses**

In general, youth appear to spend similar amounts of money over time, but appear to predict they will spend less money in the days to come (Figure 17).

**Figure 17. Reported expenses—Ecuador**

![Graph showing expenses](image)
Most youth spend their money on food and drinks for themselves, followed by cell-phone expenses, entertainment, internet expenses and online games (Figure 18). What is interesting to note is that these expenses appear to be relatively consistent over the interview period.

**Figure 18. Most common expenses—Ecuador**

When asked specifically about the amount they reported spending on cell phones, soda and school supplies, we see the majority of their money at any given period goes towards purchasing soda, some on phone cards, and very little on school supplies (Figure 19). The amounts articulated above each bar chart represent the total amount of money they reported spending during the prior seven days. While the amounts trend downward over time, their reported expenses for soda, phone cards and school supplies is fairly constant.
Between 62 and 71 percent of the youth reported feeling good about how they spent their money in the prior seven days. In summary, youth appear to have similar and consistent expenses for the same types of expenses during the three-month period. Most youth in this Ecuadorian population are spending their money either on their own food and drink or on “entertainment,” such as cell phones, internet and other forms of entertainment, which demonstrates they are not highly responsible for their basic needs; their parents and guardians are paying for them for the most part.

**Savings**

*Youth with Savings*

Different from the Mali youth, not all youth in the program in Ecuador engaged in a savings service (had a savings account). Youth in Ecuador were first provided with financial education and then were offered an ISA, but the young person had to be responsible for opening up their own account, with the help of an adult for those under legal age (18 years old).

The data in Figure 20 suggests that there are more youth reporting that they are saving compared to those indicating they have a savings account with either of the Cooperatives.

While there is a spike in the number of youth indicating they had a savings account at interview 2, during the five interviews, the percentage tends to be between 20 and 25 percent. Approximately 50 percent of the youth report having savings (anywhere) during the period.
Where Youth Save
For youth reporting to have savings anywhere, the majority of them report saving their money at home with the next most popular location being a cooperative (between 10 and 20 percent) and then either with family or at a bank.

Role of Parents
Because parents play an important role in assisting youth under the age of 18 in opening and managing their accounts, the relationship between parents and youth was explored further. In Figure 22 below, in the beginning it appears there might be similar trends for youth reporting to having a savings account with a cooperative and youth also reporting that their parent is a member of a cooperative. While approximately 20 to 25 percent of youth report having an account, between 25 to 35 percent of youth report that their parents also have an account with a cooperative.
Figure 22. Relationship between youth and parents with accounts at a cooperative—Ecuador

![Graph showing the relationship between youth and parents with accounts at a cooperative in Ecuador.](image)

**Reasons they do not have an account**
When youth were asked why they did not have an account at each interview point (Figure 23), the reasons fluctuated wildly. The top three reasons are they “don’t qualify,” “never heard of it” and “don’t know how to open one.” Those reporting “never heard of it” and “don’t qualify” actually increases over time. This suggests youth are likely providing varying reasons—or creating excuses—during the three-month period. One might expect the percentage of those reporting “never heard of it” would remain constant or perhaps decrease over time, particularly if the survey might have actually encouraged some youth in the comparison group to try to open savings account. For the treatment group, one might also expect those who report “don’t qualify” would decrease over time or at best remain constant since they would have learned that they did qualify for a youth account through the financial education.

Figure 23. Reasons for lacking a savings account with the cooperatives—Ecuador
Savings Goals
From the financial diary data, it appears youth either change their mind, or are capricious, about their savings goals. The range of items is fairly consistent: most youth are saving for computers, televisions, cell phones, trips, gifts, vehicles and clothing. However, in one interview period, they might report a laptop, and the following period (two weeks later), they report saving for a new cell phone. It’s unclear whether they achieved their savings goal and were necessarily able to purchase the item with their savings or they simply created a new savings goal for the purpose of completing the interview. Having a better mechanism to track whether certain savings goals are actually achieved would be useful to better understand the link between their savings goal and their ability to accomplish it. The financial diary methodology could technically be used for this type of tracking as long as the survey instrument was designed to reconcile responses from one interview to another. Others\textsuperscript{xvii} who have used this methodology have also indicated that this would strengthen the use of this methodology, but would require the organization conducting the interviews to complete some basic data checks and compare responses as well as introduce additional qualitative questions to understand the reasons behind the answers.

Financial Education
An important part of the program was dialogue-based, behavior-change financial education that covered basics such as the development of savings goals (in both the short and long term), how to develop a savings plan, how to differentiate between and prioritize needs over wants, and the differences in behaviors necessary to open and manage a savings account depending on whether they were younger or older than 18 years of age. The questions in the survey asked about the items they needed to have with them to open an account, when and whether parents where needed to open an account and make deposits or withdrawals. One caveat to the interpretation of the data that will be presented is that during the timeline of this project, some questions were integrated into the survey that were based on a revised version of the education modules. The revised version offered
guidance about the five items a young person needs to open an account, such as an identification (ID) card, a photograph, utility bill, parents’ ID, and a voting card. The education module was revised due to an assessment from the first phase of the project during which it was determined that information about the savings account needed to be more closely integrated into the education to encourage uptake of the savings accounts. Therefore, while there are questions regarding specific service and process attributes, not all youth necessarily participated in sessions to actually increase knowledge in this particular indicator.

First, youth were asked to name two main benefits of having a savings account; the two correct answers being “security” and “earns interest.” These correct answers were determined by the fact that the education worked to focus youth’s attention on these two particular benefits. In Figure 24 below, while there are some mild fluctuations in whether they were able to state these two benefits at each interview period, if they knew it or did not know it at the first interview, they knew it or did not know it almost at the same level after three months of interviewing. This suggests that there were no knowledge-change improvements over time if they never “learned” it from the beginning. It appears there was also no surveying effect (such as a surveyor questioning them every two weeks about their answer) that could have led to improved knowledge either.

**Figure 24. Knowledge of benefits of saving in a cooperative—Ecuador**

In Figure 25, knowledge of the five items a young person needs in order to open a savings account is presented. Much like the trends stated above, certain items they knew well at Interview 1, such as needing an ID card, and this was generally maintained throughout the three-month period. If they did not know it well at Interview 1, for example, needing a photograph, there was not much improvement over time. However, it must be noted that there is a small upward trend for all five items, which suggests that as youth either considered to open or not open an account, it was likely the experience itself improved their knowledge of these five items.
Finally, in Figure 26, knowledge-change indicators on questions relating to the role of parents in helping a young person open an individual savings account (ISA)—particularly the differences between youth younger or older than 18 years of age—and deposit and withdraw money from their account are presented. As with the prior two sets of indicators, if they knew the correct answer at the beginning, they continued to “know” at similar levels throughout the interview period. For some, there was an upward trend, but it was unclear whether experience itself improved any knowledge or whether youth resorted to simply guessing the answer at each interview. The lines represent whether youth answered the questions correctly (correct answer is shown in parentheses in the legend).

**Figure 26. Knowledge on the role of parents in ISAs**
The financial diaries occurred almost one full year after the first education sessions were provided. Perhaps knowledge change had already occurred and these graphs demonstrate that knowledge—whether high or low—was simply sustained for the most part. Importantly, this data does show that some items were never learned during the evaluation period.

**Amounts Saved**

Of the youth reporting to having savings, **most save between $8 and $16 in the last week**, but **appear to accumulate between $100 and $150 over time in total savings**. While “emergency” savings appear to be directly correlated to the total amount saved, there is a significant jump in emergency savings at interview 4, but then it returns at interview 5 to align more closely again with the total amount saved (Figure 27).

**Figure 27. Relationship among savings amounts—Ecuador**

The relationship between the amount saved in the last seven days, the amount saved in total and the amount reported in emergency savings is not exactly clear. While the amounts reported for savings in prior seven days is consistent and low, the amount saved in total continues to grow at substantial amounts. It could be that parents are subsidizing the young person’s savings or given the interview periods align with the Christmas holidays, that they received money as gifts. For the emergency savings, upon further digging into this data, it was that found a few youth reported having $500 or $2,000 in emergency savings, but had not indicated significant amounts of money being held for emergency savings in prior interview periods. This suggests possible data-entry errors; an exaggeration of emergency savings amount; youth received a significant amount of funds that were held for a short period of time (and perhaps the savings were used) or youth lack clarity on what “savings” really means and the role it plays.
When assessing the frequency of their savings (how often they save money in a formal account), while the majority of them indicate that they “never” save, it appears that those who do have a set frequency for saving are saving on a weekly basis (Figure 28). Perhaps this means that if a young person is saving at all in a formal account, he tends to report saving frequently. Only 35 percent of the treatment youth at the peak reported saving money (with most points hovering at about 20 percent). There are two possible interpretations of this data: 1) youth are not actively saving money in their formal accounts or 2) the majority of the savings behaviors are coming from a few youth who have relatively strong savings behaviors.

**Figure 28. Frequency of saving—Ecuador**

In the beginning of the diaries, when youth were asked whether they were saving for something special, they reported high rates (80%), but then it smoothed out at about 50 and 60 percent (Figure 28). It appears that as fewer youth reported saving for something special, their motivation to save money was also decreasing at a similar rate. Between 40 and 50 percent of those who indicated they were saving for something special felt confident they could achieve their saving goal.

**Figure 29. Savings goals and attitudes—Ecuador**
Motivations and Attitudes
One of the most interesting areas about the youth were their motivations to save, their attitudes and concerns about having enough money to cover expenses and their overall perception of their financial situation.

In Figure 30, there does not appear to be much of a relationship between the growing number of youth stating they had accounts and whether they were confident entering a cooperative. One might assume that as there was growth in the number reporting to have an account, there would also be an increase in the number of youth reporting to feel confident in entering a cooperative or vice versa. However, confidence levels for entering a cooperative generally stay between 47 and 57 percent.

Figure 30. Youth confident entering a cooperative—Ecuador
The financial attitudes show those who are worried about expenses report this at a very low rate (20 percent at the highest point) and those who are satisfied report satisfaction in the 60 to 80 percent range. This suggests that overall, youth feel positive about their financial situation. See Figure 31 for trends in these attitude indicators.

**Figure 31. Financial attitudes—Ecuador**

Youth were also asked to report whether they were very, somewhat or not satisfied with the amount of money they had in savings. Youth with savings accounts at cooperatives, Figure 32, reported "being very satisfied," while those with savings in general were "somewhat satisfied."

**Figure 32. Savings and satisfaction with savings—Ecuador**
Cash-flow Comparisons

A “cash-flow” comparison for the last seven days was used to show the relationships in the amount of money youth reported they received, spent, and saved (Figure 33). The line “received-spent” represents the difference between the amount they reported receiving and spending and, theoretically, would represent the maximum they could have saved at any given point (since spent is subtracted from received and the remaining is what could be saved). While other money could very likely be interjected in this model (such as total amount of money saved) to increase the amount of money they can save or spend, there is an assumption in this model that the amount they report receiving is the maximum amount of money they had as “income” for the previous week. The line “R-S-S” represents the amount of money they received in the prior seven days that they would have minus the amounts spent and/or saved (received minus spent minus saved). Theoretically, one would assume they would end the week with $0.00 if they spent and saved the entire amount they received. In the graph below, there appears to be a relationship between the amounts they report receiving and saving, such that when they report receiving more money, they report saving more money. However, the amount they report spending seems somewhat consistent over time and does not necessarily directly relate to the amount of money they report receiving, such that when they receive more money, they are not necessarily spending more. This suggests their expenses for the week are somewhat constant, even if decreasing over time (this expense decrease might have something to do with the holiday season being over for most of the youth in this study).

What the figure suggests is that youth would have a maximum of approximately $5 to save each week, with some weeks having a savings “possibility” of $0.00 if all the money was spent from the amount received in the prior seven days. However, in what is reported, based on the math, the youth would end each seven-day period with up to $10.00 in the red, meaning they either technically could not save the amount they did, or they were using other funds (perhaps loans or other savings) to spend and save in addition to the amount of money they reported receiving. Or, this figure could simply confirm the unreliability of self-reported amounts. But while there are likely some reliability issues of the self-reported amounts, it is promising to see that they report receiving more money than the amount they report spending and that there is a relationship between the amount they report receiving, and the corresponding reports for amounts being saved. If the data were completely unreliable, their reported spending amounts might appear significantly more than they report receiving in any given week, and this is not really seen in the data. See the two stories of Juan and Ricardo in the appendix for examples of specific cash-flow comparisons and descriptions of their financial lives.

Figure 33. Cash-flow comparisons—Ecuador
Finally, since it appears youth report saving more over time, a comparison of the proportion that they are saving to what they are receiving is presented below. From Figure 34 below, youth reported saving from 45 to 80 percent of what they received in the prior seven days.

**Figure 34. Amount saved/Amount received ratio—Ecuador**

**General Conclusions and Implications for Ecuador**

For the youth in this particular population, there was a large majority of youth still in school and generally low levels of economic engagement. About 25 percent reported working and very few reported migrating. Youth reported receiving (earning) and spending money in small, consistent amounts over time. From the way the youth reported spending their money, it appears that their
basic needs are being covered by the parents and guardians, and the majority of the money they are spending is for personal use such as food, beverages and entertainment. Very few, for example, reported using the money they received for school or household food.

Similar to the consistent amounts of money received and spent, youth reported small, consistent amounts of money saved each week. However, they reported having a total amount saved that was almost ten times higher or greater than the amount they reported saving in a week’s time. While small amounts saved from the amount they receive each week can grow a savings balance over time, the data suggests that parents or others are giving youth larger amounts of money to save.

Financial attitudes also appeared to be linked to their financial behaviors and financial status. As youth in Ecuador appear to be fairly protected financially (they are not spending much of their money on basic needs, for example), this would correspond with youth reporting high levels of satisfaction with their personal and household financial status and very few youth reporting feeling stressed about covering educational or household expenses. Also, youth with savings accounts reported high levels of satisfaction while youth who saved money in general felt somewhat satisfied with their savings.

Finally, tracking knowledge change over time shows that if one does not “learn” something from the beginning, one might be more likely to guess the answers. However, it is important to emphasize that Cooperative San Jose (where most of the Ecuador sample comes from) did not initially include a session on how to open an account with the institution. It actually added and implemented this session with a different group of youth who were not included in this evaluation. During a meeting held with the Cooperatives towards the end of the project, Cooperative leaders and education staff discussed the importance of actually discussing how to open accounts with their particular institution as a first education session (this was more of a marketing session) and then covered the more generalized financial education sessions (such as the differences between needs and wants, how to break savings goals up into manageable, shorter-term goals, etc.) after the “marketing” sessions. They found doing this led to more youth opening a savings account.

The financial education findings have important implications not only for the role of continual education and marketing efforts but also for the types of knowledge-change indicators that are tracked and assumed to be most indicative (or important) for the success of a financial education effort. Many evaluations have shown that linking financial education to knowledge change or improvements in linked financial behaviors is often challenging to the extent that many people question financial education’s value. However, in this case, the indicators tracked were chosen because they were the easiest to measure, such as when a parent was needed to open an account, make a withdrawal or a deposit. However, this is not the complete gamut of indicators that could have been chosen, they were the easiest and had the clearest “right” or “wrong” answers based on what was taught in the education. While the education presented the value of breaking up a long-term goal into short-term actionable steps, it is difficult to design questions to assess whether this was “learned” or not.

The results from these simple results demonstrate that financial education and marketing cannot be a one-time effort, and that it is important to find a way to sustain messages and encourage positive behaviors over time. Much of the growing literature shows that specific service attributes linked to general financial education messages (such as the importance of developing a savings plan) to
encourage uptake and use of a savings account are necessary. But which messages from the financial education (combining service attributes with general financial education messages) are most important for repetition? Some literature suggests that “nudges,” or mechanisms that encourage positive behaviors, such as text reminders to save, might be the “last mile” solution to seeing financial education and financial behaviors become more directly linked. Thus, the financial education might set the foundation, such as providing an experience to develop a savings plan, but a text reminder for saving this week would maintain the motivation to stay with the savings plan. Since it focuses on trends, this particular financial diary assessment cannot answer whether participating in financial education led to clear knowledge change, but it shows how if nothing is interjected during the period, knowledge does not improve.
Part IV: Summary of Findings from Mali and Ecuador

Three different models of integrated financial education and financial services for youth were tested during the AIM Youth project: 1) a GSA to which the group formation and financial services component was provided first and then followed by financial education (Mali: Nyèsigiso); 2) a savings group strategy whereby groups of youth were formed to save within the group, followed by financial education (Mali: CAEB, Le Tonus); and 3) financial education sessions provided to groups of youth at schools, with the offer of ISAs after (Ecuador: Cooprogreso, San Jose, Santa Ana, San Miguel de los Bancos).

Market research played an important role in designing the specific services provided in each context, since contexts and youth needs would be different. Ecuador and Mali are quite different in many ways that affect youth, such as average poverty levels and food-security concerns, economic opportunities, educational opportunities, access to financial services, cultural expectations, etc. Where there are very visible differences in data between Mali and Ecuador, the difference in context is most likely driving the explanation. For the sake of learning more about youth behaviors that cross contextual boundaries, the financial diaries completed with the four partners in this project revealed some interesting similarities.

1. **High capacity to save money.** Despite the economic differences between youth in Mali and Ecuador, youth in both contexts appear to have a high capacity to saving money. While the amounts they save at any given moment might be small, they can accumulate relatively large amounts of savings.

2. **Financial attitudes can be strong indicators of a young person's financial situation.** Financial service evaluations often rely on reported financial behaviors and outcomes, such as the amount of money earned, spent and saved. There are always reliability issues related to self-reported financial data. Complementing this data, or even substituting it, with financial attitudes when monitoring a program’s impact might be very useful for understanding a youth person’s real financial status. For example, in Mali, following the coup d’état, there was a visible dip in confidence and an increase in financial stress, which would be expected. In Ecuador, because youth appear to have very little financial responsibility, they report being highly satisfied with their personal and family’s financial situation and report very little financial stress for covering household or educational expenses. For the design of future youth financial diary studies in particular, it seems that attitudes and perceptions about finances and behaviors demonstrating financial habits should drive the learning agenda, not cash-flow outcomes.

3. **Evaluating knowledge change as a result of the financial education presented mixed results.** CAEB was the only partner that had data showing positive trends suggesting knowledge improvement during the financial diary period. Nyèsigiso youth had very little room for improvement. The data from Ecuador suggests that knowledge change did not improve during the financial diaries period and knowledge levels seemed fairly consistent from one interview to the next. Since the sample sizes are quite small, it is not possible to suggest whether the improvements or lack thereof are actually meaningful. However, they point to the potential benefit of additional touch-points or nudges to help improve financial knowledge. Prior research conducted on the impact of text messages related to achieving savings goals among adults, might
hold promise for youth as well. Perhaps the upward trends of the CAEB data point to the strength of the group-based, commitment savings mechanism where youth are naturally encouraged to save because of the frequent meetings and group pressure to save (and when the youth start off with lower levels of knowledge at the start of the program).

In conclusion, it was expected that youth would likely save in small amounts from the beginning, but the financial diary methodology provided the opportunity to see that youth have the necessary perseverance, often with assistance from parents, to remain active in savings services.

It was expected that youth would likely save in small amounts from the beginning, but the financial diary methodology provided the opportunity to see that youth have the necessary perseverance, often with assistance from parents, to stay active in savings services. When thinking about the objective of AIM Youth and its goals for building a more financially capable generation, the financial diary data seems to imply that some important short- and long-term strategies for building savings are emerging as part of complementary savings and financial education approaches. However, it will be important to identify strategies for sustaining the momentum as well as to continue evolving savings services and financial education that will help youth address upcoming significant life stages.
Part V: Annexes

Youth Stories

Mali Stories

Assa

Assa is a 15-year-old female and has been a member of the CAEB savings group Benkadi for two years. She serves as president of her group.

When asked about the “good life,” Assa said that to “have a good life is to have money. If you have money you can satisfy all your needs.” She identified the characteristics of a good life as having money, food, and livestock. She feels confident that she will have a good life. In five years, she sees herself in five years as a trader, and better off because she will have more money.

Assa feels that she has a good diet because she said, “often I eat potatoes and other food necessary for my body.” To her, good health means being fit and not getting sick. She also feels healthy because “I’m able to do everything I need.”

The savings group is what has most impacted her thinking about money and how to manage it. Since joining the savings group she has started to save money. At home she has no financial responsibilities as her parents pay for major expenses. She buys shoes, but her father buys her clothes.

Assa is happy with her savings, but isn’t currently saving the amount of money she wants because she hasn’t been in the group for enough time. In her participation with the group, she has learned how to “increase your money and understand when to borrow.” She shares this information with friends and with her parents. She especially likes the collective activities within the group and thanks the group for helping her save more than she would have on her own. Her savings goals include saving for urgent needs (emergencies), and in the future she hopes to buy a cow.

She does not plan to migrate, but said that many members of her group have migrated to other areas and have not returned. Their departure “had a big affect on the group since we gave them their money that they had saved.”

She is proud to be a member of a savings group because she “learned a lot with the group on money management” and plans to continue participating in the group. Assa recommends the group to friends and to her parents because “the group allows us to easily solve our money problems.”

Bourama

Bourama is a 16-years-old male, and has been part of the savings group Avenir at Nyèsigiso for one-and-a-half years.

Bourama described “well-being” or the “good life” as “getting married, having children and money.” He is confident that he will have a good life because he knows that he will work. In five years he sees
himself as being independent. “I will take care of my own needs and those of my family—that is to say, electricity, and some household expenses.” He thinks he will be better off because he will be working.

He says that young people today have a better life than during the time of their parents because they are lucky; they can save money in safe places. He also said they are more educated, literate youth, and remarked, “Today, there is more school whereas it was difficult for our parents to study.”

Bourama said he has a good diet. He eats enough to be full, and he eats foods with vitamins. To him, good health means, “One that can do everything he needs, and he who can work is healthy.” He feels healthy because he can move, he feels strong and can do everything he needs to do.

Marie (the Animator at Nyèsigiso) is the person who has had the most influence on the way Bourama thinks about money. The group has also helped. “Before the group, I spent as much of my money as I wanted. But with the group, I’ve started to control my spending. I even [have] savings at home now.” Although Bourama does not have much financial responsibility at home, he pays for his soccer shoes, socks and other small needs for playing the sport. Bourama said he has the skills and information to make good financial decisions. “After receiving training in financial education, I now know how to manage money. That is to say, when to spend and when to save.” The word “money” makes him feel content because it allows him to have everything he needs—it is important.

Bourama’s mother has taught him about managing money and savings goals, and he especially liked her advice on saving. He is happy with his own savings because he can save through his livestock and by selling his pigeons. He also has access to money or credit when he needs it because of the savings group. He said, “We help friends, but we do not give ourselves credit.”

When asked what he likes most about the group savings account, he said, “I especially liked the savings location and the savings interest you get. It is also secure.” The Nyèsigiso group has helped Bourama to make his own savings more easily, and he said he would not have saved as much without the account, “It was very difficult for me because I had no concept of money management.” He paid for the pigeons he sells now, and that has allowed him to have more money. He has also shared information with a friend in the neighborhood who started a new group.

Bourama’s savings goals are to buy equipment to help him reach his dream of being a soccer player, and so far he has been able to pay for his cleats. One of his challenges is overspending—but with the group, he thinks he spends less. Compared to a year ago, he has saved more money because he saves every Saturday with the group. He feels proud to be a member of a savings group because “since the formation of the group, we have not had any problems.” He said he is likely to continue to be a member of the group because “there is cohesion within the group and the group allows me to save easily. Without the group, I wouldn’t be able to save what I’m trying to save.” Bourama recommends Nyèsigiso to his friends and family members because he sees the benefits of the group and he loves “that everyone enjoys these benefits.”
**Ecuador Stores**

**Juan**

Juan is a 15-year-old boy from Montalvo, Ecuador. He participated in Cooperative San Jose’s financial education program and has a savings account with the cooperative as well. One of his parents is a member of the cooperative and has been a member for over five years. He said his parents already had an account when he received his and that they helped him open it.

When assessing his poverty level, he was consistently no more than 4.8 percent likely to fall under the national poverty line during the five interviews of the financial diaries, suggesting that his family is relatively well-off compared to his entire cohort of peers that had an average poverty likelihood of 24 percent. At no point during the interviews did he report any food insecurity. There are eight people in his household and only two of them, likely his parents, work to support them.

Juan’s definition of the good life is to have money, good health, and the well-being of his family. When he was asked to share what he felt necessary to achieving the good life, he said, “To have an acceptable financial situation, to have a house, a kitchen, and a savings account.” He wants to be a systems engineer when he grows up because he likes technology and computers. He feels confident he’ll achieve this goal because all he has left is high school and his university studies.

When asked to name his greatest strength, he shares that he learns quickly and this helps him reach his goals; his greatest weaknesses are that he has too many chores and duties to complete.

Juan thinks his parents have achieved their life goals because they are professionals. He also thinks they manage their money well because they know how to distribute it. When asked what they share with him when they talk about money, he shared, “Son, you have to save money. The lesson is that you shouldn’t spend money on vanities because afterward, you’ll have nothing.” He feels his family worries more about money compared to other families because they don’t spend their money on unnecessary things. However, when asked what he might do differently compared to his parents, he said he’d save more for health.

He thinks his diet is healthy because he doesn’t eat a lot of things that can hurt him. His definition of good health is “to eat well, do sports” and he thinks his health is good because he gets his medical checkups. While his family’s health has been good during the past year, he worries a lot about their health because “they could get sick, and they’d have no money saved for emergencies.”

He thinks youth are better off today compared to his parent’s time because there are more educational opportunities. He thinks his children will have it even better because “there will be more technology and more wisdom.”

He feels that he has a lot of financial pressure because his parents, who have been the most influential people in how he thinks about money, have taught him to save and “that life is difficult.” While he feels financial pressure, he doesn’t have a lot of financial responsibility because he doesn’t have to cover his own expenses. He worries a lot about money because “you have to save money, to have anything.”

**Figure A: Juan’s cash flow**
When asked about what he felt when the word “money” was mentioned, he shared that he felt “worried, because sometimes there is money, and sometimes there isn’t. You have to think before you act. But you have to keep hope because today there may be nothing, but tomorrow, something.” He reports being satisfied with the amount of money he has saved because he recently began saving money.

The one financial crisis he remembers in his family is when his family was not paid on time for their work. While this was a crisis for their family, they didn’t reach out to anyone for help.

While he doesn’t consistently report working during the six interview periods, he either indicated he worked in agriculture or at home. He didn’t look for work at any point during the financial diary surveys.

What he likes about the Cooperative is that it offers a savings account to younger people, however, he dislikes that it is far away. He says his savings haven’t really changed since having an account, because “I’d save anyway.” The most important thing he learned from the education sessions is that it was important to have a savings plan and that “you should save for basic services.” He’ll continue saving with San Jose in the future because “I will continue saving to achieve bigger things in the future.”

When we look at Juan’s cash-flow analysis, for the most part, he reports his total savings increasing significantly over time (between $240 at its lowest and $350 at its highest), but the amount he reports saving in the prior seven days is between $3 and $5. This suggests that either his report of this total savings amount is exaggerated (if you assume that the amount he’s saving weekly is contributing to the overall savings total amount), or that his parents are putting money in his savings
account. He also doesn’t report any emergency savings for the first two periods, but then reports having a savings amount of $50 for emergencies in the last three interview periods. The dip in the second interview period in his expenses, savings and spending might be due to the fact that the winter/Christmas holiday fell between interview one and interview two.

When comparing his estimates for the amount received, spent, and saved, at no point does he overestimate the amount saved and spent, compared to the total amount of money he reported receiving the prior seven days. This suggests he has a fairly accurate “budget” or accounting of his money.

When asked about his savings goals each interview period, he lists a computer for the first period, video games, then a television for the next three interview periods, with the last period also reporting video games again. He reports spending most of his money on transportation, food for himself or his household and cell-phone expenses.

He also reports sharing with friends and family important points about saving at each interview period. The list below is what he shared at each interview:

1. “[Friends], you should save money.”
2. “Uncle, we should save money for any possible emergency.”
3. “[Friends], saving is the best option to help you achieve your goals.”
4. “[Friends], you have to save money to have a good future.”
5. “[Friends], if you don’t save money, you will not have money.”

Ricardo

Ricardo is a 13-year-old boy living in Manabi, Ecuador in a household of six people. He’s not married but he thinks he would like to get married at the age of 25. His definition of the good life is “to pass life well” and in order to achieve the good life, “you need to be united.” He has a lot of confidence that he will achieve the good life because he likes to work.

One day, he would like to be a lawyer and he believes he will achieve this goal as long as “nothing bad happens in my life.” He is studying a lot to achieve this goal. He thinks that it will be his profession that means more than the money he’ll make, because he is “going to be living it.” In five years, he thinks his life will be better because he’ll be on his way to achieving his dream and he’ll be working.

Ricardo believes his greatest strength is his intelligence and perseverance and that these will help him achieve his goals. He believes his greatest weakness is his lack of economic resources, he does not score as food-insecure and his family appears relatively better-off compared to his peers. His PPI likelihood score for falling below the national poverty line was 53.2 percent at baseline and the average for all the participants was approximately 28.8 percent. At endline, he was 71.3 percent likely to fall below the national poverty line. There are people in his community who face food insecurity, particularly those with few economic resources, but he doesn’t mention that his family worries about food and he also never scores as food-insecure.

Ricardo doesn’t really know how healthy his diet is, but he knows that the definition of good health is “to be well.” His family has had good health in the past year yet he worries about their health often because “I always want us to be healthy.”
He believes his parents have achieved many of their own dreams as he has seen them do many things. He believes youth today are better off than his parents’ generation because there is more freedom in everything. He hopes that the main difference between him and his parents is that he will be a professional as neither of his parents became professionals. He believes his own children will be better than him because of many things that he will be able to give them that he doesn’t have now. His family has faced very few crises, so few that he can’t remember how his family handled them.

When the word “money” is mentioned, he feels happy because having money will enable him to buy many things that he wants. He doesn’t really like to spend money and thinks he is a good saver. He rarely thinks he falls to temptation of purchasing something he doesn’t need. He indicates he is a member of a village bank and that he belongs to a savings group.

Sometimes it is difficult for him to save money and he doesn’t really feel like he has strategies to help him save more money. He has enough money to cover his basic expenses, but if he had to cover a large cost or a week’s worth of expenses, he would not have enough money saved. He did worry last week that he wouldn’t have enough money to cover his school expenses and that his family wouldn’t have enough to cover basic needs. However, in general he feels satisfied with his personal and family’s financial situation. If given the choice of taking $5 today or $10 in two weeks, he’d prefer to have $5 right now.

The person who has influenced him the most on how he thinks about money is his mother, through all of her advice. He thinks his parents generally make good financial decisions. His parents do talk to him about money and they often say that he should know how to use money and not misuse it or spend it poorly. He feels little financial pressure and financial responsibility because he doesn’t manage any money, his parents do. He also doesn’t worry about money for the same reasons. However, he thinks his family worries more about money compared to other families because they are always worried about not spending their money unnecessarily. He believes he has the ability to make good decisions because he doesn’t like to spend money just for the sake of spending it.

When we interviewed Ricardo at baseline regarding his money, he shared that he had received $20 the prior week and estimated he’d get $20 the next week. About $8 was money he could use on himself, about $8 for the family. The money he receives is generally used for both himself and his family. He indicates he works outside of the home (but he doesn’t identify the work) and that he makes less than $25 when he works. He gave about half the money he earned in the past month to a family member. He says he works frequently during the school year. He likes the work and thinks it is safe. In the seven days prior to the baseline, he reported spending only $8. When asked how much he spent on specific items, he reported spending $3 on snacks, nothing on clothes or cell phones, and $8 on school materials and some money on entertainment. He thinks he’ll spend his money the same way in the next week and feels pretty good about how he spends his money.

In the past seven days, he indicates he saved about $15 and is pretty satisfied with his savings. He has about $11 in total saved at home and with a village bank. The majority of his money is saved at home and he indicates he saves weekly. His saving goal is to help cover the cost of his studies. He feels very confident he will achieve his savings goal and feels very motivated to continue saving into the next month. He says he has about $9 in emergency savings. He thinks his parents are confident in his ability to make good money-management decisions.
At baseline, he has fairly high knowledge of the benefits of saving in a cooperative (security and earning interest). While he doesn’t feel comfortable sharing his opinion at home, he feels trust of his community and feels comfortable entering a cooperative.

For the financial diaries, we interviewed Ricardo every two weeks, between September 20 and December 6, 2013. As with his original interview, Ricardo measures as food-secure during the entire interview period. We learned that one of his parents saves in a village bank and at home and is not currently a member of the Cooprogreso. During the interview, Ricardo never opens an account with Cooprogreso and his reasons for not opening an account vary over the three-month period. In the first interview, he indicates he doesn’t know how to open an account with Cooprogreso and that he feels his savings are safe where he currently has it (with a village bank). In the next interview, he indicates he doesn’t know how to open an account and at the interviews of the following two periods (in October), he indicates he doesn’t have any money to save. With the final interview, he indicates he doesn’t have an account because he doesn’t have all the prerequisites to open an account.

While at baseline, in May of 2012, he indicates he works frequently and a lot during the school year, however, during this three-month period, he does not work at all and also didn’t look for work.

When we look at his financial transactions for the baseline (point 0) and six interview periods for the financial diaries (points 1–6) and ask him about the amount of money he received, spent and saved in the last seven days, we see that Ricardo generally reports receiving less money than he reports spending and saving, except for the baseline and the last financial diary surveys.

**Figure B: Ricardo’s cash flow**

![Figure B: Ricardo’s cash flow](image)

When asked to report on the amounts of money he spent on snacks, personal items such as clothing, cell-phone expenses and school materials, he reports spending more on these items than the total amount of money he reports spending for the past seven days. He reports snacks costing him approximately $200 at interview 3, but he reports receiving a total of $10 in the past seven days.
We can also see that when he is asked to estimate the amount he saved in the past seven days as well as the total amount of money he currently has saved, he appears to have quite a bit in total saved, which would reflect his perception of himself that he is a saver more than a spender—except for the third interview when his total savings takes a huge dip. The data suggests that perhaps he dipped into his savings to purchase snacks in the third interview period, but this is only a guess.

Figure D: Ricardo’s amount in savings
When asked about his savings goal for the financial diaries, his main reported savings goal for several periods was the purchase of a television. Interestingly, his PPI score fluctuates on the report on the number of color televisions in his house. In one interview period, there are two or more TVs in his household, the next period, there is one, and the following periods there are more than two TVs in his household again—which likely reflects him achieving a short-term goal of purchasing a color TV.

At baseline, he had $8 in emergency savings and at points 1 and 2 of the financial diaries, he had $20 and $30, respectively, but no emergency savings after this time. He also indicates that he has a credit, for $20 and $10 in the first two periods, and this credit is with a person. He indicates the $20 credit is for the village bank (perhaps to repay a loan with the village bank) and the $10 is for the purchase of a TV in the second period.

Overall, his confidence to talk to his parents about money fluctuates over the six interviews—some interviews he feels very confident, and others less so; however, in he generally thinks they trust his ability to manage his own money.

Regarding the savings behaviors promoted during the education, his knowledge fluctuates (varying from having correct and incorrect answers) for most of the knowledge indicators. For example, he correctly identifies that parents are needed to help youth open an account for all six interviews, but incorrectly identifies in all cases youth do not need an adult to make a deposit if you are under the age of 18. It appears he guesses about whether a person over the age of 18 needs a parent to open an account or make a deposit.

During the first financial diary interview, he reports feeling very confident about entering a cooperative, but toward the end, he is much less confident. Interestingly, during the third interview, he reports feeling worried about covering basic family costs, which corresponds to a dip in his total savings and when he receives the least amount of money. He never indicates worrying about covering school costs during the six interviews.

He generally feels good about his personal financial situation and his family’s financial situation, except for 4th interview period. He indicated he gave financial advice for two of the interview periods, but not the final four. When he did give advice, he shared that he told his friends not to spend their money and that they should save their money.

Overall, he reports in the qualitative interview that he’s somewhat satisfied (instead of very satisfied) with his own savings, mainly because he really doesn’t have much to save. He has enough money for his own needs, so he’s somewhat satisfied with the money he earns.

While he never becomes a member of Cooprogreso, he indicates what he likes most about it is that he learned how to save even though his savings have changed very little. He’s somewhat likely to become a member of Cooprogreso because it seems like a good cooperative.
Endnotes:


x Ibid.


xiii See note ii.

xv Please note that the outreach number reported here is primarily based on youth reported to have received financial education and does not necessarily mean that these youth all have a savings account. This also means that the averages for gender and age ranges are based on the youth who participated in the education and do not reflect the disaggregated data for those with savings accounts.


xix Fête de Tabaski, also called Eid Al-Adha, is the most important Muslim holiday of the year, falling two months and ten days after the end of Ramadan. During Tabaskí, Muslims sacrifice a domestic animal, generally sheep (or other animals) and youth receive gifts. They may also use savings to help parents by contributing to help pay for the animal or other holiday expenses.

xii See note vii.

xx Progress Out of Poverty Index (PPI) of the Grameen Foundation is a poverty measurement scorecard that consists of ten questions about a household’s characteristics and asset ownership that are scored to compute the likelihood the household is living below the poverty line. There are separate PPIs for each country. For more information: http://www.progressoutofpoverty.org

xxi Food security is defined as access to food, availability of food and utilization of food. This means that a food-secure person is one who has access to food (enough money or resources to pay for food), who has food available (there is food available to purchase or consume—often influenced by agricultural cycles or political strife), whose body can utilize the nutrients of the food eaten (which can be influenced by the typical kinds of foods eaten, effects of illness on absorption of nutrients, etc.). Food-insecure means that someone who does not have this access, availability or utilization for all or some of the 12 months of the year.

xxii The food-security scale is a 17-question survey instrument that Freedom from Hunger adapted from a United States Department of Agriculture food-security survey, adapted to international contexts, that measures household access to food through available resources to purchase or barter for food.


xxiv Defined as living below the National Poverty Line.


xxvii Defining and Measuring Financial Education—MicroSave’s Perspective. College of Agriculture and Banking (October 2013). Available at:


Names have been changed to protect participants’ privacy.

“Received – Spent” is the amount of money he reported receiving minus the amount spent. This is being used to estimate the total amount of money potentially saved if the only source of money was the amount he reported receiving. R-S-S is the total amount received minus the total amount spent and saved. This would be the amount he’d theoretically have left after spending and saving.

Some youth, as can be seen in the cash-flow figures, appeared to have discrepancies in the amounts they reported receiving and spending. In this case, Ricardo was asked first to report the total amount spent in the prior seven days and then to indicate the amount he spent on specific items. For some youth, these amounts were consistent, such that if they first report spending $8, they wouldn’t report spending more than $8 in total on other individual items. Others were less consistent about the amounts they reported.