

Savings and Financial Education for Girls in Mongolia

Impact Assessment Study



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ABBREVIATIONS

FE	Financial Education
GDP	Gross Domestic Product
HDF	Human Development Fund
HDI	Human Development Index
KSA	Knowledge, Skills, and Attitudes
MEA	Mongolian Education Alliance
MFO	Microfinance Opportunities
MNT	Mongolian Tugrik
PPP	Purchasing Power Parity
UB	Ulaanbaatar
WWB	Women's World Banking

EXECUTIVE SUMMARY

The Savings Innovation and Expansion for Adolescent Girls and Young Women project in Mongolia is funded by the Nike Foundation, directed by Women's World Banking (WWB), and implemented by XacBank, a microfinance bank. It offers a combined program for adolescent girls including financial education (FE) classes designed by Microfinance Opportunities (MFO) and a savings product. The theory underlying the project is that when girls are offered savings products and financial education tailored to their needs and tastes, they will be socially and economically empowered, and their families as well as implementing institutions will benefit over the long term. The ultimate objective of the program is to empower girls to create positive change in their families and communities. This is what the Nike Foundation refers to as the Girl Effect. This report is an evaluation of findings of the baseline and endline impact assessment research on the girls' savings and financial education program.

The savings and financial education program

XacBank and WWB designed the savings product for adolescent girls between the ages of 14-17 years old, who before this intervention were not able to fully access and control a bank account in Mongolia. The savings accounts for girls had a low minimum balance requirement to attract girls to open accounts. The savings product and financial education program, named Temuulel ("Aspire") were marketed directly to the target audience through mass media as well as through schools and community-based groups. WWB and XacBank collaborated with MFO and a local NGO, the Mongolian Education Alliance (MEA) to design the financial education training program. The program consists of eight core sessions covering general savings, budgeting, and saving at a bank, plus optional sessions on loans and debt management.

XacBank partnered with two NGOs to deliver the program: MEA and the Equal Step Center. MEA offered the eight-week financial education program in schools, while the Equal Step Center offered the training program to low-income girls in community-based clubs. Branch-level XacBank staff in Mongolia's capital Ulaanbaatar (also known as UB) coordinated the financial education trainings in 125 schools and the community-based NGO. From the pilot phase until the third quarter of 2011, 4,190 girls received school-based financial education training and 320 girls received community-based training. Other changes to the program between baseline and endline are discussed in the institutional findings section below.

Location

Mongolia, with a population of 2.7 million, is a sparsely populated and land-locked country that ranks 100th out of 169 countries on the UNDP's Human Development Index. Forty percent of Mongolia's population now lives in UB, a proportion that has been increasing as low-income nomadic herders move to peri-urban ger districts with extremely limited infrastructure. Despite difficult rural and urban living conditions and a 15.8% national poverty rate, the population does have near universal access to education. Importantly, girls and women are expected to delay marriage until they have completed high school and are actually more educated overall than men are.

The impact assessment study

This impact assessment study is based on results from baseline and endline research conducted approximately 18 months apart. By evaluating the Temuulel program, the impact study seeks to assess short-term changes in knowledge, skills, and attitudes (KSAs) and longer term impacts, including

changes in behavior. The impact assessment examines the effects of the project in two general areas: 1) impacts on girls and their families, and 2) impacts on partner institutions.

The key research questions addressed in this study include:

- How do girls' knowledge, skills and attitudes (KSAs) toward savings, money management and use of banks change after acquiring savings accounts and financial education, as opposed to only savings accounts?
- How do changes in girls' KSAs towards savings, money management and banking lead to changes in their behavior?
- How do the social and economic aspirations of girls who open a savings account and participate in the Financial Education program compare to those of girls who have only the savings account and to those of girls who do not participate in any aspect of the program at all?
- How do parents' attitudes and behaviors toward their girls change over time with participation in the financial education and/or savings programs?
- How effective are the different financial education delivery channels in improving the outcomes for girls?
- How do institutions' attitudes and behaviors toward providing products and services for girls change?

To answer these questions, the study compares girls' baseline levels of KSAs and behavior around saving money and using banks to the endline results among similar groups of girls. Specifically, it looked at girls' knowledge of, comfort with, and ability to control banking products and services in their name, particularly savings accounts. Social outcomes were assessed through indicators of girls' social networking behavior and self-esteem. Changes in parents' exposure to financial education ideas and XacBank products are assessed, along with those in peer exposure, to determine the nature of spillover effects. Institutional changes were measured in terms of the commitment of implementing institutions to seek or continue support for financial products and educational initiatives for girls.

Methods

Baseline research was undertaken from January 20 - February 11th, 2010 in UB, and endline research was conducted from April 19th to May 6th, 2011. Qualitative data was collected from girls, their parents and guardians, and key informants from the institutions involved in the project. Demographic data was collected from all of the girl research participants.

Sampling was conducted in ger districts in order to draw on a largely low-income population of school girls. The sample was segmented into three groups: Savings Only girls, who had a Temuulel account; FE + Savings girls, who have completed the financial education training program and opened a Temuulel account; and Comparison girls who do not have an account and have not taken financial education training. Where possible, comparisons are made between girls who have a savings account and financial education, girls with savings accounts only, and girls with neither. However, because differences in outcomes between the FE + Savings and Savings Only samples were not always measurable, sometimes the two samples are referred to collectively as the Intervention samples to be concise. This sampling frame was selected in order to be able to measure the effects of the provision of savings accounts to the effects of providing savings accounts and financial education training, in terms of changes in the KSAs and behaviors of girls.

Selecting the sample at the endline was challenging because of the relatively low level of market penetration of the savings product (estimated by WWB to be around 6% nationwide). The higher uptake levels observed amongst girls having received financial education (estimated by WWB to be around 12% in UB) suggests that the FE program encouraged girls who may not otherwise have done so to open accounts, though the research cannot confirm this.

Findings

Findings established measures of universal indicators of well-being, knowledge, skills, and attitudes and behaviors around financial services and money management, as well as measures of social empowerment for girls. Parents' financial KSAs and behaviors were also measured to understand what spillover effects may have occurred. The impacts of the project on institutions in terms of their continued or increased support for savings products and financial education for girls were also determined, though in less detail than data on girls.

Girls in the study were sampled from peri-urban districts in UB to ensure the inclusion of low-income girls in the study. Most girls at baseline and endline were just over 15 years old, but the Savings Only girls at endline were nearly 16.5 years old, on average, and had therefore completed more school than the other girls.

KSAs

Project indicators on participant knowledge, skills and attitudes (KSAs) addressed, among other things: what girls know about bank locations and services (knowledge); girls' degree of financial autonomy (skills); and girls' attitudes about the importance of savings as well as their comfort in discussing finances and financial services with bank tellers and their parents or guardians.

Projected outcomes

It was expected that girls who participated in the program interventions would show greater gains in KSAs than comparison girls due to experience with taking the financial education course and/or savings accounts. FE + Savings girls were anticipated to have greater gains than Savings Only girls because the financial education curriculum addressed the knowledge, skills, and attitudes that girls would need to prepare them to improve financial management and increase savings.

Observed outcomes

Intervention girls showed significant increases in knowledge, skills, and attitudes relative to the Intervention samples at baseline and Comparison girls at both baseline and endline.

FE + Savings girls and Savings Only girls all had experience opening and using XacBank Aspire accounts, so their higher knowledge levels should not be surprising. However, in addition to this, FE + Savings girls tended to be familiar with a slightly wider range of services than Savings Only girls.

The skills of participating girls were assessed based on their degree of financial autonomy. The financial autonomy of Intervention girls changed from baseline to endline through the ability to open of their savings accounts. This gave Intervention girls the ability to deposit their saved money securely. By contrast, girls without accounts ran the risk of spending money they intended to save and of having it lost or stolen.

Intervention girls also showed significantly changed attitudes at the endline. Almost all Intervention girls viewed savings as important, and most were also more comfortable talking to bank staff and discussing financial matters with their parents.

Implications and recommendations

Both interventions appear to have contributed to higher overall KSA levels found amongst Intervention girls, but the financial education program in combination with savings may have contributed more to improved knowledge and attitude outcomes. Endline FE + Savings girls were younger than Savings Only girls, and yet their financial management and savings KSA levels were equal or even slightly higher than girls who only had accounts. Because of the small sample sizes, particularly of Savings Only girls, it could not be determined whether the combination of financial education and savings accounts produces effects at an earlier age than savings accounts alone. However, it is worth noting that simply opening one's own savings account which can be operated independently of anyone else does increase a girl's financial autonomy.

Behaviors

Measures of behavioral change sought information on whether girls had savings plans, whether they saved regularly, and whether they contributed financially to their families' well-being.

Projected outcomes

The financial education program taught girls how to create and use a savings plan, and provided them guidance in how to save regularly. Girls with savings accounts also had the possibility to save in a safe location at a XacBank. Therefore, it was projected that girls who participated in program interventions would be more likely to have savings plans and would have more experience saving regularly than other girls. FE + Savings girls were expected to be more likely to follow their savings plans, since they received more information to support that behavior change than Savings Only girls.

Intervention girls were also expected to invest more in their families' development than girls who did not participate, but this topic was not addressed specifically in the financial education training course. Therefore, similar results were expected for Savings Only and FE + Savings girls.

Observed outcomes

Although intervention girls showed improved outcomes over the course of the study relative to the comparison group, the findings revealed some interesting patterns. Girls at endline were more likely to report saving money regardless of the sample they were in. FE + Savings girls reported saving more money, on average, than Savings Only or Comparison girls. However, these findings were drawn from a small sample of participants and, therefore, cannot be generalized.

By contrast, Savings Only girls reported that they were likely to contribute to their families' well-being, and in larger amounts, than FE + Savings or Savings Only girls. Endline Savings Only girls contributed more to their families than baseline Savings Only girls, but endline FE + Savings and Comparison girls contributed less than baseline FE + Savings and Comparison girls. Importantly, almost no girls at either baseline or endline followed savings plans. This suggests that there may be room for some changes in financial education curriculum design and marketing of the savings product.

Implications and recommendations

Behavior change is a medium- to long-term impact, and these results, taken after only 18 months, portray incomplete and perhaps unstable phases of behavior change. That said, Savings Only girls were

not only older, on average, than other girls in the study, but the majority also had summer jobs which provided them with a source of independent income. It is possible that their parents looked to them to pay more of their own expenses and contribute more to their families because they were older and were earning their own money. At the same time, it is possible that the financial education training contributed to the higher savings rates of FE + Savings girls.

Two recommendations emerge from these findings. First, XacBank could encourage girls with savings accounts to deposit their summer income and other seasonal lump sum payments such as holiday gifts to their accounts. Second, the financial education could be reviewed to assess whether there could be more effective strategies to convince girls to establish savings plans.

Social empowerment

Measures of social empowerment addressed whether girls plan for their future in non-financial ways, and, as a way of understanding changes in self-esteem, whether they believe in their own power to set and accomplish goals. FE + Savings girls were asked if they met new friends through the financial education class to understand if the class helped them build their social networks.

Projected outcomes

The lessons of financial education and experience in using savings accounts were expected to affect girls' non-financial attitudes and behavior. The experience of saving money for a particular aim was expected to increase their belief in their ability to set and accomplish other personal goals. Girls were also expected to apply the skills gained from planning their savings to planning their future. FE + Savings girls were expected to meet new friends in financial education classes, helping them to build their social networks.

Observed outcomes

While girls in the Savings Only and FE + Savings groups showed important changes in their social empowerment attitudes, these changes were unanticipated and not detected using the primary indicators chosen for the study. The most significant but unanticipated finding was that girls who opened accounts reported feeling a boost in their self-esteem because of the sense of maturity that came with doing something associated with adulthood. The other positive finding was that financial education classes allowed girls to develop teamwork skills that, although highly valued in many contemporary Mongolian workplaces, are not emphasized in the traditional hierarchical environments of Mongolian schools.

Outcomes sought by the primary indicators revealed mixed results. Girls in the FE + Savings groups showed slightly more awareness of the sequential steps they needed to take to reach their goals as they passed into adulthood. Neither Intervention group showed significant changes in girls' non-financial planning habits. However, about half of the FE + Savings girls also made new friends as a result of the financial education program.

Implications and recommendations

Social empowerment impacts such as increases in self-esteem typically develop over the long term, so the boost in maturity that girls felt from owning an account is also significant. As more adolescents open accounts, though, it will become less unique to have an account at that age, potentially reducing the sense of maturity that is produced by acquiring a savings account. The social network gains made by FE + Savings girls are also important and over time, friends from financial education classes may motivate each other to adopt or maintain positive behaviors. Further research would be necessary to

draw conclusions, however.

To improve social empowerment levels, it may be necessary to reinforce the connections between financial and non-financial life planning in the curriculum and savings account.

Impacts on parents and peers

Questions about parents sought information on the spillover effect of the program by examining parents' exposure to financial education concepts and XacBank products through the participation of their girls in program interventions. Additional data was collected on the impact of Intervention girls on their peers, though no indicators were established to measure this at the outset of the project.

Projected outcomes

It was expected that girls would expose their parents or guardians to the two elements of the project through discussions at home. Parents of FE + Savings girls were expected to increase their awareness of XacBank's products and the financial education program. Parents and guardians of FE + Savings and Savings Only girls were expected to be exposed to some financial education concepts from their daughters. No outcomes were projected for peer impacts at the outset of the project.

Observed outcomes

The research found that the program had important spillover effects, but not just in terms of the chosen indicators. Nearly all of the FE + Savings girls told their parents about the financial education classes, and most girls who opened savings accounts, with or without financial education, told their parents about them. FE + Savings girls passed on some financial education concepts to their parents, but most parents did not seem to expect to learn serious concepts from their children. The nature of parent-children relationships in Mongolian families probably limited the degree to which girls discussed new ideas with their parents.

Positive parental response was very important to girls. Parents tend to think that the earliest girls become interested in financial management is when they are nearing high school graduation, and a girl's interest in financial matters is taken as a sign of maturity. Girls who told their parents or guardians about their participation in either one or both of the interventions overwhelmingly received praise from them. This boosted girls' self-esteem and their status as examples for other adolescents and siblings.

Girls also discussed both financial education and the savings accounts with their friends. Because Mongolians view managing money and using a savings account as a mature action typical of adults, this also helped to boost girls' self-esteem. Some girls even tried to convince their friends to open their own accounts, which would represent a spillover effect of the project that was not predicted.

Implications and recommendations

The program did have spillover effects, but not necessarily the effects that were expected. The program allowed girls to show their increased maturity and desire for greater responsibility by telling their parents and peers about the financial education program and savings accounts. Because there were eight sessions of financial education, FE + Savings girls had more opportunities to mention the program with their parents when discussing their daily activities.

XacBank could potentially benefit from some of these patterns, particularly peer discussions about savings accounts. Marketing messages could be created which encourage girls with accounts to talk

about them with their friends, with referral rewards as motivation.

In financial education classes, girls could be encouraged to talk to their parents about the specific aspects of the program. For example, an exercise in which girls work with their parents on creating a savings plan could leverage their parents' interest to facilitate the acquisition of planning behaviors.

Value of financial education

The main question concerning financial education was how the outcomes of FE + Savings girls compared to the outcomes for Savings Only girls. The positive effects of financial education could be seen mainly in the knowledge of FE + Savings girls, their savings behavior, and in the spillover effects of their relations with their parents.

Projected outcomes

The theory of change for the project proposes that changes in knowledge, skills, and attitudes precede and create behavior change. A competing theory of behavior change in microfinance proposes that it is more effective to foster a desired behavior in clients, and then they will build their knowledge, skills, and attitudes through use. This project offered an opportunity to assess the different theories in the context of youth savings by offering just savings accounts to one group of girls, and a financial education course along with savings accounts to another group of girls. Based on the project's model of behavior change, it was anticipated that girls with financial education and savings would show better outcomes than girls who only opened savings accounts.

Observed outcomes

The specific KSA outcomes show some differentiation between the FE + Savings and Savings Only groups. FE + Savings girls acquired slightly more knowledge of banking services and financial management strategies, saved more money, and opened more term accounts. Based on WWB's calculations of savings uptake, girl in UB who took financial education were about twice as likely as the general population, who were exposed to mass media marketing and some school and branch-based events, to open accounts. Savings Only girls were slightly more comfortable talking with their parents about money than FE + Savings girls, and they contributed more money to their families. The skills that the two groups developed in controlling their assets and accessing and using their accounts appeared to be equal. Neither group of girls showed any significant gains in their ability to plan for the future, either financially or in the rest of their lives. FE + Savings girls have more opportunities to discuss their class and their accounts with parents and peers, creating a spillover effect that appears to exceed that created by the Savings Only girls.

Implications / recommendations

The findings of the project suggest that the financial education classes contributed to differences in outcomes between FE + Savings girls and Savings Only girls. In the school-based financial education model implemented in this project, girls were exposed to ideas about financial management and savings sooner than girls normally take an interest in these matters and at a younger age than Savings Only girls in the study. This suggests if girls are offered financial education at school, they will be more likely to acquire financial management acumen at a younger age than other girls, which is important because women are typically expected to be the financial managers within Mongolian households. The class also offers them the opportunity to open a savings account and, as a result, to begin accumulating savings at a younger age than other girls are generally motivated to do so.

Savings Only girls were much more likely to work during the summer than FE + Savings girls. However, it

is not clear from the research why Savings Only girls were both older and more likely to have a summer job. Does having a summer job increase the likelihood of a girl opening an account? Are there other common experiences or conditions that make some girls more likely to open accounts on their own than their peers?

Despite these questions, it is recommended that the financial education program be continued, as it appears to generate positive outcomes in participating girls. It is worth considering whether a separate financial education program for boys should be developed to address concerns that mixed classes create a difficult learning environment for girls. The curriculum content on creating a financial plan may prove to be more effective if girls, particularly younger ones, are encouraged to draw up their plans with their parents.

Impacts on institutions

Questions on the impact of institutions sought data on the commitment and funding levels of XacBank and its partners for the savings product and the financial education program, and whether new partnerships had been established to continue or expand these programs. Questions also addressed the public perception of XacBank.

Projected outcomes

The project was supposed to have beneficial impacts on the implementing institutions, leading them to pursue further resources and establish other initiatives and partnerships for the benefit of adolescent girls. The project was also anticipated to have a positive effect on XacBank's public image among girls.

Observed outcomes

The implementing institutions have shown enthusiasm for the project, though with a caveat related to a change in program policy. The project continues to serve its original target audience of adolescent girls, but boys are now eligible to both open Aspire savings accounts and participate in Aspire financial education programs.

The innovative savings accounts are considered a success by XacBank. Over the course of the research, the XacBank administration showed enthusiasm for providing financial services for girls, and managers at the central office view the savings accounts as a way to develop customer loyalty. The commitment of branch staff to servicing girls' accounts varies, however. It is not clear if funding for the savings accounts has increased, but XacBank has not found new partners to help in marketing the girls' products over the course of the research.

XacBank and its partners have also showed a commitment to continuing financial education and creating new partnerships to do so. XacBank executives recognized that administration of the financial education program lay outside the core competencies of their savings products division, and oversight of the financial education program being implemented by the MEA was transferred to an NGO operated by XacBank employees, the Golden Fund for Development Association (GFDA). XacBank and the GFDA successfully sought funding from the SEEP Network to continue the project. The GFDA partnered with Aflatoun to pilot test their savings program in elementary schools after the introduction of the Aspire program. XacBank and the GFDA are exploring a partnership with the Mongolian Department of Education to have financial education incorporated into the secondary school curriculum nationwide. These partnerships have the possibility to extend the reach of the program throughout the entire country.

The public image of XacBank among girls did show improvement over the course of the research. FE + Savings and Savings Only girls had a much more positive view about XacBank at endline than baseline, and several vowed to bank with XacBank after they grew too old to maintain their Aspire accounts. In spite of trainings given by XacBank, some girls and trainers still complained of rude treatment by branch-level staff.

Implications and recommendations

Institutionally, the project can be considered a success generally. However, the move to include boys complicates the assessment of the project outcomes for institutions. Because girls are no longer the focus of the project, the move to include boys may be perceived negatively according to project indicators. In reality, the inclusion of boys is likely to have mixed results.

By going to scale with the inclusion of boys, XacBank has shown confidence in and commitment to the program. But the project is directed specifically at girls, and changes in outcomes based on this revised policy should be considered. Opening financial services to boys should not affect the financial services that girls receive when opening and using their accounts, because these are activities that customers undertake individually. Furthermore, if opening eligibility to boys makes the product more valuable to XacBank, it is likely that more girls will be able to access and benefit from the product.

The effects of boys' inclusion on financial education are less clear. The benefits of girls-only classrooms include greater participation of girls, more suitable pacing, and the provision of gender-specific content. Including boys in classroom trainings may erode these benefits for girls.

XacBank should provide further training and incentives to ensure that branch staff are welcoming to girls and equipped and encouraged to facilitate visits to the bank by financial education classes.

Conclusion

This impact assessment study reports on the results of baseline and endline research on the Savings and Financial Education Program for Girls in Mongolia. The study examines the project's impact on the financial and social empowerment of girls, as well as its impact on the Mongolian institutions which implement the program, based on a set of predetermined indicators.

Based on those indicators, the project achieved success in changing the knowledge, skills, and attitudes of participating girls towards saving and money management, and it showed mixed success in changing their behaviors and fostering financial and social empowerment. The project was generally successful in creating institutional change, though some of these changes, such as the inclusion of boys, do not correspond to the objectives of the Girl Effect model.

1. INTRODUCTION AND THEORY OF CHANGE

This report presents the results of an impact assessment of the Savings Innovation and Expansion for Adolescent Girls and Young Women project, which is being implemented by XacBank, a Mongolian microfinance bank. The project offers a financial education (FE) program and a savings product to adolescent girls, presenting girls with paths to empowerment that would not otherwise be available to them. The ultimate objective is to unleash the power of girls to create positive change in their families and communities, a result known as the Girl Effect.

The purpose of the impact assessment research is twofold: to assess the financial and social empowerment of Mongolian girls as a result of project interventions, and to assess the institutional impacts on XacBank and two of its NGO partners, the Mongolian Education Alliance (MEA), and the Equal Step Center. The research was commissioned by Women's World Banking and the baseline research was undertaken from January 20 - February 11th, 2010 in Ulaanbaatar (UB), the capital of Mongolia. The endline research was conducted in UB from April 19th to May 6th, 2011.

The project, funded by the Nike Foundation, was directed by WWB and implemented by XacBank, with technical assistance provided by Microfinance Opportunities on financial education. The bank designed, marketed, and launched a savings product which targets girls from the ages of 14 to 17 years of age. XacBank originally partnered with two local NGOs, the MEA and the Equal Step Center, for the delivery of the financial education training.

1.1 MODEL OF CHANGE

The model of change for the project assumes that investments in girls and young women will have both positive effects on individual girls - Girl Impacts – and a spillover effect on girls' families and communities – the Girl Effect. As adolescents, girls stand at a crossroads where their future ability to reinvest in their communities is decided by their degree of economic and social empowerment, which is determined, in turn, by their financial management capabilities and social assets. Based on knowledge of the critical role that women play in enabling their family and community members to thrive, the model predicts that investments in girls will pay dividends for many years at the individual, household, and community level. At an individual level, maturing girls move into the workforce and begin to earn incomes and integrate into and lead their communities, all while assuming greater caretaker roles as they have their own children and parents age. At the household level, financial power can help a woman rescue her family from the cycle of poverty. At the community level, women can make significant contributions that spur growth, diversity and innovation and ultimately help build strong national economies.

In Mongolia, the Savings Innovation and Expansion project focuses on changing the savings behavior of low-income girls. The hypothesis is that when girls aged 14-17 are offered savings products, financial education programs, and marketing tailored to their needs and tastes, the result will be significant social and economic empowerment of the girls, and important indirect economic impacts on their families. In the process, girls are expected to achieve improvements in knowledge, skills, attitudes (KSAs), and behaviors around savings, including: understanding the importance of savings and considering it desirable; learning saving strategies; opening formal savings accounts which they control; and developing the habit of saving. A key aspect of this hypothesis is that through practice, girls will adopt

the positive behaviors of asset accumulation, goal setting, and planning for the future (Girl Effect).

The project also hypothesizes that partner institutions will benefit from the implementation of such a program. It is expected that financial institutions, in this case XacBank, will nurture future adult customers who are both more loyal and financially sophisticated, and therefore better savers and lower credit risks. The program should also enhance XacBank's brand as an institution dedicated to national social and economic development through investments in young people. Paired with direct marketing to girls, this will assist XacBank in promoting products to girls' family members and other adults.

The research is designed to understand the impact of the project in two ways. The first is through the measurement of The Girl Effect, or the theory that programs promoting the accumulation of social assets and financial capabilities for girls will not only result in positive changes in girls' economic and social conditions, but will also result in positive social and economic change for the girls' families and communities. The second is through the assessment of the success, sustainability, and scalability of business model innovations used in the project by XacBank and its partners. This report provides information on the endline conditions for girls and the partner institutions as of April and May 2011. The report also compares the endline results to the baseline results which were gathered in January and February 2010 soon after the project had been rolled out.

In assessing the Temuulel ("Aspire" in Mongolian) savings product and the complementary financial education program, this study seeks to capture short-term outcomes as well as longer term life-of-grant impacts. The data will inform analysis on the two learning objectives for the grant: 1) the impact on girls and their families, and 2) the impact of the project on the partner institutions. Outcomes are measured through short-term changes in knowledge, skills, and attitudes, and impacts are measured through signs of longer-term changes in behavior.

This study assesses girls' outcomes through measures of girls' knowledge, skills and attitudes, including girls' knowledge of, comfort with, and ability to control banking products and services in their name, particularly savings. Social outcomes of the project are being measured through indications that girls have gained new friends through financial education trainings and indications that they have become more comfortable discussing savings with their parents or guardians. The impact of the project will be assessed through measures of girls' self-esteem, their power to plan for the future, their ability to make decisions about the use of their assets, and their comfort in discussing finances with their parents or guardians.

At the community level, the Girl Effect will be assessed through evaluations of parents' attitudes about the importance of girls' participation in financial education training and their exposure to financial education concepts through their daughters. Furthermore, evidence of the impact of the Girl Effect will be sought through behavioral measures of girls' increased use of savings for the education of family members and positive changes in the attitudes of family members towards girls' financial activities.

The study also assesses the impact of the program on Mongolian institutions and their ability and willingness to sustain, scale up, and enhance the program. The original institutions to be assessed were XacBank, the MEA, and the Equal Step Center. This study also assesses the role of the Golden Fund for Development Association (GFDA), an NGO affiliated with XacBank that became involved in the project in early 2011 and was to assume full responsibility for the financial education program by mid-2011. The institutional impact will be assessed primarily through measures of the attitudes and behavior of the institutions towards providing services and products for girls. Their efforts and success in seeking other

funding and partners for the savings product and financial education program are also considered. The outcomes will be assessed through evidence of increases in girl-focused training and financial education capacity at MEA and the Equal Step Center.

The report begins with an introduction to the research, including the research location and description, a description of the financial education and savings program, and the purpose and design of the research. The findings follow, beginning with an analysis of the sample profile and data on the universal indicators. The section continues with an analysis of the impacts of the program on girls' knowledge, skill, attitude, and behavior outcomes and on their social empowerment attitudes and behaviors. The findings conclude with a discussion of the impacts of the program on parents, and with an analysis of the impacts on implementing institutions. The conclusion summarizes the research and offers some general reflections on its implications, and the paper concludes with several recommendations for the consideration of the implementing partners.

2. PURPOSE AND DESIGN OF THE RESEARCH

The purpose of this study was to assess the impact of the project on participating girls, their families, and the implementing institutions. Temuulel savings accounts were rolled out in all 77 XacBank service outlets throughout Mongolia in October of 2009 and were available in all 86 of the bank's service outlets as of April 2011. While monthly financial education and marketing seminars are being conducted at rural and urban schools, eight-week extracurricular financial education classes are being offered only in secondary schools and through community centers in UB. For this reason, the research was limited to the capital. This study sought data from a sample of girls that was comparable at the baseline and endline, though at both stages, low account uptake hindered the recruitment of girls with savings accounts.

2.1 RESEARCH LOCATION AND CONTEXT

Mongolia

Mongolia is a landlocked country, bordered by Russia on the north and China on the south. With a total area of 1.5 million square kilometers and a population of 2.7 million (UNESCAP, 2011), it is the least densely populated country on earth. Mongolia currently ranks 100th out of 169 countries on the UNDP's Human Development Index, and its GDP per capita (PPP) in 2009 was estimated at \$3,771 (UNDP, 2010). As of 2010, 57.5% of the population lives in cities (UNESCAP, 2011), and 40% of all urbanites lives in the capital, Ulaanbaatar (NSO, 2009).

Figure 1 – Map of Mongolia



Source: Perry Castañeda Map Collection, 2010.

While a significant portion of Mongolia's population faces poverty, access to schooling remains nearly universal. The government provides free primary and secondary education to all children, although there are often additional fees associated with attending school, especially for boarders. The best universities are public and, for those who qualify, heavily subsidized by the state. The percentage of the population in poverty was reported to be 15.8% in 2008 (IHDI, 2010). The percent of population living below \$1.25 (2008 PPP) a day stands at 2.24% (UN Statistics Division, 2010). However, Mongolia's literacy rate is an impressive 95.3%, including 97.2% of women and 93.3% of men (UN Statistics Division, 2010). Furthermore, the percentage of girls who attend secondary school stands at 91%, compared to 85% for boys (UNICEF, 2010). At the university level, women make up 60% of the student body in Mongolian institutions (UNESCO Institute for Statistics, 2011).

While women and girls have achieved gender equality in education, this does not mean that women have equal status to men in all areas of Mongolian life, or in all areas of the country. For instance, women only make up 40.4% of the official labor force, suggesting that they may be more involved than men in the informal economic sector (UN Statistics Division, 2010). It is also reported that rural students generally face far greater challenges than urban ones in accessing educational resources (The World Bank, 2006), and that schools in UB's *ger* districts are grossly overcrowded (UNICEF, 2003). Overall, women and girls from the middle and upper classes tend to have opportunities that one would not expect given the country's Medium Human Development score, per UNESCO.

Ulaanbaatar

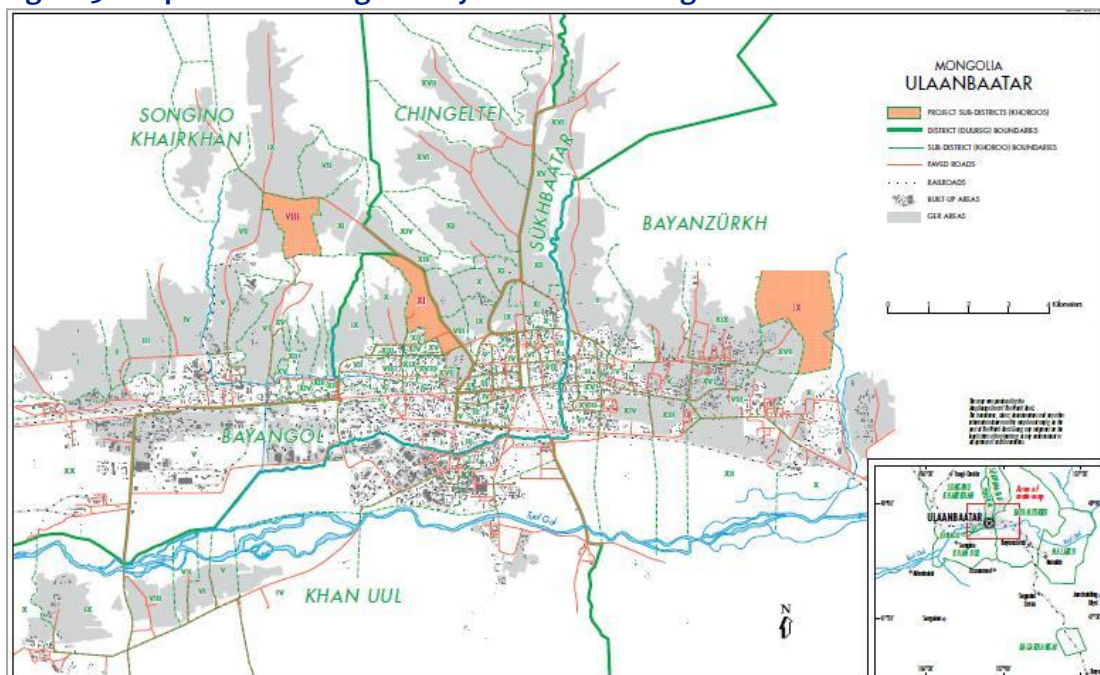
This research took place in the nation's capital, Ulaanbaatar. While XacBank made the decision to offer the Temuulel savings product through all of its branches nationwide and offers financial education seminars at both rural and urban schools, the full financial education training program was only implemented through schools and NGOs in the capital. Therefore, conditions in the capital are important to the overall context of the impact study.

Figure 2 – A view of a typical *ger* area in Songino Khairkhan District
Note the mix of *ger* and house dwellings



Ulaanbaatar's population is growing due to rural-urban migration, and at the end of 2009, just over 1 million people lived in the capital. A minority of that population lives in apartment buildings and other permanent structures, but about 60% of the city's residents, particularly migrants from the countryside, live in peri-urban informal settlements, or *ger* districts. *Ger* districts are sorely lacking in permanent infrastructure such as water and sewer lines, paved roads, and public transportation, and 85% of *ger* area residents heat their homes with wood and/or coal-fired stoves. *Ger* area household incomes are 43 percent lower than those of apartment area households (Kamata, Reichart, Tsevegmid, Kim, & Sedgewick, 2010). The latest available assessment suggests that 45% of *ger* area residents are underemployed, and 27% of *ger* residents are fully unemployed (Herro, 2003). Given the living conditions of most *ger* dwellers, residence in a *ger* area is often used as a proxy for low-income status.

Figure 3 - Map of UB showing the Bayanzurkh and Songino Khaikhhan Districts



Source: Kamata, Reichart, Tsevegmid, Kim, & Sedgewick, 2010.

This study focused on two of the nine districts of Ulaanbaatar that are known to have a high proportion of *ger* households: Bayanzurkh in the east and Songino Khaikhhan in the west. The population of Bayanzurkh in 2009 was 250,000 and that of Songino Khaikhhan was 232,000, making them the two largest districts by population in UB. As of 2003, 63% of Bayanzurkh's residents and 65% of Songino Khaikhhan's residents lived in *ger* dwellings. The two districts also were estimated to have the highest unemployment of all city districts, at 36% and 29%, respectively (Herro, 2003).

XacBank

XacBank, established in 2001, has experienced rapid growth during the past decade. It currently stands as the fourth largest bank in Mongolia (XacBank, 2011). The bank has 86 service points throughout the country, including branches in each of the provincial capitals (*aimags*). It has not been as successful in penetrating the rural districts (*soums*) as its chief competitor, Khaan Bank.

At the end of 2010, XacBank reported having 190,486 depositors holding an average balance of \$876. The bank also had 75,736 total borrowers, 55% of whom were women. The gross loan portfolio was \$263.5 million, and assets stood at \$380.2 million (Mix Market, 2011). Data on borrowers disaggregated by gender were not available at the time of writing.

XacBank markets itself as a young, dynamic, and socially responsible institution, and staff members tend to reinforce that impression. For example, XacBank rebranded in 2009 and began to market itself as an "eco-bank." Prior to this, XacBank's motto was "profit and people." Now its motto is "profit, people, and the planet," and the bank proudly publicizes that in 2009 it became the first financial institution in the Northern Hemisphere to receive a carbon credit. XacBank's marketing strategy appeals to younger consumers through strategic promotional partnerships, such as its sponsorship of Olympics telecasts in 2010 and youth-oriented projects such as a soccer tournament that coincided with the World Cup Competition in the same year (XacBank, 2010).

XacBank's effort to promote financial education to girls is another component of the corporation's overall social responsibility efforts. In this project, XacBank was responsible for developing, marketing, and implementing a savings product for girls between the ages of 14-17, and for finding and supervising NGOs to adapt and implement financial education trainings for girls through the school system and community centers. In early 2011, XacBank began to transfer responsibility for the financial education program to the GFDA.

Golden Fund for Development Association (GFDA)

The Golden Fund for Development Association¹ is an NGO that was established in 2003 by XacBank employees in response to the employee social responsibility initiatives of the bank. The GFDA currently has 1,200 voluntary members, drawn from all of the companies in the TenGer Financial Group, the parent group of XacBank.² Operating funds are provided by member donations, which are reported to be voluntary and calculated using a sliding scale based on the employee's income. The GFDA has 4 full-time employees, and each bank branch has a coordinator.

The NGO's main areas of focus are children's education, environmental protection, and child development, particularly the development of children from poor families. The GFDA has recently completed a pilot program of the Aflatoun financial education program in 3 schools for children aged 6 to 12. In the pilot project, Aflatoun was integrated into the school curriculum in sessions organized by primary school teachers. The GFDA currently views the Aflatoun program as complementary to the Aspire financial education curriculum for children aged 14-17.

Another main activity of the GFDA is the Xac Tugul (Xac Paradise) environmental education project, started in 2009. Administered locally by GFDA members, this project has established 9 parks in rural areas, where children can learn about gardening and forestry, planting trees and bushes, and environmental awareness.

Mongolian Education Alliance (MEA)

The Mongolian Education Alliance is an NGO was established in 2004 to ensure accountability and accessibility in the country's educational sector. Its staff of twelve is currently based in the Sukhbaatar

¹ The GFDA is not the same as the Golden Fund for Development, or X.A.C., which was formed by the UN's MicroStart Program, later merging with Goviin Ehlel Ltd to form XacBank (UNCDF, 2010).

² TenGer includes XacBank, XacLeasing, XacSecurity, Horus Nomadic Solutions and Prime Insurance (TenGer Financial Group). The GFDA is also has offices in the main TenGer Financial Group building in UB.

district of UB. MEA's primary activities are organizing teacher trainings, promoting youth and early childhood development initiatives, and conducting research on education. MEA recruited and trained university-enrolled peer educators and community-based trainers, supervised the eight-week training sessions in the schools, and trained XacBank staff responsible for delivering financial education seminars in schools without financial education classes.

Equal Step Center

The Equal Step Center is a small, community-based NGO founded in 2002. The NGO is dedicated to the goal of providing equal rights to all children, especially vulnerable children such as those at risk to enter the sex trade, street children, the disabled, rural children, and minorities. Equal Step Center implemented the eight-week financial education training sessions in community centers in the Chingeltei and Bayanzurkh Districts of UB during the pilot phase and first cycle of FE in late 2009, but moved later activities to the Nailakh District in consultation with XacBank.

2.2 PROGRAM DESCRIPTION

Design and initial implementation of the savings product

Prior to the pilot of this program, no savings products were available to children in the Mongolian market that they could open and access directly by themselves. Since 2001, XacBank has offered a long term savings account called "Future Millionaire," targeted at parents who wish to save for their children, but children are not allowed to open or withdraw money from these accounts. Other banks offered payment cards to children when they turned 16 for their use with accounts opened by their parents. In late 2007, WWB offered to assist XacBank in updating their youth product portfolio to increase uptake and usage of savings products by girls. After securing funding for the project from the Nike Foundation, WWB and Microfinance Opportunities conducted initial product and financial education design research in September 2008. Among other things, this research found that while Mongolian children could not open and access savings accounts, there were actually no legal restrictions preventing children over the age of 14 from doing so. Based on that finding and on primary research showing that long term saving products did not appeal to adolescent girls, XacBank and WWB designed the girls' savings product to be attractive to girls from 14-17 years old. The name "Temuulel" was selected through an internal competition among XacBank employees. "Temuulel" means "aspire" in Mongolian. The logo and design concepts were developed by a local design agency.

The savings product was designed with a low minimum balance requirement in order to encourage uptake among adolescent girls. The minimum balance that a girl needs to start and maintain a Temuulel account is 3,000 MNT (USD \$2.40).³ Both term and demand deposit accounts are available, with demand deposit accounts paying 6.3% in May 2011, down from 8.2% at the time of the baseline study in January 2010. Term deposit accounts paid the same interest rates as regular adult savings accounts and paid the same rates at the time of both the baseline and endline research, between 8 – 12.5% at the baseline, depending on the term length.

In order to open an account, a girl must go to a XacBank branch with a national identification card (available after a child turns 16) or a birth certificate, two photos, and the minimum deposit amount in cash. She also is required to fill out a one-page intake form, reproduced in Annex Two of the baseline report (Tower, McGuinness, & Sebstad, 2011), which requests information about the girl's phone

³ The May 1, 2011 conversion rate of 1,255 MNT to US \$1 is used for this report.

number, grade, the name of her school, and how she heard about the Temuulel program.

Upon opening an account, a girl receives a pink, wallet-sized passbook with the Temuulel logo for her use. The passbook was specifically designed to be half the size of a regular passbook in order to appeal to girls and was distributed to girls free of charge⁴. XacBank also offered incentives through the end of February 2010 with two goals in mind: First, in order to encourage uptake, girls who came with one or more friends to open accounts received a popular pink "charity bracelet" modeled after those popularized by the Lance Armstrong Foundation, at no extra cost. Second, in order to encourage higher account balances, which XacBank anticipated would be low relative to adult and even Future Millionaire savings accounts, a variety of promotional items were offered to girls who achieved certain savings balance levels in term deposit accounts (see Figure 4). These promotional items were reportedly extremely attractive and popular with girls.

Figure 4 - Temuulel promotional items



XacBank also designed debit cards for the girls' savings accounts, again in pink and imprinted with a prominent Temuulel logo. These cards are available upon payment of a 6,000 MNT (\$4.78) fee, a considerable amount for many girls. With a card, Temuulel account holders can check their balances and make withdrawals from ATMs, and make point-of-sale (POS) purchases from merchants using funds drawn from their Temuulel accounts.

Student bankers, whose role is explained in the description of the financial education program, were also given Temuulel wallets and nametags in exchange for their participation in the program.

Marketing

Design of the marketing materials began on August 1st, 2009 with some assistance from WWB. Market research was conducted to guide decisions regarding the message and channel for the campaign, which utilized in-branch

signage, television commercials and interviews, and public relations products such as press releases.

Implementation of the savings product prior to the baseline

Temuulel accounts were offered in all XacBank branches beginning in September 2009. However, in October of 2009 the rollout of financial education and direct marketing in schools was delayed by government-mandated school closures intended to contain the spread of an H1N1 virus epidemic. According to XacBank employees, uptake of the Temuulel savings product was greater in rural branches than in urban ones, though the reasons for this were unclear. In all, 2,400 accounts had been opened by the end of December 2009. This fell short of the bank's goal of 5,000 accounts.

⁴ According to WWB, girls are now charged 500 MNT (USD \$0.40) for Temuulel passbooks, but an MEA administrator stated that she was told that the passbook fee is left to the discretion of the branch managers. The administrator also stated that girls at the branches in question are charged 1,000 MNT (USD \$0.80) for a passbook.

Implementation of the savings product from baseline to endline

Since rollout, XacBank has instituted several changes to the savings products, including two significant changes in eligibility. First, in order to retain Temuulel clients, eligibility was extended to girls as old as 24, in September of 2010. This change was enacted to permit Temuulel account holders to keep their accounts as they enter college or university, but prior to becoming fully independent of their families. Executives explained that this is part of XacBank's mission to appeal to and become a bank for Mongolians of all ages. Second, in response to demand for the product and in order to increase its potential market, XacBank decided to open eligibility to boys in October 2010.

Interest rates on both term and demand accounts have been adjusted semi-annually according to the rate review policy for all of XacBank's consumer savings products. In May, the interest rate on demand accounts stood at 6.3%, and the rate on term accounts was between 8% and 12.5%.

At the time of the endline research, there were few active marketing and promotion efforts because the school year was ending, decreasing direct marketing opportunities. However, a celebration for all of the financial education participants was being planned for mid-May to mark the close of the school year and to promote the product. Information about the event was being spread by the student teachers and some newspaper publicity articles.

Table 1 - Temuulel account uptake as of March 2011

	Total	Girls	Girls with FE	Girls with FE in UB ⁵
Accounts	6396	5827	936	583
Clients	5563	5013	792	493

Uptake of the accounts was still lower than expected at the endline. As shown in Table 1, a total of 5013 girls had opened 5827 accounts as of March 2011; 792 girls who had taken FE had opened a total of 936 accounts. Some girls owned both term and demand accounts, which is why there are more accounts than clients. The low numbers of savings accounts affected sampling for the research by limiting the pool of potential participants in the low-income areas where research was conducted.

Design and initial implementation of the Financial Education and school-based direct marketing program

WWB and XacBank collaborated with MFO and the MEA to design the financial education training program. Market research conducted in September 2008 and February 2009 by WWB and MFO guided the decision to use classroom-based training and the selection of content for the curriculum. MFO subsequently developed an eight-session financial education curriculum. Component courses were adapted from its global youth curriculum to address the gaps in financial knowledge, skills, attitudes and behavior of Mongolian school girls, which were identified through the market research. MFO provided eight one-hour sessions covering three topics: general savings, budgeting, and saving at a bank. It also provided two optional sessions on loans and debt management. MEA provided input on local

⁵ FE girls in UB have taken the eight-week course administered by MEA.

modifications to the curriculum and translated the curriculum into Mongolian.

MFO then led a training of trainers (TOT) workshop on financial education for MEA. In the workshop, the MEA trainers learned the principles of FE and pedagogical methodologies for adolescent education. They were also introduced to the Temuulel FE curriculum and the savings product. MEA participants took turns team-teaching the curriculum, which provided them with practice using the materials. After receiving training, MEA recruited female university students to be financial education trainers. MEA then trained both the university students and female trainers from a community-based organization, the Equal Step Center, to deliver financial education to girls, which were to be organized into clubs of about 20 – 25 members each.

Because of low uptake of savings accounts during the pilot, WWB altered the model for school-based financial education for the rollout to further integrate the educational and marketing channels. Sessions are being taught in eight-week cycles, the first of which began in late 2009. The altered model included promotional visits by XacBank staff to schools. In each participating school, three schoolgirls were also designated as "student bankers" to promote Temuulel savings accounts to their peers.

Additionally, three levels of financial education and marketing were originally planned for participating schools. Table 2 describes the program involvement at each partnership level, with Level 1 designated as "Bronze," Level 2 as "Silver," and Level 3 as "Gold."

Table 2 - Initial school-based FE and marketing levels

Type of Partnership	Key Components
Level 1 - Bronze	A formal partnership agreement with participating schools. Monthly seminar series by XacBank coordinator on basic FE concepts for girls and teachers. Monthly product promotion presentations (following the FE seminar). Develop "Aspire" student bankers as XacBank ambassadors and product champions in schools- 3-4 bankers per school (i.e., 2 from the 10th grade, 1-2 from the 11th grade).
Level 2 - Silver	Same as level 1. Conduct an 8-session FE program per semester for two savings clubs.
Level 3 - Gold	Same as level 1. Conduct five savings clubs per semester. Set up a XacBank classroom that would serve as a meeting place for savings clubs and a venue for promotional events for girls, teachers, parents (cross-selling). Identify 1-2 teachers to work closely with, and who will supervise the FE program and product promotion events.

To reach rural schoolgirls, XacBank designated bank officers at branches outside UB as Temuulel coordinators. Their role is to work with local schools to offer financial education training to rural school children through monthly seminars or, in some cases, the eight week classroom course.

Implementation of the Financial Education program and school-based direct marketing prior to the baseline

XacBank branches throughout the country conduct Temuulel financial education activities with local schools and community groups, coordinated by branch-level Temuulel coordinators. In 2009, two four-day trainings were conducted at XacBank headquarters to train these coordinators. Additionally, 350

student bankers worked in their respective schools during the first cycle.

To administer the school-based training clubs, MEA selected and trained 35 peer educators from its pool of university student applicants, and also selected 11 of the pilot test trainers to become monitors who served as resources for new trainers and reported back to MEA. A total of 839 girls received training during the first cycle, according to MEA.

The Equal Step Center conducted first cycle trainings in UB through one club in the Chingeltei district and three clubs in the Bayanzurkh district, training a total of 80 girls. The GDFA provided 16 of these girls, who were orphans, with the minimum savings balance to enable them to open their own Temuulel accounts.

Implementation of the Financial Education program and school-based direct marketing from baseline to endline

The financial education program and direct marketing underwent some changes from the baseline to endline. The financial education program was simplified by consolidating the three levels of financial education and direct marketing into one model of a partner school with financial education classes, student bankers and some direct marketing. In interviews, XacBank staff explained that the girls selected to be student bankers lacked motivation. After the baseline research was completed, the student banker program was suspended⁶. Consolidating the three levels of FE and marketing made the project easier to administer for XacBank.

In order to bring eligibility for the financial education program in line with eligibility rules for the savings product, financial education classes in schools were opened to boys as well as girls. According to MEA administrators and trainers, this has changed the clubs in several ways. The process of recruiting students has changed, as teachers now may request that their entire class be enrolled together to form a single club. As a result, girls are not offered the opportunity to expand their social networks by meeting unfamiliar peers. Club sizes have also risen to as many as 35, according to one trainer.

In response to the addition of boys, MEA has instructed student trainers to make the curriculum more gender-inclusive by changing the use of pronouns in the curriculum (alternating “he” and “she,” for instance) and referring to hypothetical examples of boys in the lesson plans. Additionally, the dynamic of classes has reportedly changed. When clubs are formed out of entire classes, there is a tendency to include students who are not interested in the topic, which makes it more difficult for student trainers to maintain the attention of the children.

The gender balance of mixed classes has also reportedly changed class dynamics in some clubs. According to MEA administrators and students, boys tend to be less deliberative during club activities, and sometimes can be a distraction to girls. They also reported that boys tend to be quicker to introduce new ideas into club discussions, and astute trainers can structure exercises as competitions between boys and girls to increase student engagement.

⁶ WWB was told that most branches did not fully train and manage student bankers to direct market the product.

Table 3 - Participation in the school-based FE program in UB

Cycle	Clubs	Schools	Total students	Total girls	Percent girls
2009 pilot	11	6	192	192	100%
2009-2010 1 st	48	21	839	839	100%
2009-2010 2 nd	51	25	1,075	1,075	100%
2010-2011 1 st	58	27	1,123	885	79%
2010-2011 2 nd	48	23	1,080	610	56%
2010-2011 3 rd	48	23	1,004	589	59%
TOTAL	264	125	5,313	4,190	79%

MEA reports that 4,190 girls out of a total of 5,313 students have participated in their school-based financial education classes in UB since the pilot cycle in 2009, as shown in Table 3. According to XacBank, the overall number of students nationwide who participated in urban and rural school-based financial education training by the end of the 2009-2010 school year was 4,800, with 120 participating in financial education training provided by Equal Step. For 2010-11, the total number of students who participated in urban and rural school-based financial education nationwide was 10,805, while 200 children participated in Equal Step trainings (Bat-Ochir, 2011).

2.3. RESEARCH DESIGN

The baseline and endline research primarily used qualitative research techniques, such as focus group discussions and individual interviews, to collect data. While properly collected and analyzed quantitative data can provide accurate measures of social phenomena, it is harder for researchers to mine quantitative data for insights into the processes driving social phenomena - how and why observed changes take place. Qualitative research provides a great deal of social context, which will offer a better understanding of how and why investments in girls' financial futures pay dividends. Furthermore, qualitative research permits effective monitoring of programs, because the contextual data it generates can be used diagnostically while the program is still in operation, without compromising the validity of the final project assessment.

The majority of research tools were therefore qualitative, though socio-demographic data including the universal indicators on the focus group participants was collected using a short survey questionnaire.

Research tools

The tools used in conducting the baseline and endline assessment research included focus group discussions with selected samples of girls, positive deviant interviews with successful savers, a socio-demographic survey questionnaire of all focus group participants, structured individual interviews with girls' parents and guardians, and structured individual interviews with key informants from the Mongolian institutions involved in the project.

Focus groups were used to elicit information about girls' knowledge, skills, attitudes and behavior around finances, savings, and banks, as well as pertinent contextual information about family and social activities. Positive deviant interviews were conducted with girls who demonstrated behaviors that the project is trying to encourage, in order to learn how they developed them. Socio-demographic data was

gathered using questionnaires either before or after the focus group discussions. The socio-demographic data collected included information about the ages, professions, and education of those living with each girl, as well as information on her educational achievements and aspirations, her work status, earnings, savings, and personal data about marriage and pregnancy. This tool not only elicited socio-demographic data, but served to triangulate information gathered in focus groups. Individual interviews with parents and guardians served to gauge the attitudes of family members towards girls and their activities, particularly financial activities. Interviews with key informants sought primary data on the institutions and their projects, and their expectations for and attitudes towards the girls' savings product and the financial education training.

Figure 5 – Focus group at School No. 85



Informed consent

In order to protect the rights of minors in the study, informed consent was sought for all research participants. For focus groups with girls, consent forms describing the research purpose and procedures were sent to each girl's parents or guardians, one of whom was required to give written consent prior to prior to his/her daughter's participation. Before each focus group, the roster of girls was cross-checked against the received consent forms to ensure that a parent or guardian of each girl had agreed to her participation. At the beginning of each focus group, the moderator described the research orally to girls, and they then consented orally to participate. Key informants were read the consent form describing the research prior to their interviews and gave verbal consent to participate.

Key Research Questions

The key research questions drove the development of the specific indicators used in this study. Most of the questions about outcomes and impacts on girls were addressed in focus group discussions, and relate to girls' financial knowledge, skills, attitudes, and behaviors. Questions about social empowerment were also included in the focus group discussion guide.

- What are the social and economic aspirations of girls who participate in the savings product and the financial education program as compared to those girls who only have the savings product and to those who do not participate in the program at all?
- How do parents' attitudes and behaviors toward their girls change over time with participation in the savings and/or financial education programs?
- How do girls' knowledge, skills and attitudes (KSAs) toward savings, money management and use of banks change after acquiring savings and financial education, in comparison to only savings?
- How do changes in girls' KSAs towards savings, money management and banking lead to changes in their behavior?
- How effective are the different financial education delivery channels in improving the outcomes for girls?⁷
- Have additional resources been mobilized to deliver or expand the savings products and financial education for girls?
- Can the girls' savings product be implemented sustainably by XacBank?
- What is the potential for scaling up or replicating the girls' savings product?
- What is the potential for scaling up or replicating the financial education program?
- How has the public image of XacBank changed and why?
- How do institutions' attitudes and behaviors toward providing products and services for girls change?

Sampling Process

Sampling for the project was designed to survey a comparable sample of girls at baseline and endline. Both samples sought low-income girls in three main segments based on their likely exposure (at baseline) or exposure (at endline) to project interventions in the following combinations: the eight-week financial education course plus the Temuulel savings product; the Temuulel savings product only; and a Comparison group of girls with no intervention. Baseline and endline sampling was conducted in *ger* districts in order to draw on a largely low-income population of girls.

Baseline sampling

The baseline sample was designed to survey girls from populations that had not been impacted by program interventions, or, in the case of the Savings Only sample, girls who had only limited exposure to the intervention. Two baseline groups of girls were selected from populations that would be affected by the program at endline. These groups consisted of girls who had recently opened a Temuulel savings account,⁸ and girls who went to schools or participated in NGOs that were scheduled to participate in the eight-week financial education program. A distinction was also made between girls who lived in Bayanzurkh, where eight-week financial education training was offered in schools, and girls who lived in Songino Khaikhan, where the eight-week financial education training was scheduled to be offered through the community-based organization, the Equal Step Center. One school-based and one community-based comparison group were also sampled. The girls in these two groups had not opened Temuulel accounts and did not have plans to participate in financial education. A full description of the

⁷ This was a key question initially, but due to changes in the community-based FE program it was not possible to assess this in the endline research.

⁸ These girls did not have lengthy experience with their accounts, compared to the experience that girls at the endline were expected to have.

baseline sample and the selection process for both school-based and community-based segments can be found in the baseline report (Tower, McGuinness, & Sebstad, 2011).

After the baseline research was completed, several changes that affected endline sampling were made to the program. First, the community-based financial education program was moved from Songino Khairkhan to Nailakh, a district whose population is not comparable to that of Songino Khairkhan. Because there was no equivalent baseline sample against which to compare Nailakh girls, no girls in community-based financial education groups were surveyed for the endline. However, because all of the girls participating in the community-based program in Songino Khairkhan were also students at state-run secondary schools, it was decided to utilize their baseline results for comparison to the results from schoolgirls in the same district in the endline. Additionally, the baseline research sampled girls from schools in the Bayanzurkh District that offered what was then referred to as the “second level” financial education program, meaning that FE participants took the eight-week course in schools with girls who performed direct marketing activities as “student bankers.” By the endline, the first and third levels of FE were eliminated, and all school-based participants were receiving the same eight-week financial education instruction that the girls in the baseline sample were to receive, but without direct marketing from student bankers. Therefore, the financial education programming that the baseline girls were to receive was equivalent to that received by the endline girls.

Endline sampling

The sample for the endline was drawn from the Bayanzurkh and Songino Khairkhan districts of UB, and included girls who have received financial education and opened Temuulel savings accounts (FE + Savings), girls who have opened Temuulel accounts but had not received FE (Savings Only), and girls with no exposure to either intervention (Comparison).

Table 4 – Endline sample

District	Bayanzurkh		Songino Khairkhan	
Sample Segment	FGDs	Girls	FGDs	Girls
FE + Savings	4	21	2	10
Savings Only	2	10	0	1 ⁹
Comparison	3	17	2	14
TOTAL	9	48	4	24

How the endline sample was selected

MIS data from XacBank on girls with Temuulel accounts were used to identify girls with savings accounts. Under WWB’s direction, XacBank merged their MIS data on Temuulel account usage with data provided by the MEA on FE participants in order to identify two groups of girls: some who had only opened accounts and some who had opened an account and taken FE. The database was first filtered to include only girls who used banks in Bayanzurkh or Songino Khairkhan. Then it was filtered to select girls who had used their accounts at least once since opening it, and girls whose accounts were opened before September 2010 to include girls who had had over seven months to use their accounts. This was

⁹ An individual interview in focus group format was conducted with a girl savings account holder in Songino Khairkhan.

done to ensure that the girls at endline had more experience with their accounts than the girls sampled for the baseline. The database was also filtered to exclude girls whose balance had exceeded 100,000 MNT (USD \$79.60) to prevent the inclusion of higher income girls. The sample was then segmented into girls who had taken FE and girls who had not. The low uptake of the savings product resulted in small sample sizes of girls with Temuulel accounts, particularly Savings Only girls.

The results of this filtering process were then ranked by school to identify schools where adequate numbers of girls could be found to populate focus groups of at least 6 participants. School 48 in Bayanzurkh and Schools 67 and 83 in Songino Khairkhan were chosen in this way for focus groups with FE + Savings girls.

Using the same clustering process, School 86 in Songino Khairkhan was chosen for focus groups with Savings Only girls. However, no single-school clusters of Savings Only girls were identified in Bayanzurkh, so it was decided to invite girls with accounts from throughout the district to participate at FGDs which were held at XacBank facilities. A further difficulty involved securing informed consent from these girls, who had to go to the designated XacBank branch for a form prior to the FGD, and then return to the FGD with the signed form to participate. As a result of the low numbers and logistical difficulties, only two FGDs were conducted in Bayanzurkh, and only one interview was completed in Songino Khairkhan.

Comparison girls were selected in consultation with the GFDA and MEA, which identified schools in Bayanzurkh and Songino Khairkhan that were in *ger* areas and had not participated in MEA's school-based trainings. Three focus groups were conducted at School 85 in Bayanzurkh, and two were conducted at School 62 in Songino Khairkhan.

Parents of girls

The consent forms for the participation of girls in focus groups included a request for parents or guardians to indicate their willingness to participate in individual interviews. Other parents and guardians were recruited to participate over the phone and gave their consent to be interviewed upon arrival with their daughters at FGDs. Eleven parents were eventually interviewed, including eight from Bayanzurkh and three from Songino Khairkhan, as shown in Table 5.

Table 5 – Sampling of parents

Sample	Bayanzurkh parents	Songino Khairkhan parents	TOTAL
Parents of FE + Savings girls	2	1	3
Parents of Savings Only girls	3	1	4
Parents of Comparison girls	3	1	4
TOTAL	8	3	11

Research Team

The research team was led by Elizabeth McGuinness, the Consumer Research Director at MFO. She was assisted in the design of the research by Senior Advisor Jennefer Sebstad and in the baseline

implementation by Research Officer Craig Tower, who subsequently led the implementation of the endline research. In UB, three local researchers completed the in-country team for both the baseline and endline. These researchers were selected to conduct focus groups and interviews with girls based on their experience and past work with children. The moderator, Erdenechimeg Chimiddorj, is a linguist who has worked for over twenty years in various positions including camp leader at the Nairamdal International Children's Center. The assistant moderator, Tsetseglen Magsarjav, is a social scientist who taught in a secondary school in UB for ten years. The interpreter, Undraa Nergui, is a young economist with excellent English skills whose proximity in age to the girls may have been beneficial in reducing the perceived age difference between girls in the focus groups and the research team.

Limitations of the study

The first and major limitation of this study concerns the lack of correlation between parts of the baseline and endline samples caused by the instability of the financial education program at the time of the baseline research and the expansion of the program from baseline to endline. Originally, the baseline sample was to be drawn from Bayanzurkh and was to include both schoolgirls and girls in community-based organizations. The location of the community-based program run by Equal Step was moved from Bayanzurkh to Songino Khairkhan prior to the baseline, and moved again to Nalaikh after the baseline was completed but before the second cycle in 2009-10. Because no baseline data were available for the community-based group in Nalaikh, it was not possible to conduct meaningful endline research with that segment.

A second, related limitation is the lack of a designated baseline sample of school-based girls from Songino Khairkhan. The baseline sample in Songino Khairkhan was composed of girls recruited through Equal Step who were likely to receive financial education and girls who were not going to receive any intervention. All of these girls attended school, but they may have had unique characteristics as a group due to their mothers' participation in a female farming organization. Therefore this sample may not represent the ideal comparison group for the Songino Khairkhan sample of school-based girls included in the endline analysis.

A third limitation was the process of identifying and contacting girls using the MIS and FE participation data provided by XacBank. In some cases, missing or incorrect information resulted in an inability to identify sought after girls, and a misclassification of others. For example, if data on the school a girl attended was not available, she could not be assigned to a school-based cluster for possible inclusion in the research. If she had taken FE, but her participation had not been recorded by MEA, she might be sampled for a Savings Only FGD, despite her FE participation. The situation occurred when three girls were sampled for a Savings Only FGD at Branch 5 in Bayanzurkh. Upon arrival, it was discovered that they had all taken FE at School 44. In this case, the FGD was conducted as scheduled with just these three girls, but the activity was recategorized as an FE + Savings FGD instead of Savings Only. Furthermore, missing, incorrect, or out of date mobile phone numbers made it impossible to contact some girls whose profiles were appropriate for a given sample, reducing the pool of potential participants.

A fourth limitation is the relatively low number of girls and focus groups in the Savings Only sample. These girls were identified using MIS data from XacBank, which included the mobile phone numbers for many but not all of the girls. The numbers of girl savers in Bayanzurkh and Songino Khairkhan were low initially. Recruitment was further complicated by the informed consent procedures, which required the Research Team to contact girls' parents for permission prior to contacting the participating girls, a time-consuming procedure for all sample segments. FE and Comparison girls were identified through their

schools, and school administrators assisted the team by distributing consent forms to the girls for their parents to sign, and by collecting the forms afterwards. Girl savers were required to either go to a nearby XacBank branch to pick up a consent form and return with it on the day of the FGD, or to come with a parent on the day of the research activity. Because girls were required to go out of their way to pick up the forms, this procedure made it more difficult to recruit girls with savings. Attending focus groups was also more inconvenient for these girls, as the discussions had to be held at bank branches at times outside the regular school and work day.

A fifth limitation concerns the average age of the girls in the study. The average age of girls at the endline should have been the same across segments. Because of the low numbers of girls, the consent requirement, the dependence on school coordinators for recruitment, and the graduation of older girls, it was not possible to control the average age of the girls recruited into the endline research. The average age of girls participating in the endline was 15.3 years, but the average age of endline Savings Only girls was 16.3 years, compared to 15.4 years for the endline FE + Savings sample.

3. FINDINGS

Summary of Findings on Impacts on girls:

Universal indicators:

- Universal indicator measures showed no incidence of teenage marriage or pregnancy, and no significant change in other measures from baseline to endline;

Knowledge findings:

- There were girls in all endline FE + Savings and Savings Only FGDs who knew the location of the nearest bank, compared to girls in fewer than half of FGDs at baseline, and knowledge of XacBank locations increased;
- Girls in all endline FE + Savings and Savings Only knew how to access savings services, but girls in fewer than half of the FGDs at baseline did;
- Girls in all endline FE + Savings and Savings Only FGDs knew about formal savings services, and girls in half the FGDs knew the difference between term and demand accounts, but only one baseline Savings Only interviewee knew about term and demand accounts.

Skills findings:

- Girls in most baseline FGDs had control of their own money, while girls in all endline FE + Savings and Savings Only FGDs did;
- Girls in all endline FE + Savings and Savings Only had control of their own savings accounts, but no endline Comparison girls did.

Attitude findings:

- Girls in all FE + Savings and Savings Only FGDs agreed that savings was important, compared to girls in just half of baseline FGDs;
- Girls in most FE + Savings and Savings Only FGDs were comfortable talking to bank staff, compared to girls in fewer than half of the baseline FGDs;
- Girls in endline Savings Only and FE + Savings FGDs were more comfortable talking about money with their parents than girls at baseline.

Behavior findings:

- Based on SEP data, at endline 100% of Savings Only and 97% of FE + Savings girls reported saving money, compared to 74% of endline Comparison girls, but almost no girls at either baseline or endline followed savings plans.
- Endline Savings Only girls contributed more to their families than baseline Savings Only girls, but endline FE + Savings and Comparison girls contributed less than baseline FE + Savings and Comparison girls.

Social empowerment findings:

Attitudes:

- All girls at baseline and endline were determined to pursue postsecondary education, and most had a strong belief in their ability to attain their goals;
- There were small increases in the number of girls in FE + Savings and Savings Only FGDs who showed an ability to effectively plan for the future.

Behaviors:

- In half the FE + Savings FGDs, there were girls who had made new friends through the FE classes.

Summary of parent-level and institutional impacts:

Parent-level findings:

- At endline most parents of FE + Savings girls talked about FE concepts with their girls and no Savings Only girls did; at baseline only one mother discussed FE concepts with her daughter.
- Parents were more aware of XacBank's savings products and the financial education program.

Institutional impact findings:

- Funding for Temuulel savings accounts continues, and services have been added, and the accounts have opened to boys;
- No new partnerships for providing financial services for girls have emerged;
- Funding has continued for the Temuulel FE program, but boys are now included;
- XacBank is now partnering with the GFDA to provide FE for girls and boys, is now offering the Aflatoun program, and is seeking a partnership with the Ministry of

3.1 SAMPLE PROFILE AND UNIVERSAL INDICATORS

Sampling was conducted in two different districts of UB: Bayanzurkh and Songino Khairkhan. The sample was segmented into three groups: girls with savings, girls that have been in the financial education program and have savings, and a third comparison group that had not been exposed to either intervention. Sociodemographic data profiling the sample and universal indicators are presented here to illustrate differences between the populations by district and by segment. Universal indicators data also will permit comparison of samples across studies in the Nike Girl Effect initiative.

Sample Profile

The sample profile was put together using data collected with the SEP questionnaire. Girls were not expected to know their family income, and to prevent the entry of potentially inaccurate data they were not asked to report that figure. In order to index the general socioeconomic level of girls' households, proxies were used, including the family's housing type and the number of female-headed households. Data was also gathered on girls' level of education, the number of years of education they have received, the number of years they have spent at their current school, and whether they contribute to their family budget.

In UB, the most common forms of housing, in ascending order of the general preference among UB residents, are *gers*, houses, and apartments, which roughly correspond to the income level of the household.¹⁰ Overall, the baseline sample included girls from more *ger* and fewer apartment households (49% and 6%), compared to the endline (26% and 25%); the proportion of girls in houses was similar, at 45% for the baseline and 49% for the endline. This indicates that the girls in the endline sample are likely to come from households with better living conditions and higher incomes than the girls in the baseline sample.

¹⁰ A *ger* is a tent used by nomads, which has no water, sewage, or gas lines, but which may have electricity. *Gers* are often constructed by newly arrived rural migrants on a plot of urban or peri-urban land. Later they may construct a more permanent house, which would not necessarily offer utility access. Apartment buildings offer the convenience of electricity, water, sewage, and gas, and are generally preferred over *gers* or houses.

Table 6 - Endline SEP and universal indicator data by district

Profile Data	Endline			Baseline
	Bayanzurkh	Songino Khaikhan	Total	
Ger	27%	24%	26%	49%
House	48%	48%	49%	45%
Apartment	23%	28%	25%	6%
Female headed households	14%	24%	17%	24%
Universal Indicators				
Marital status (single)	100%	100%	100%	100%
Pregnancy incidence	0%	0%	0%	0%
Average age	15.5	14.9	15.3	15.2
Average age started grade 1	7.1	7.3	7.2	7.3
Average # of School years	8.7	7.8	8.4	8.4
Current grade, median	9	8	9	9
Contribute to family expenses	30%	36%	32%	38%
N =	56	25	81	89

By district, the greatest differences in dwelling type from baseline to endline were found in Songino Khaikhan, where, at baseline, 58% of participants were found to live in *gers* compared to 24% of participants at endline (see Annex I for complete baseline data by district). Additionally, girls in apartments made up 0% of the baseline sample and 28% of the endline in Songino Khaikhan. In the Bayanzurkh baseline sample, 43% of girls lived in *gers* and 9% in apartments, compared to 27% and 23%, respectively, at the time of the endline research. Data on dwelling type by district suggests that the girls in the endline sample from Songino Khaikhan were much more likely to have better living conditions than their peers in the baseline sample.

Data on female-headed households was gathered because these tend to be single-parent households and have less access to economic resources. This can place a greater burden on girls to do housework¹¹ and enter the workforce at an early age. Twenty-four percent of baseline girls came from female-headed households, compared to 17% for the endline. The percentage of girls from female-headed households in Songino Khaikhan was 13% lower from baseline to endline, compared with 14% for Bayanzurkh. Overall, the data on dwelling type and female-headed households suggest that the girls in the endline sample were likely to live in households with slightly more resources than those in the baseline.

One possible explanation for the larger number of female-headed households and poorer dwelling conditions in the baseline group is that the participants in Songino Khaikhan were selected with the assistance of the Equal Step Center and their partner, the Mongolian Women Farmers Association, whose membership includes a high proportion of women entrepreneurs. This may help to explain the magnitude of disparity in the proportion of female headed-households and dwelling type.

¹¹ Even girls from two-parent households are expected to perform a great deal of housework.

Table 7 - Endline SEP profile data by sample segment

Profile Data	Comparison	Savings Only	FE + Savings
Ger	37%	25%	13%
House	53%	42%	45%
Apartment	8%	33%	42%
Female headed households	24%	0%	16%
Universal Indicators			
Marital status (single)	100%	100%	100%
Pregnancy incidence	0%	0%	0%
Average age	14.9	16.3	15.4
Average age started grade 1	6.9	7.8	7.2
Average # of School years	8.0	9.3	8.6
Current grade, median	9	11	9
Contribute to family expenses	11%	75%	42%
N =	38	12	31

Some important differences were found between segments in the endline sample. The Savings Only segment was the most uniform in terms of dwelling type, with 25% of the girls living in *gers* and 33% in apartments. The Comparison group was likely to be slightly lower in income, as 37% of the girls lived in *gers* and 8% lived in apartments, and the FE + Savings segment was likely to be higher in income, with 13% living in *gers* and 42% in apartments. Interestingly, the Comparison sample registered the highest number of female-headed households at 24%, compared to 16% for the FE + Savings sample and 0% for the Savings Only sample. Based on data on dwelling type and percentage of female-headed households, it appears that girls in the Comparison segment came from the households that have access to the fewest socioeconomic resources. There were fewer clear differences between the FE + Savings and Savings Only segments.

Universal Indicators

The universal indicators for the girls in this study reflect the generally positive position of women and girls in Mongolia compared to other countries with similar HDI ratings. As the background information showed, Mongolian girls are at an educational advantage relative to boys. Girls in Mongolia are discouraged from marrying and having children before the completion of secondary school, permitting a high percentage of girls to advance to vocational training schools or universities, and with the firm encouragement and support of their parents.

The uniformity of girls' reports of marital status and pregnancy in the study were remarkable: none said they had ever been married or pregnant. Therefore, there is no data to report on their age at first marriage or pregnancy, as none of the girls has yet experience either of these life events.

The differences in age and educational experience between the baseline and endline samples according to the universal indicators are negligible. Endline girls were slightly older at 15.2 years compared to

baseline girls at 15.3 years. Baseline girls started the first grade at 7.2 years old compared to 7.3 for endline girls, and the median current grade for both was 9th.

Within the endline sample, girls from Bayanzurkh were older, at 15.5 years and have received 8.7 years of formal education versus Songino Khaikhan girls who were, on average, 14.9 years old and had spent 7.8 years in school. Interestingly, their median current grade level was the same. This may be due in part to the higher age of the Bayanzurkh sample, but some girls may also have lost time in school if they migrated from rural areas into the capital.

The differences between segments in the endline are more noteworthy than those between baseline and endline. The average age of the Comparison segment was 14.9 years old, compared to 15.4 for the FE + Savings segment and 16.3 for the Savings Only segment. The segments show similar differences in terms of educational attainment, with Comparison girls having spent the fewest years in school (8) and reaching the lowest median grade level (9), compared to FE + Savings girls (8.6 and 9) and Savings Only girls (9.3 and 11). Therefore, it is likely that the girls in the Savings Only segment were more developed socially and intellectually than the other segments of girls, particularly those in the Comparison segment.

3.2 IMPACTS ON GIRLS

The effects of the project on girls are being measured by comparing baseline and endline assessments of girls' knowledge, skills, attitudes, and behaviors. The long-term goal is to change girls' financial behaviors, but based on the model of behavior change underlying the project, girls are more likely to do so if they first acquire an appropriate set of knowledge and skills and develop positive attitudes about the desired financial behaviors. Actual behavior change is a long-term process, therefore evidence of socially and economically empowered behavior may be only minimally apparent in participants by the end of the project. However, if positive outcomes for knowledge, skills, and attitudes result, then participants will be more inclined to social and economic empowerment than the general population.

Knowledge

In order to understand how knowledgeable girls are about financial services, they were asked what they know about banks, including their products and services. Based on market research and pilot reports prior to the baseline, it was hypothesized that the girl participants would not be very well informed about financial services. After completing the program, the desired outcome is an increase in girls' knowledge on all these topics, which would help equip them with the information they would need to open a formal savings account (See Box: Knowledge Indicators). MEA collected data on FE participants' knowledge and attitudes using tests pre- and post the FE sessions, but that information was not yet available at the time this report was written.

Knowledge indicators:

- Percentage of girls who know where the nearest bank is and have visited it;
- Percentage of girls who know how to access banking services;
- Percentage of girls who know which types of formal savings services are available.

Endline analysis

At the endline, the girls in nearly all of the focus groups were able to identify the nearest bank, except for one Comparison group in Bayanzurkh. Girls in most focus groups were able to identify more than one bank with a nearby branch. None of the Bayanzurkh Comparison groups were able to identify banks other than Khaan with nearby branches, but the school is located in a peri-urban area of the district where even the Khaan Bank is quite distant. Significantly, two of these groups could not identify the Temuulel logo. When discussing the location of the nearest bank, XacBank and Khaan Bank were mentioned much more frequently than any others, though XacBank was mentioned more by groups in the Intervention samples (the FE + Savings sample, and the Savings Only sample). Golomt Bank, Khadgalamj Bank, and TDB were also familiar to girls in the Intervention samples.

Knowledge findings:

- There were girls in all endline FE + Savings and Savings Only FGDs who knew the location of the nearest bank, compared to girls in fewer than half of FGDs at baseline, and knowledge of XacBank locations increased;
- Girls in all endline FE + Savings and Savings Only knew how to access savings services, but girls in fewer than half of the FGDs at baseline did;
- Girls in all endline FE + Savings and Savings Only FGDs knew about formal savings services, and girls in half the FGDs knew the difference between term and demand accounts, but only one baseline Savings Only interviewee knew about term and demand accounts.

There were sharp distinctions between the Intervention groups and the Comparison groups in terms of knowledge of banking services. The lowest level of knowledge was registered by the Bayanzurkh Comparison groups. Each of these groups volunteered five services provided by banks, mostly based on transactions they had seen family members make on trips to the bank such as savings, money transfers, salary, pension, and Human Development Fund withdrawals (see box), and currency exchange. About one-fifth of the Comparison girls had never been in a bank, and about one third had never received any services themselves, even if they performed on a transaction on behalf of a parent or family member. By contrast, the knowledge of banks that girls in the Intervention groups had was based more on transactions that they had performed themselves. Girls in the FE + Savings and Savings Only groups were able to cite a broader range of services provided by banks, including internet and telephone banking, small business loans, and leasing services.¹² Most Savings Only groups did not mention as many types of bank services as either the Comparison or FE + Savings groups. Furthermore, while only one Comparison girl knew about term and demand savings accounts, about half of the groups in each Intervention sample mentioned that these different kinds of accounts existed. Knowledge of interest earning was low, as a few, though not all, of the Intervention groups mentioned that they could grow their money in interest-bearing savings accounts.

Girls were also asked to discuss what experiences they had in going to banks in order to gauge their actual exposure and further probe their knowledge. The girls with the lowest level of experience going to banks were the Comparison girls from Bayanzurkh, many of whom had never received any bank services themselves. By contrast, about half of the girls in the two Comparison group FGDs in Songino

¹² In the TenGer Financial Group, leasing services are not handled directly by XacBank, but by Xac Leasing.

Khairkhan, who lived closer to the center of the city, had received a bank service, such as transferring money, receiving Human Development Funds, or paying a utility bill. All of the girls in the Intervention sample had used bank services themselves, and some, especially the FE + Savings girls, had experiences at multiple banks. One of the Savings Only girls explained that her general knowledge of bank services had changes since she opened her Temuulel account:

I used to think that only adults used bank services, but now I know that students can use bank services, too. (Endline FGD 6)

Overall, girls in the Intervention groups had a more thorough knowledge of banks and bank services, particularly savings accounts, and had more experience going to banks than Comparison girls. Girls in the Savings Only sample, being older, may have had more opportunities to go to banks than younger girls.¹³ FE + Savings girls are closer in age, on average, to the Comparison and baseline girls than the Savings Only girls. While program interventions likely contributed to FE + Savings girls' increased knowledge, it is harder to judge the impact of the intervention on Savings Only girls because of the age difference between the sample segments. It is worth noting that the distance of the Bayanzurkh Comparison sample from the center of the city and the nearest bank limited their access to banks much more than the Songino Khairkhan Comparison sample or either of the Intervention samples. The levels of knowledge that girls acquire through visiting banks with adults may be affected by the distance of banks from their homes, but this effect was not specifically assessed in the research.

Mongolia's Human Development Fund

During the baseline research, many girls reported that their families received "Children's Money" from the government in the amount of 3,000 MNT per month (USD \$2.39). This program was intended to redistribute mineral revenues for the benefit of the country's children; more information can be found in the baseline report (Tower, McGuinness, & Sebstad, 2011).

The Children's Money program was discontinued soon after the conclusion of the baseline research. However, the government has instituted the Human Development Fund (HDF) at the behest of the two biggest political parties of Mongolia, the Revolutionary Party and the Democratic Party. These parties promised large cash distributions of mining revenues to all citizens during the Parliamentary election in 2008 and established, under pressure from the public, the HDF. Cash distributions to every Mongolian citizen started February 2010 and amounted to 120,000 MNT (USD \$95.62) that year – lower than the USD \$1,000 that was apparently promised, but still a significant amount for many families.

Currently, every citizen of Mongolia, regardless of age, is eligible to receive a sum of 21,000 MNT (USD \$16.73) every month from the HDF. In order to draw the funds, citizens must register with the local government, which issues HDF passbooks. The funds are currently being distributed through Khaan, Savings and Capital banks to every Mongolian citizen, regardless of age. Children under 16 cannot receive the money directly from the bank, but children above 16 may receive distributions themselves.

¹³ Sibling order may also have an effect on girls' behavior. Girls who are the oldest child in their families may acquire more financial capabilities at an earlier age than peers who are younger than their siblings for similar reasons, but no conclusions can be drawn based on this research.

Knowledge: Baseline to endline comparison

In comparing the endline to the baseline findings, it is notable that girls in the endline samples generally have more knowledge of banks and bank services than those in the baseline samples. Endline girls were more able to cite the nearest bank than baseline girls. The baseline girls had limited experience going into banks compared to the endline girls, and much less experience going on their own to conduct transactions than most of the endline girls, particularly the Intervention girls. It was noted in the baseline report that girls sampled at that time offered vaguely positive opinions about bank interiors, such as this:

Banks seem very clean and comfortable. People working at the bank are polite, and they interact with customers nicely. (Baseline FGD 13)

While baseline girls were familiar with a range of bank services, like the endline Comparison girls their knowledge tended to be limited. Most often they were familiar with those transactions that they had seen conducted with, or performed on behalf of, a parent or other relative. The lack of knowledge of some Comparison girls in the endline sample might be the result of the distance that they had to travel to go to the nearest bank.

Girls in the Intervention groups showed higher knowledge levels than endline and baseline Comparison girls. It is probable that as they get older, Comparison girls will gain more knowledge of banks and bank services, but FE + Savings had more knowledge at a similar age, and the Savings Only girls had more knowledge at an older average age. It is probable that the program interventions contributed to the increased knowledge levels of Intervention girls, particularly FE + Savings girls, whose average age is close to the Comparison girls.

Skills

Most of the data on skills is being gathered through pre- and post-tests administered only to financial education groups by their trainers. However, information was gathered from focus group participants regarding their power to manage money, which also offered them the opportunity to reveal their financial acumen. It was projected that the program will increase girls' decision-making power and therefore their financial empowerment (see Box: Skills Indicator). This is especially important for Mongolian girls, since women are usually in control of the household budget. When they are adults, girls who have acquired good money management skills will be better equipped to ensure the development of their families.

Skills indicator:

- Girls are increasingly able to make decisions over economic assets.

Skills findings:

- Girls in most baseline FGDs had control of their own money, while girls in all endline FE + Savings and Savings Only FGDs did;
- Girls in all endline FE + Savings and Savings Only had control of their own savings accounts, but no endline Comparison girls did.

Endline analysis

Information on girls' power to make decisions over their economic assets was elicited directly by asking girls who decided how they spent their money and who decided how they spent their savings. They were also asked if they discussed money and savings with their parents. Overall, it was found that girls exercised a great deal of autonomy over their spending and savings, though the comments of the FE + Savings girls showed that they had a greater range of money management skills than other girls.

For the most part, girls across segments at endline made their own decisions about how they spent their money, except one Comparison group in which girls reported having little control over their spending money. Most of the girls in the research received daily allowances¹⁴ on weekdays from their mothers to be spent on transport fare to school and lunch or snacks. Two mothers of Bayanzurkh Comparison girls who lived within walking distance of their school said that they did not give their daughters an allowance. They felt that the girls had no need for transport money and there was no cafeteria in the school offering food for sale.

Otherwise, girls in UB tend to have a good deal of autonomy in managing their daily expenses, according to both girls and their parents. The mother of a Bayanzurkh Comparison girl explained her position, which was typical of all parents interviewed:

She decides what to do with her money after I give it to her, but she may tell me what she's done with it later. (IDI Bayanzurkh Comparison mother)

Typical amounts that girls receive for their daily allowance range from 500-2,500 MNT (USD \$0.40 – \$1.99), an amount which parents usually calculate based on their knowledge of transport and other costs. No parents interviewed for the study gave their daughters weekly instead of daily sums, and only one girl from the Savings Only segment mentioned receiving an allowance on a weekly basis. This practice controls the ways that girls can spend money, particularly for discretionary costs, and it also tends to limit the sums of money that girls can use to build money management skills. Girls also reported that they were more likely to confer with their parents, especially their mothers, when deciding what to do with sums of money larger than about 20,000 MNT (USD \$15.94).

More Comparison girls than Intervention girls explained that their parents decided how they spent their savings. Some described the difficulties that they had in saving money, such as this Comparison girl from Songino Khaikhan:

I save money in a juice jar. My brothers and sisters keep taking my change money (from the jar). (Endline FGD 2)

Most Intervention girls had full control of their savings, and some described the implications of the savings skills that they have developed. For example, a Savings Only girl interviewed in Songino Khaikhan explained what it meant to have an account that she could use herself:

¹⁴ The term "allowance" is being used here in the sense of a sum of money distributed for a designated purpose. Unlike the allowance that many American children receive purely for discretionary expenses, allowances for most of the girls in this study were intended to pay for essential daily expenses like food and transportation.

I'm not dependent on my parents anymore. When I save at home, I don't earn any interest. If I save it in the bank, the interest grows and my savings grow. It's not nice to get money from my account. I only get it when I absolutely need it. (IDI Songino Khairkhan)

While this girl controls her account, she explained elsewhere that she received the money that she manages from her parents. She still feels that her account has increased her autonomy, as she does not have to ask them for money as often. Moreover, she uses her account to grow her savings and is able to resist reducing her balance on whims.

FE + Savings girls also described having more control over their savings than Comparison girls, and the ways they explained how they used their savings showed that many of them were exercising skills taught in the FE curriculum. A girl in a Songino Khairkhan FE + Savings group explained how she applies her money management skills while using her account:

Instead of buying sweets, I have started to buy groceries and things I need for my home. By enrolling in Temuulel I have learned to calculate my expenses. I put 2,000 MNT (USD \$ 1.59) in my account per week. (Endline FGD 5)

This girl understands that choosing to buy sweets affects her ability to spend or save money for other purposes, and she exercises her expense calculation skills to assess what she should do with her money. Other girls discussed weighing the different ways they could use their money, and several girls mentioned distinguishing between their wants and needs.

Most girls across the 3 segments described having limited discussions with their parents about money, and these discussions typically involved girls asking their parents for money for school, extracurricular, or social activities. In most cases, girls ask their mothers for money. One FE + Savings girl explained her reasoning for asking her mother for money:

We don't think dads know about such things. Usually moms are the ones who manage family finances. (Endline FGD 5)

Girls from poorer households sometimes felt that asking their parents for money was difficult, as this FE + Savings girl noted:

My mom gives me money every day, 500 MNT (USD \$0.40). Sometimes when my mom is low on money or has run out of money, I feel bad about asking for money. (Endline FGD 5)

The amount of daily allowance that this girl receives from her mother is relatively low compared to other girls, indicating that she may be from a poorer household. The fact that her mother sometimes runs out of money herself reinforces this idea.

Girls who had savings accounts, with or without FE, were more likely to discuss the accounts with their mothers than their fathers, though this was not always the case. FE + Savings girls were more likely to discuss money management and savings with their fathers than Savings Only girls. In some cases this was because their fathers were themselves more financially astute as entrepreneurs or international businessmen. However, FE + Savings girls were also more likely to say that they talked with their fathers about money management, even though their mothers still handled the family budgets.

A Low-Income Saver

This 16 year old FE + Savings girl lives in a ger in Songino Khairkhan with her mother, a disabled widow, and her uncle. Her uncle works in an iron factory and her mother receives a monthly 100,000 MNT disability payment and encourages her to save:

I had learned something about saving money before I took the FE class. My mother tells me that I should save and spend wisely, but I didn't have any savings before I started the FE class.

While her mother encouraged her to save, she first began saving after taking the FE class:

The most important thing I learned from the FE program was to distinguish between expenses that were important and not important for me. Important expenses for me are things like books and notebooks. Things that are not important are games and candy. FE has helped me with my future goals. I have learned how to save.

The FE program also introduced her to Temuulel savings accounts, but she encountered obstacles when she tried to open her own:

When I first went to open my account, I forgot to take a picture with me for the identification card. When I returned to the bank with the photo, it was closed. I went back again, but they didn't have any passbooks. Finally, 10 days after I first tried to open my account, I went back and got a passbook.

What motivated her to return to the bank to open her account?

I was persistent about opening the account because I want to help my family with our financial situation, and I want to learn about budgeting for the future. I was interested in savings before I took the FE class, but I didn't know about savings or how to save money.

Unlike many of the girls, she has a small income from part-time work, and just was given permission to work over the summer:

I make some money doing odd jobs. I wash someone's car, I can make 1,000 MNT, and if I fetch water I can make 500 MNT. On average, I'll make 2,000 MNT per week. That's the amount that I deposit into my Temuulel account on a weekly basis, though I may give some money to my mother if she needs it. I don't ask my mother for money on a regular basis, and when I do, I want to spend it on something useful.

Last summer I spent at home with my mother and younger sister. My mother gave me permission to work in the summer of 2011. My cousin works in a cafeteria, and I could work there washing dishes or waitressing.

She has two long-term reasons for saving money, but did not mention a target amount:

I have never withdrawn any money from my account since I opened it. My balance is approximately 50-60,000 MNT which I have saved in the year since I opened my account. My long-term goal is to save for my university tuition. My other goal is to help with my mother's illness. I want to help her go to the countryside to recuperate.

Opening and managing a savings account also proved to be an opportunity for many girls (Savings Only and FE + Savings) to discuss money with their parents, particularly their mothers. One FE + Savings girl, who had not discussed her account with her father, related this experience she had with her mother:

I went to XacBank myself and I opened a (Temuulel) account on my own. My mom told me to keep adding to my account because I can tend to be very wasteful. (Endline FGD 10)

Girls who showed the initiative to open an account often received encouragement from their parents to do so, and no girl with an account reported being discouraged from doing so. Three girls opened accounts at the urging of their parents; in two cases their parents were influenced by marketing at banks. In the last case, the girl's mother, a secondary schoolteacher, learned about the accounts when the financial education program was introduced in her school. Other girls, by contrast, opened accounts and did not initially tell their parents; some still had not told one or both their parents. Girls who took financial education also reported receiving support from their parents to do so, but in most cases they took the initiative to make their parents aware of the club. Of all the FE + Savings girls surveyed for the endline research, none reported not telling her parents at all about the course.

A small minority of girls learned about budgeting, money management, and banking from involvement in family decision-making with their parents. Some were included in family discussions about the monthly budget, and many of them lived in families where one or more family member was an entrepreneur. One exceptional FE + Savings girl lives with her grandmother and budgets for the household with her widowed mother, who is working and studying in Korea:

I'm generally in charge of the family budget. My mother allocates the money for household uses, but I manage the money for my transport and other things. I have been doing this since I was in 8th grade, and now I'm in 9th. Before that, my uncle lived with me and did the budgeting, but he moved out last year. (IDI Bayanzurkh)

Girls who have been exposed to budgeting at home, whether for their households or family businesses, have had an opportunity to acquire and exercise money management skills that was not available to most Comparison girls in the study. No Comparison girls in the endline study described being exposed to budgeting at home.

It is likely that the Temuulel program positively affected the financial autonomy and money management skills of girls in the Intervention segments at endline. The research showed that girls who were motivated to open their own accounts, or to enroll in financial education before opening an account, could demonstrate to their parents their interest in becoming more financially independent. It appears that the program gave these girls the opportunity to open a discussion about finances with their parents and to signal their desire to be encouraged and coached to manage their money responsibly. The financial education program in particular appeared to help girls open financial discussions with their fathers. The same opportunities to express a desire for financial autonomy and to exercise financial management skills were not available to girls at baseline, or to any girls in Mongolia under 16 prior to the establishment of the Temuulel program.

Skills: Baseline to endline comparison

The baseline study concluded that participating girls were given enough autonomy to develop basic

money management skills. Girls had unequal opportunities to develop more complex money management skills, and most were hampered by the small sums that they were allowed to control. By comparison, the endline Intervention girls had greater opportunities to develop their skills and discuss money management with their parents than baseline girls. Most importantly, they also had the possibility to save their money securely in a formal savings account, increasing their financial management options.

Opening a bank account greatly increased the autonomy that girls had over their money. The accounts offered girls confidentiality and security for their savings, which is rarely the case when girls save at home or in their wallets. This change represents a large increase in financial autonomy for Intervention girls.

Most of the girls in the baseline study reported having a good deal of control over the allowances they received from their families. However, one to two in each group said that their mothers controlled their spending, similar to the endline Comparison groups but more than the endline Intervention groups. Baseline girls were also much more likely to give and receive money from their savings to a sibling than girls in the endline, suggesting that their families may be more able to provide for the expenses of their children.

Most baseline girls also reported that financial discussions with their families were limited to making requests for money, more often to their mothers than their fathers. Some girls stated that they would turn to their fathers for money only if their mothers did not provide them with the sums they needed. For example, a girl in Bayanzurkh explained her strategy for accessing money from her parents in this way:

If I want to go out and see a movie with my friends and my mom won't let me, in this case I'll ask my dad. Then he allows me to go, and he gives me money. It happens during summer time a lot. (Baseline FGD 14)

This tactic demonstrates a kind of resourcefulness, but not the kind of money management skills that will help girls when they are responsible for their own or their future household's budget.

Several girls in the baseline also reported that their families had opened savings accounts in their names¹⁵, but the girls were not aware of how much money was saved, since they could not access them. One girl from the Bayanzurkh group shared her experience with her mother:

I have a savings account which my mom opened for me when I was little. We don't talk much about my savings. Mom just says it is for my future education. I only see the savings book. (Baseline FGD 8)

In such a situation, a girl may eventually benefit from her mother's efforts, but she does not have an opportunity to exercise the skills that will permit her to save when she has her own income, or becomes responsible for her own family's budget.

A small minority of girls in the baseline did participate in budgeting with their families, as revealed in FGDs and in interviews with parents. One Songino Khaikhan mother described how she did this with her family:

¹⁵ A number of Mongolian banks offer custodial savings accounts, including XacBank's Future Millionaire product.

We discuss the family budget. How much to spend on food, how much for clothing and other things. We sometimes disagree about it. For example, she might want to buy new shoes and I say "you already have shoes, why do you want new ones?" Or she may want new clothes but there is no money. (Baseline IDI Comparison mother)

The family laid out their priorities together, and the parents discuss expenses with their daughter, who was an only child. However, they currently are not able to save money. Their daughter therefore may have understood some aspects of budgeting but did learn about savings from her parents.

Girls in the baseline and the endline Comparison segments received a similar degree of support from their parents for their saving efforts. By contrast, endline Intervention girls had opportunities to either respond to or provoke their parents' engagement in their acquisition of financial management skills. Girls whose parents prompted them to open accounts were encouraged by their parents' efforts to help them manage their own money. Those girls who were motivated to open their own accounts or enroll in financial education then had an opportunity to demonstrate to their parents their interest in becoming more financially independent. The same opportunities to express a desire for financial autonomy and to exercise financial management skills were not available to girls at baseline.

Attitudes

To gauge girls' attitudes about money management and savings, they were asked their opinion of the importance of saving, and about their comfort level in discussing financial matters with parents or guardians. Also, they were asked about their experience with banks and their comfort level in banks and in interactions with bank staff members (see Box: Attitude Indicators). Having a positive attitude towards savings and banks should motivate girls to use acquired knowledge and skills to change their behavior.

Attitude indicators:

- Percentage of girls who understand the importance of saving;
- Percentage of girls who are comfortable asking bank staff about their products or services;
- Girls are increasingly comfortable discussing financial matters with a parent or guardian.

Attitude findings:

- Girls in all FE + Savings and Savings Only FGDs agreed that savings was important, compared to girls in just half of baseline FGDs;
- Girls in most FE + Savings and Savings Only FGDs were comfortable talking to bank staff, compared to girls in fewer than half of the baseline FGDs;
- Girls in endline Savings Only and FE + Savings FGDs were more comfortable talking about money with their parents than girls at baseline.

Endline analysis

In financial education classes, girls were taught the importance of savings, and what kinds of expenses are important to save for. These attitude indicators were designed to test girls' belief in the importance of savings. When asked about their attitudes towards the importance of saving money, girls in all segments agreed that savings were important. About a quarter of the girls in the Comparison groups suggested that savings were important for emergencies or their personal expenses, while one focus group suggested that they would need money for college in the future. Approximately half of the Savings Only girls identified savings as a tool for reaching general, unspecified future goals. Among FE + Savings girls, about a quarter identified specific needs such as emergencies, personal expenses, or contributions to their families. Interestingly, FE + Savings girls tended to talk more convincingly about the purpose and value of savings. For example, one girl discussed the name of the program this way:

The program's name is Temuulel, so it seems to me the message is to reach for something, to have a goal and try to reach it. (Endline FGD 11)

In other words, the name of the financial education and savings program served to remind her of her reason for saving money. Another Savings Only girl used a noteworthy metaphor to discuss her understanding of how interest accumulates in savings accounts:

I think savings is like a flower pot full of fertilized soil. The term account is the vase with lots of fertilizer, and the demand has less fertilizer. Right now, I have the flower pot with less fertilizer. (Endline FGD 12)

This girl's statement shows that her positive attitude about savings is reinforced by a practical understanding of the benefits of savings. It also offers a metaphor that may be meaningful to girls with rural roots, or to girls who have learned about horticulture in their schools.¹⁶ It cannot be said that savings accounts and the financial education program *create* generally positive attitudes towards savings in UB girls, which were also found in Comparison girls. However, the program may help to strengthen the positive attitudes that UB girls already have. It appears that owning their own savings accounts allows girls to test their positive feelings about savings early in life, and the financial education program offers them more sophisticated ways of thinking about the function and purpose of their savings. It is possible that girls who took financial education but who did not open Temuulel accounts exercise their knowledge of money management through savings at home, but that speculation cannot be effectively assessed without further study.

To better understand the effect of the program on girls' relationships to their families, girls were asked how they feel when they discuss money with their parents. Overall, girls were more comfortable talking with their mothers than their fathers. Comparison girls did not have much to say about their comfort level, and in the FGDs, they tended to discuss the timing and reason for their requests for money, as noted in the skills section. More Savings Only girls described their discussions about money with their parents as a kind of negotiation, which could become uncomfortable when their requests are denied. In some cases, savings accounts diminish their need to have these conversations with their parents, as this girl in Bayanzurkh stated:

Before, I used to get money from my mom when I needed it, but now that I have a

¹⁶ In several of the classrooms used for FGDs, tagged plants were growing on windowsills as part of class projects.

savings account, I take the money I need from there [i.e. the savings account]. (Endline FGD 6)

Gaining financial independence made it possible for some girls with accounts to make less frequent requests for money from their parents, which for some was a welcome change. Many FE + Savings girls also described their requests for money from their parents as negotiations. A girl in a Bayanzurkh FGD summarized the process this way:

Whenever I need money, I have to explain my reasoning the right way in order to get money. (Endline FGD 3)

Like the Savings Only girls, the FE + Savings girls seem to have a better understanding that money management involves choices on their part and on the part of their parents. Developing this understanding should make it easier for these girls to think rationally about financial decisions.

Other FE + Savings girls reported getting positive responses from their parents when they enrolled in financial education or opened an account. For example, a girl in the Songino Khaikhan FE + Savings sample said this about her mother's response to her decision to take part in the program:

I learned about the program and told my mother about it. My mom told me to spend my money wisely. She said it is important because now that I have my own account, I will be responsible for it. (Endline FGD 5)

Positive responses like this from their parents can encourage girls to exercise their money management skills. This also shows that parents can play a key role in reinforcing girls' positive attitudes towards savings by underscoring why they think savings are important.

Girls were also asked about their experiences in going to banks, to assess their comfort level in accessing formal financial services. Because they may only have gone with parents or other adults, Comparison girls were asked specifically if they have ever received banking services themselves. The more individual transactions that girls had conducted in banks, the more likely they were to describe negative experiences. Interestingly, most of the girls who described such experiences had also overcome them and learned how to prepare for and manage inadequate customer service.

In the Comparison segment, the majority of girls in two out of five FGDs had received services themselves, while only half the girls in two other FGDs had done so. In one FGD, none of the girls had received services themselves, and their responses were summarized by the note-taker in this way:

None of the girls have gotten individual services by themselves, but they said that when they went with family members or relatives, the bank tellers looked very kind. (Endline FGD 7)

Although these girls have not had to deal with tellers themselves, they have a positive feeling about them. By contrast, the response of another Comparison FGD where most girls had received bank services was described this way by the note-taker:

The girls said that basically bank staff members are friendly and polite, but it seems sometimes tellers do not pay attention to the customers. (Endline FGD 1)

The focus of the Comparison girls was on the visible service that the bank provided through its tellers,

rather than on the quality of the bank products or the processes needed to accomplish transactions. These comments make the girls seem reluctant to criticize bank tellers or the quality of their service.

Savings and FE + Savings girls all had individual experiences in banks, and their descriptions of their banking experiences tended to focus on the process of using their accounts. This Savings Only girl, for example, explained her banking experience over the past six months in this way:

My mom gets her salary from Khaan Bank, and I use XacBank because I have an account there. I don't usually communicate with the teller. But I think because tellers work and communicate with many people they have good communication skills. I once asked the teller whether my account was eligible for an incentive, but it was not. (IDI Songino Khairkhan)

This girl had a positive view of tellers, but her attitude was based on her actual experiences, her judgment of what makes a teller effective, and on her own ability to access information she needed to use her account through the teller. FE + Savings girls, who were more numerous than Savings Only girls in the sample, had more negative experiences to report than girls in other segments. Like the Savings Only girl quoted above, they also tend to evaluate the tellers not just on their superficial response, but they also understand the work of bank tellers better than Comparison girls:

I went to receive information on the services of XacBank. The tellers had really good communication ethics. But some of the tellers tend to be really mean and angry. So every time I go to the bank and get a code to see the tellers, I pray that I don't have to go to the angry scary tellers. (Endline FGD 4)

This quote shows two important things. First, the girl understands how the bank's service works, and the qualities that make a good teller. Secondly, she shows that, armed with that understanding, negative service experiences do not deter her from using her account. Not every girl has the maturity to overcome an indifferent or impolite reception from a bank teller, but girls with banking experience tend to be more comfortable with banks.¹⁷

Questions about girls' attitudes towards banks show that girls who participated in program interventions developed stronger rationales for their positive attitudes towards savings and were more comfortable in banks than Comparison girls. While Comparison girls also had positive attitudes towards savings and showed a certain comfort in banks, their lack of experience may prevent them from further developing their money management acumen through formal financial services, at least in the short run.

The differences in attitudes between Intervention and Comparison girls may be partially explained by the Intervention girls' participation in the Temuulel program. Girls with accounts, whether or not they have taken FE, must have access to some financial resources to make the initial deposit. As a result, girls with more means are more likely to open more an account, such as those in the FE + Savings and Savings Only samples. Older girls, such as those in the Savings Only segment, may also be more likely to have developed positive attitudes about money management and banking through interactions with adults. Furthermore, the Comparison girls were younger, on average, than the two Intervention groups; but they were less than half a year younger than the FE + Savings girls. Therefore, it seems unlikely that the

¹⁷ Other girls noted challenges posed by bank procedures that did prevent them from using their accounts, such as identification requirements or a lack of passbooks when they enrolled. These situations are discussed further in the section on institutional impacts.

differences in attitudes found between Comparison and Intervention groups in the endline may be understood solely as a result of differences in sample demographics. In short, girls with individual experience in banks, and who are educated about how they work, are more likely to become astute banking consumers at an earlier age than girls who do not have the same exposure.

Attitudes: Baseline to endline comparison

The attitude responses of baseline respondents were similar in some ways to those of endline Comparison respondents. Only half the baseline FGDs agreed that savings were important compared to all the endline FGDs, but more baseline respondents expressed difficulty in setting aside money. This may be because they came from lower-income households. Like endline Comparison girls, baseline girls had limited discussions with their parents about money matters. A few more girls in the baseline stated that they would ask their fathers for money when requests to their mothers were not granted.

Intervention girls at the endline were more comfortable in banks than girls at baseline, fewer than half of whom had conducted a transaction alone. More importantly, some girls who had received bank services noted that doing so made them feel proud and more mature. This positive feeling of maturity was noted by some of the Intervention girls in the endline. The focus of endline Intervention girls on describing banking processes when talking about their banking experiences suggests that using banks is no longer novel to them. They may view being a banking customer as a behavior that has become a normal part of their lives, as discussed in the next section.

Behaviors

Behavioral data were elicited both through the socio-demographic questionnaire and in focus group discussions, and covered both savings activities and spending activities. The data offer a snapshot of how girls earn and spend money, how and where they save it, and what they contribute to family development. MIS data on Temuulel account transactions provides further information on the behaviors of girls with accounts. The project seeks to empower girls to save their money, making some of that money available for their own or their families' development. The project anticipated that girls with savings accounts and/ or those who have taken financial education will ultimately save and contribute more to their families, an effect which is part of a long-term process that is unlikely to be complete during the lifetime of the study.

Behavior indicators:

- Percentage of girls who follow their savings plan and have experience or practice saving regularly;
- Girls increasingly invest in their own or families' development through educational support for themselves or younger siblings.

Behavior findings:

- At endline 100% of Savings Only and 97% of FE + Savings girls reported saving money, compared to 74% of endline Comparison girls, but almost no girls at either baseline or endline followed savings plans.
- Endline Savings Only girls contributed more to their families than baseline Savings Only girls, but endline FE + Savings and Comparison girls contributed less than baseline FE + Savings and Comparison girls.

Endline analysis: Accessing and spending money

In focus groups, most girls said that they had access to small sums of money on a regular basis for their daily expenses, but that they only had irregular access to larger sums. In interviews with mothers, it became clear that in most families, allowances are distributed on a daily basis to adolescents for everyday school expenses like transport and snacks. In a very few cases, mothers included a small daily allowance for mobile phone credit, while in other cases, mobile credits were budgeted on a weekly or monthly basis. Mothers gave girls sums in the range of 4,000 – 15,000 MNT (USD \$3.19 – \$11.95) for weekend outings to watch movies, participate in clubs or sports teams, or celebrate birthdays with friends. It was not uncommon for girls to request these irregular sums from their fathers rather than their mothers, though some girls felt that they could never discuss any financial issue, including requests for outing money, with their fathers. Many girls also received gifts on holidays like Naadam, either from their parents or visiting relatives.

None of the girls was working full time for a wage at the time of the focus group discussions. In fact, in individual interviews, parents were strongly opposed to the idea of girls working instead of attending school. One Comparison girl reported working for compensation during the school year at the time of the research, but some girls worked for family members or neighbors for indirect compensation, or no compensation at all. Many more girls engage in summer work, including 10.5% of the overall Comparison segment, 12.9% of the FE + Savings segment, and 60% of the Savings Only segment. The average amount earned per week by those who worked during the summer was much greater for Savings Only girls than either Comparison or FE + Savings girls, at 59,667 MNT, 28,750 MNT, and 21,250 MNT, respectively (USD \$47.54, \$22.91, \$16.93). The median wages were more consistent, with the median for Savings Only summer wage earners at 32,500 MNT (USD \$ 25.90), compared to 22,500 MNT (USD \$17.93) for the FE + Savings segment and 20,500 MNT (USD \$16.33) for the Comparison segment. During the school year, however, girls do not receive these wages and apparently are usually discouraged by their parents from working.

When girls were asked what they needed money for, most mentioned daily expenses such as snacks and transport. They also mentioned birthdays and gifts; outings with friends; makeup and accessories; clothes; and cell phones, cell phone credit, and internet fees. In half of all the focus groups, girls felt they required money for educational needs, including books and school fees.¹⁸ None of the girls

¹⁸ Despite primary and secondary public education being “free,” it is very common in ger districts of UB for families to be asked to contribute money on a frequent if irregular basis for their children’s schools or classes. This is reportedly one of the biggest complaints that parents have about UB schools (UNICEF, 2003).

mentioned needing money for savings, although they may have interpreted the question as pertaining solely to expenses.

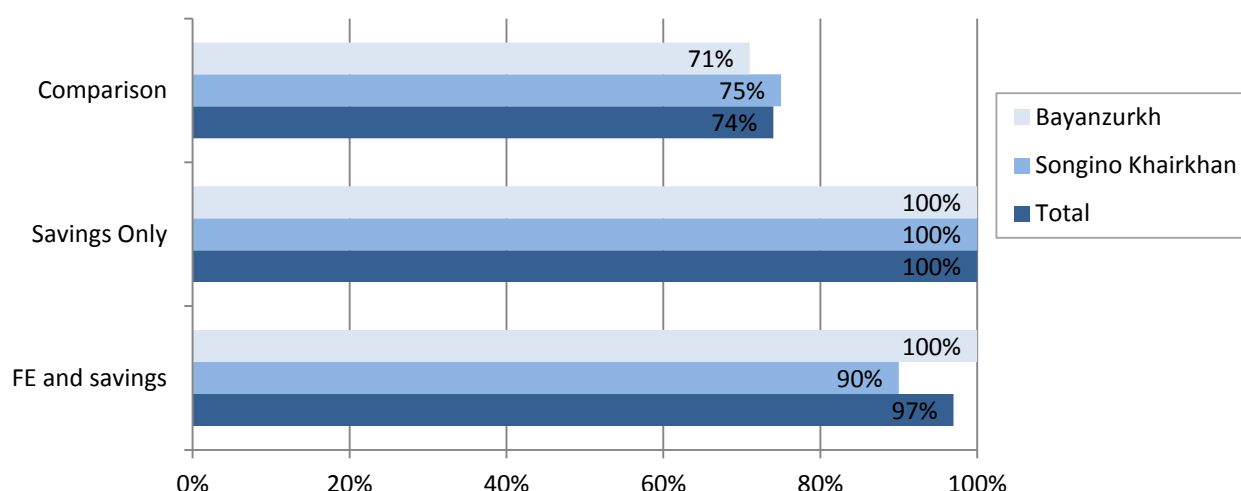
Saving money

Data on saving was gathered using two tools. The SEP tool gathered self-reported data from girls concerning where they save money and how much they save. These data were intended to include both formal and informal savings. MIS data from XacBank was also used to understand the savings patterns of Intervention girls who participated in the study. Because the sample is small, these data cannot be extrapolated to explain behaviors beyond the samples, but they do offer suggestions as to some possible broader behavior patterns.

SEP evidence on savings

Analysis of the socio-demographic data revealed that the proportion of girls who save was higher in the FE + Savings and Savings Only groups, at 97% and 100% respectively. In the Comparison sample, 74% overall reported saving any money, as shown in Figure 6.

Figure 6 - Percentage of girl savers at endline, by segment and district



What is most noteworthy about the SEP data on savings is the median amount that savers reported they had accumulated (see Figure 7). Girls in the Comparison group who saved reported having median current savings of 10,000 MNT (USD \$7.97), which is actually more than the 6,000 MNT (USD \$4.78) that girl savers in the Savings Only segment reported. Savers in the FE + Savings segment reported a median total of 25,000 MNT (USD \$19.92), 4 times as great as the totals of Savings Only Girls, and 2.5 times greater than totals of Comparison girls. This result is especially surprising considering that Savings Only girls are older than girls in both other segments. Older girls may also have more of their own expenses than younger girls, which Savings Only girls may pay for using the money in their accounts.

Savings Only girls also reported contributing in the largest proportion (64%) and in the largest amounts (12,000 MNT, or USD \$9.56) to their family's weekly budgets, which may represent a diversion of potential savings (see "Contributing to the family," below, for intergroup comparisons). At the same time, they also do more summer work than other girls in the study, meaning that they earn more of

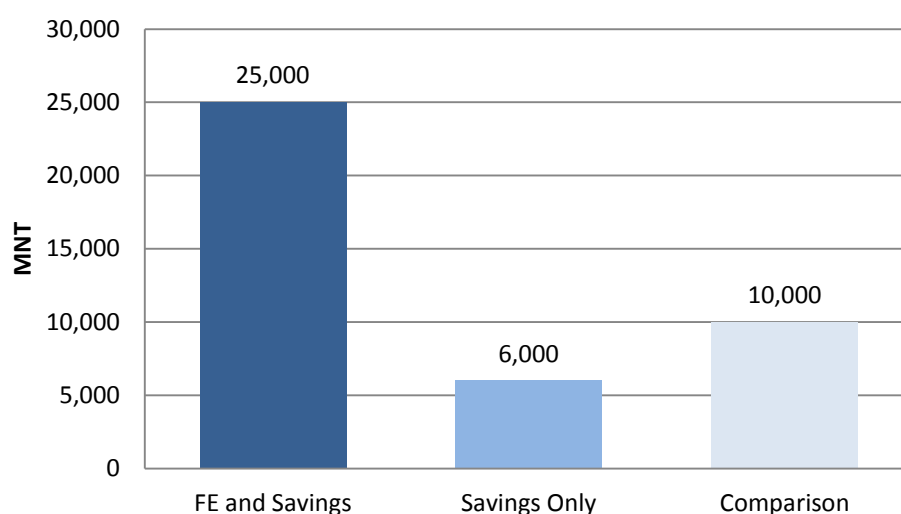
their own money which is then available to save.¹⁹

For girls without an independent income, saving money means not spending all of the allowances that they are allotted by their parents. One FE + Savings girl recognized that her savings were still connected to her family:

Saving money for me is basically helping out my parents by saving their money.
(Endline FGD 4)

This girl recognizes that all of her financial resources are given to her by her parents, and that her savings habits help her parents as long as she is still dependent on them.

Figure 7 - Median savings by segment, self-reported



MIS evidence on savings

MIS data from XacBank on Temuulel account transactions provided further information on the savings habits of girls with Temuulel accounts. The MIS data showed that the 31 FE + Savings girls held 24 demand and 9 term accounts, and the 12 Savings Only girls held 14 demand and 1 term accounts.²⁰ Furthermore, accounts held by FE + Savings girls had higher average monthly deposits (USD \$5.31) and withdrawals (USD \$3.14), and a more positive average monthly change in balance (USD \$2.17) than Savings Only girls (see Table 8 for amounts in MNT and totals across segments). FE + Savings accounts also had higher average total deposit values (just over USD \$8 more) and average maximum account balances (over USD \$6 higher) than the Savings Only accounts. These data are derived from a small sample and can't be generalized to all Temuulel account holders.

¹⁹ This does not necessarily mean that they *have* more money, since other girls may receive more in gifts or in discretionary funding from their parents.

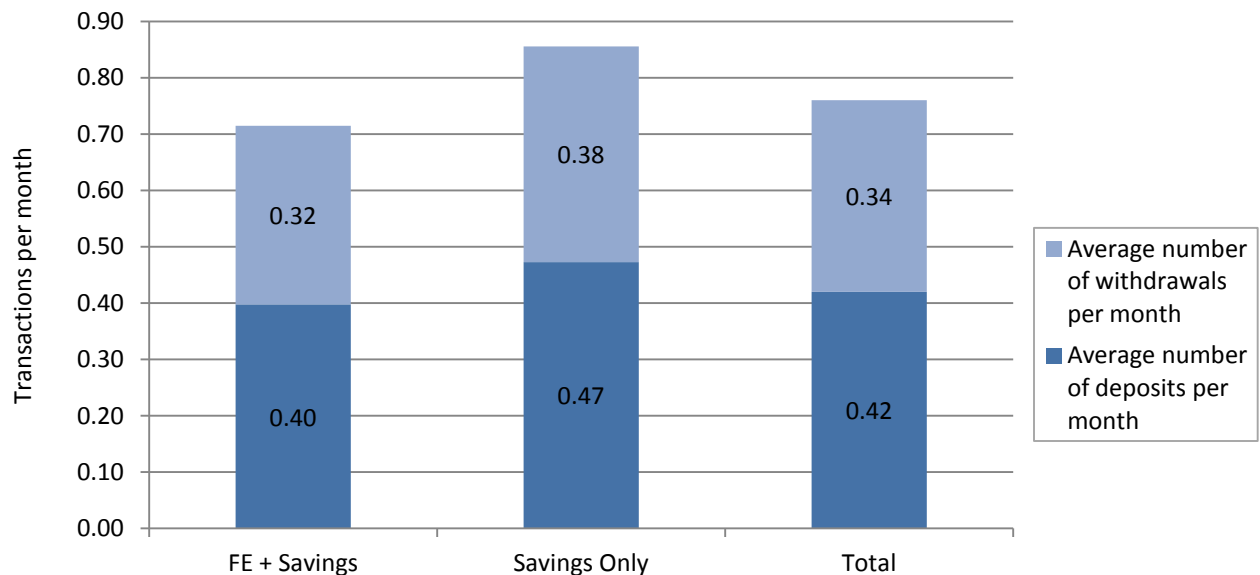
²⁰ There is not a one-to-one match between accounts and clients. Some girls held term and demand accounts simultaneously, while some held successive term accounts.

Table 8 - MIS data on FE + Savings and Savings Only accounts

	Average monthly deposit		Average monthly withdrawal		Average monthly change in balance	Average total deposit value		Average maximum account balance	
Segment	MNT	USD	MNT	USD	USD	MNT	USD	MNT	USD
FE + Savings	6,664	\$5.31	3,939	\$3.14	\$2.17	53,712	\$42.80	27,002	\$21.52
Savings Only	4,426	\$3.53	3,351	\$2.67	\$0.86	44,457	\$35.42	18,846	\$15.02
Total	5,965	\$4.75	3,755	\$2.99	\$1.76	50,820	\$40.49	24,453	\$19.48

Accounts held by Savings Only girls registered more frequent activity than accounts held by FE + Savings girls. As Table 9 shows, accounts held by Savings Only girls registered .86 transactions per month compared to .71 per month for FE + Savings accounts. Again, because many of the FE + Savings accounts were term deposits, fewer transactions, particularly withdrawals, might be expected from accounts held by FE + Savings girls. However, the difference between the average number of deposits and the average number of withdrawals was minimal: .08 for accounts held by FE + Savings girls, compared to .09 for accounts held by Savings Only girls. While it is not possible to generalize these results to the larger population of participating girls, Savings Only girls in the study maintained a higher level of account activity than FE + Savings girls, which may be related to their income from summer jobs. It is possible that Savings Only girls are less deterred by the transaction costs²¹ of banking, because they are older and are likely to have more autonomy than younger girls to travel to the bank.

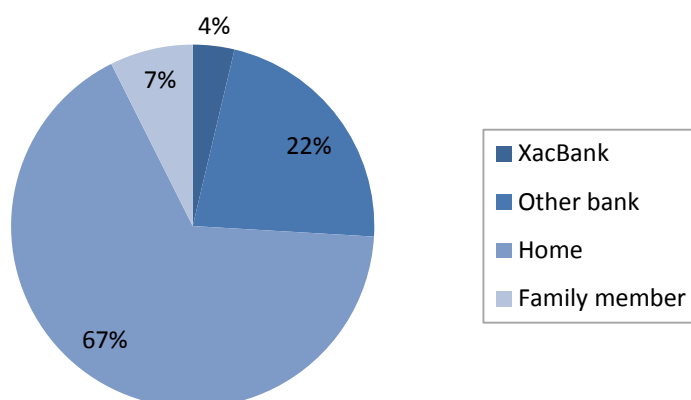
Table 9 - Account activity for FE + Savings and Savings Only segments



²¹ Transaction costs are defined as all the costs involved in making a transaction, including time and money spent on transport and the opportunity costs of not engaging in an alternate activity, as well as any fees charged to process the transaction itself.

Girls in different segments also tended to save in different locations. The primary savings location for 100% of the Savings Only girls and 97% of the FE + Savings girls was XacBank. The remaining 3% of the FE + Savings girls used another bank as their primary savings location.²² Comparison girls saved in a wider variety of locations, with 47% saving primarily at home, which included saving money in their wallets. Nineteen percent reported that their primary savings location was a bank, but only 3% deposited primarily at XacBank. The remaining 4% saved their money primarily with someone else such as an elder sibling or a family member (see Figure 8).

Figure 8 - Primary savings location, endline Comparison segment



Most girls did not report using a secondary savings location, and no Comparison girls did. All of the girls who reported using a secondary location in response to the SEP questionnaire chose to save in a bank other than XacBank, including 23% percent of FE + Savings girls and 8% of Savings Only girls. In FGDs, some girls in the two Intervention groups described saving methods that combined saving at home and at a bank. For example, this FE + Savings girl described her strategy like this:

I save my money day by day and at the end of the month, I put it in the bank. Putting it in the bank weekly is too soon for me, and too time consuming,²³ so until I put it in the bank, I save it in my drawer. (Endline FGD 5)

So while some girls saved at home, it is possible that girls with accounts did not consider storing money at home to be proper saving, at least when responding to the SEP questionnaire.

Some of the Intervention girls also discussed their intended behavior when they are no longer eligible for the Temuulel savings product. In endline FGDs and interviews, two girls with Temuulel accounts discussed what they intended to do with their accounts after they were too old to continue using them. They both mentioned that they intended keep an account at XacBank, such as this FE + Savings girl:

²² Girls with savings accounts were selected for the sample based on the existence of XacBank MIS records for their accounts. It was not possible to filter girls prior to the research based on use of accounts at other banks.

²³ Presumably the transaction cost of travel to and from the bank is what takes too much time, but this was not made clear in her comments.

My Temuulel account will be important to my future. It has an age limit. I will open an account when I am an adult, and of course I will keep it at XacBank. (IDI FE + Savings Bayanzurkh)

This would represent a positive effect for XacBank's customer retention. From a financial education perspective, it would be preferable for the girl to weigh her different savings product options when she reaches adulthood, demonstrating that she understands informed financial decision making.

Changes and challenges in saving money

In all of the Savings Only and FE + Savings FGDs, there were girls who reported that their behavior changed as a result of their participation in the program. One FE + Savings girl explained how the program changed her savings behavior:

I tried to manage my money the right way, but I spent more than I was supposed to spend. Now, if I receive a gift, I save half in my account. That way it's like I didn't even have it in the first place. (IDI Bayanzurkh)

Many other girls saw a benefit to the transaction costs incurred when accessing savings deposited in their Temuulel accounts, such as this Songino Khairkhan saver:

Saving money at home is not safe because I can spend it easily. I can't always spend the time to go to the bank, so my money is not easy to spend there. It's very important for saving. (IDI, Songino Khairkhan)

In other words, the transaction cost associated with travel time²⁴ to the bank serves as a deterrent to unplanned spending, thereby encouraging savings accumulation.

Despite the positive attitude that most girls had about saving, in practice saving proved to be difficult for many in all three segments of the study.

Some of the problems that girls faced were related to where they saved, but others had to do with how they saved. All of the girls in the Comparison segment FGDs complained about the difficulties in saving money, compared to a majority of the FE + Savings segment and half of the Savings segment. Some of the difficulties were shared across groups, such as lacking willpower or a savings strategy. But only Comparison group girls, who usually save at home, stated that their savings had been lost or stolen (in 2 out of 5 FGDs), and only Intervention girls complained about problems with banks.

Most of the Comparison girls described saving money in their wallets, in a purse at home, or in a piggy bank. These strategies were judged to be convenient, but many girls acknowledged that they were risky in stories about the challenges of home savings. A girl in Songino Khairkhan described how her plan to save for a cell phone was derailed:

²⁴ She did not explicitly mention transport costs as a deterrent, but this was discussed as an important transaction cost for some Temuulel account holders.

Profile of an Ideal Saver?

In the baseline impact assessment, we suggested that one of the Songino Khairkhan savers whom we interviewed along with her mother might serve as an ideal saver. We were able to interview both again for the endline research. While Odval presented a positive picture of her money management, her mother revealed potential harmful effects of some of her financial practices, as discussed in the text box “Mother of an Ideal Saver?” in the Impacts on Parents section.

Odval (a pseudonym) is now a 15 year old ninth grader. She lives in a ger in the Songino Khairkhan district with her parents, her 11 year old brother, and her two year old baby sister. Her mother sells auto oils and lubricants, and Odval fills in for her when she is sick. Her step-father is a seasonal taxi driver who is currently not working.

She initially opened her Temuulel account after her brother broke into her piggy bank. At the time, she was saving her money to replace her lost cell phone with one more expensive than her parents wanted to buy. She realized that she needed a more secure place to save. Having seen a Temuulel ad on television, she attempted to open an account, but first went to Khaan Bank:

When I had accumulated 20,000 MNT (USD \$15.97), I went to open a savings account at Khaan bank. They told me 'You are not 16 years old.' Then I went home.

Despite being rebuffed at one XacBank branch for lack of a birth certificate for identification to open an account, she persisted:

I came alone to the bank and opened savings account. I liked that if I have only 3000 MNT (USD \$2.39), XacBank would let me open a savings account. It doesn't matter if I am young or old or what amount of money I have.

Odval reported that she was going to save for her university education. Odval was unusual among baseline girls in that she was able to distinguish between her short-term savings goal (a cell phone) and her longer term goal of paying the costs of attending university. She tried to save 1200 MNT (USD \$0.96) per week in each account.

By the time of the endline, Odval still had her demand account, but said that the term account she had at the baseline had matured. She had a clear strategy for the two accounts:

I like to use my term for educational savings and my demand for daily use. I deposit one time per week, using money I get from the daily allowance my mother gives me. The last time (I withdrew) was two months ago, when I bought school supplies.

FYI, the transaction report has no record of a term account for G. Badam (I assume this is her)

While Odval has not helped her mother learn about other XacBank savings accounts, Odval's peers are learning about Temuulel from her. Her savings experience makes her feel more positive about her future and her ability to plan, but she doesn't think that formal savings accounts are for every girl:

I talk with other girls about my account. Sometimes they are jealous about it. I sometimes convince girls to open their own accounts... For me, I am goal-oriented. I have many goals and I am trying to save for the future. Maybe other girls lack initiative. Others may be from families with financial problems. Or, maybe some girls don't care about their future... I'm confident that I can achieve my goal if I try to be honest and steady.

Finally, her experience with XacBank has instilled a sense of customer loyalty in her as she thinks about her future:

When I reach the age of 18, I am going to convert my Temuulel account to an adult savings account at XacBank.

Odval's financial practices seem ideal from her interview, in contrast to some of the comments of her mother.

I had a piggy bank with 20,000 MNT (USD \$15.94) in it, but my younger brother broke it. Then my mom got the money.²⁵ I got another piggy bank, but unfortunately its bottom opened up and I lost the money I saved again. (Endline FGD 1)

While some girls in Comparison FGDs described instances where their home savings were lost or stolen, none of the girls in the Intervention groups complained about this problem.

One problem that was shared across segments was the temptation to spend saved money. Not surprisingly, this problem was most frequently cited among Comparison segment girls. However, some of them overcame this difficulty by saving their money with family members. For example, a girl in Bayanzurkh turned to a sibling for help in saving money:

My younger brother saves money very well. If I find money, I give it to him to save for me. He criticizes me when I take the money back too soon or when he thinks the sum is still too small. Luckily, sometimes I forget my saved money. (Endline FGD 8)

When she says she is “lucky” to forget her saved money, she means that there are times when she thinks she has no money, but suddenly remembers her savings with her brother. The advantage of saving with family members is that the money is out of a girl’s immediate control, helping her to resist temptation. Several Comparison girls recognized that using a bank account is another means to help them resist temptation, such as this Songino Khairkhan girl:

I am still too young to have a savings account at the bank. Therefore it is impossible (for me) to save money at the bank. I save some money at home but I spend it quickly with my older sister. (Endline FGD 1)

This girl realizes the value a bank account could have in helping her to accumulate savings, but she is apparently unaware that it is possible for her to open a savings account at XacBank.

Resisting temptation was not a problem limited to Comparison segment girls, though girls in every Comparison segment FGD complained about it. Girls in both Savings Only FGDs and four out of six of the FE + Savings FGDs also explained that they tend to use their money when they are tempted. One Savings Only girl described her savings efforts like this:

I save my money and put 3,000-4,000 MNT (USD \$2.39 - \$3.19) into my account after it accumulates (at home). But now I keep using money from my savings so I haven’t saved so much. (Endline FGD 6)

While this girl was putting her money into her bank account, her situation seems very similar to girls who store money in their wallets and find that they are unable to accumulate larger sums over time. Her ready access makes it easy for her to use her account, and she has not been able to build her balance.

Some of the Intervention girls, having recognized that they may be tempted to withdraw money from a demand account, used term accounts to help them save more money. This was mentioned in less than half the FE + Savings and Savings Only FGDs, and two Intervention girls also described similar uses. This FE + Savings girl gave the most concise description of her behavior:

²⁵ The girl did not explain what her mother did with the money.

I have two accounts, a term account and a demand account. I put money in my demand account when I need to use it for everyday things. I put money in to terms account to increase my savings. (Endline FGD 4)

With one exception, all the girls who mentioned using term accounts as a strategy to increase their savings more rapidly than demand accounts had or were already using a term account in conjunction with a demand account. This means that girls with knowledge of term accounts had adequate resources to sustain balances in two accounts.

Girls across segments were also challenged in planning their savings. This problem may be more acute for girls who do not effectively limit their access to their savings through the use of a bank account or family member, but using these methods does not necessarily help them in planning their savings, as the previous example shows.

Some girls with accounts encountered problems in accessing bank services, including transaction costs involved in getting to the banks,²⁶ inattentive or rude service, and the low supplies of account products, notably passbooks. Passbook problems were usually encountered by more than one girl in a single focus group, as girls often accessed their accounts through the same branches. Some girls who were unable to obtain passbooks had the motivation or resources to return to the branch to pick one up. In some cases, this discouraged girls from using their accounts. Other girls overcame this challenge by repeatedly visiting the bank, demonstrating a strong motivation to save (see the “Profile of a low-income saver” on p. 28.)

Contributing to the family

As the data on income showed, most girls in the study were still dependent on their families for money. Therefore, they could not be expected to invest heavily in their families’ development. As one Savings Only girl said,

I don’t usually need to spend money. My parents take care of everything. (Endline FGD 6)

While most girls received most of their money from their parents, many of them did spend money occasionally for the benefit of their families. Essentially, many girls were merely returning money they had been given back to their families as new household needs arose, taking precedence over the girls’ expenses.

Most of the Comparison girls contributed small amounts of money to buy everyday items for their household, to purchase gifts for siblings, or to loan back to their parents. One girl planned to contribute to her family in this way:

I will buy a stuffed animal for my little sister’s birthday because she likes them so much. (Endline FGD 2)

²⁶ None of the girls mentioned opportunity costs – the time that they would not be able to use doing something else while they went to the bank. Opportunity costs may be an issue for girls with very busy extracurricular activities.

She viewed this gift as a contribution to her family, probably because she had never been in a position to contribute significantly to family well-being.

The Savings Only and FE + Savings girls, by comparison, were more likely to discuss contributions that assisted their families through the purchase of home necessities or in smaller numbers, to invest in their education. One FE + Savings girl explained how she has changed her behavior like this:

Instead of buying sweets, I have started to buy groceries and things I need for my home. By enrolling in Temuulel, I have learned to calculate my expenses to better spend my money. (Endline FGD 5)

This participant clearly links the financial education program with her more practical spending patterns and the skills it has inculcated in her, which suggests that the program has impacted her behavior. Other girls in the FE + Savings group mentioned ways that they contributed small amounts to advance their own educations, such as this Bayanzurkh girl:

I almost never withdraw any money (from my Temuulel account). The last time I did was in September to buy books and clothes for school. I bought the books for a pre-medicine class that I was taking after school. I'm planning to use the savings on more of these classes before I start university. (IDI Bayanzurkh)

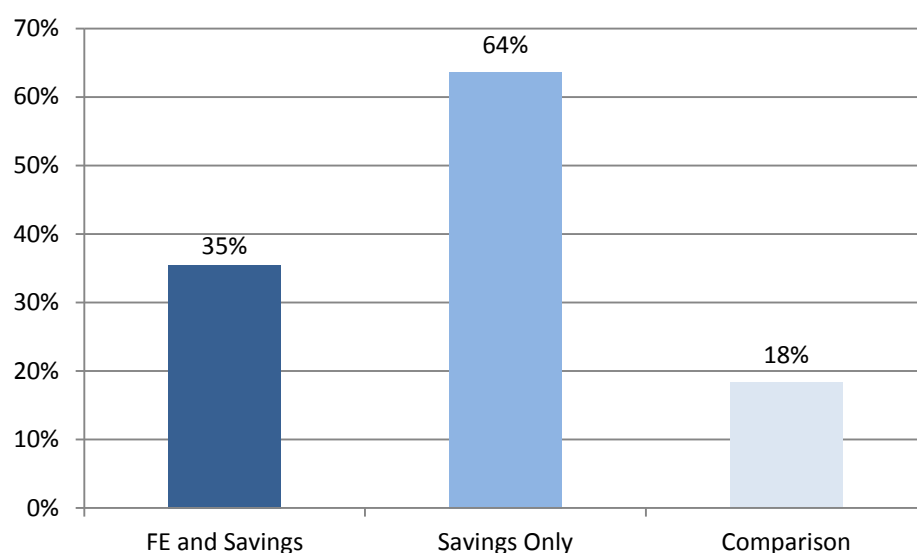
This girl was precocious in terms of her preparation for university. She was typical of Intervention girls, who tended to save their money in anticipation of attending university. The following FE + Savings girl expressed this succinctly:

I initially opened this account in order to save my Human Development Fund money. My parents support my decision. Generally my mom supported me because she thinks (these savings will be) important when I become a college student. (Endline FGD 10)

While she did not initially have an idea what she would do with her savings, the girl had a ready source of cash in the government's HDF payments. The girl or her parents received the money from another bank, and the girl took the money to XacBank to deposit into her Temuulel account. Her parents encouraged her to deposit into her account and to use the savings during her college education. Younger girls may not be as sensitive to the expectation that they will attend university, or to the expense that their families are likely to incur when they do begin their post-secondary schooling.

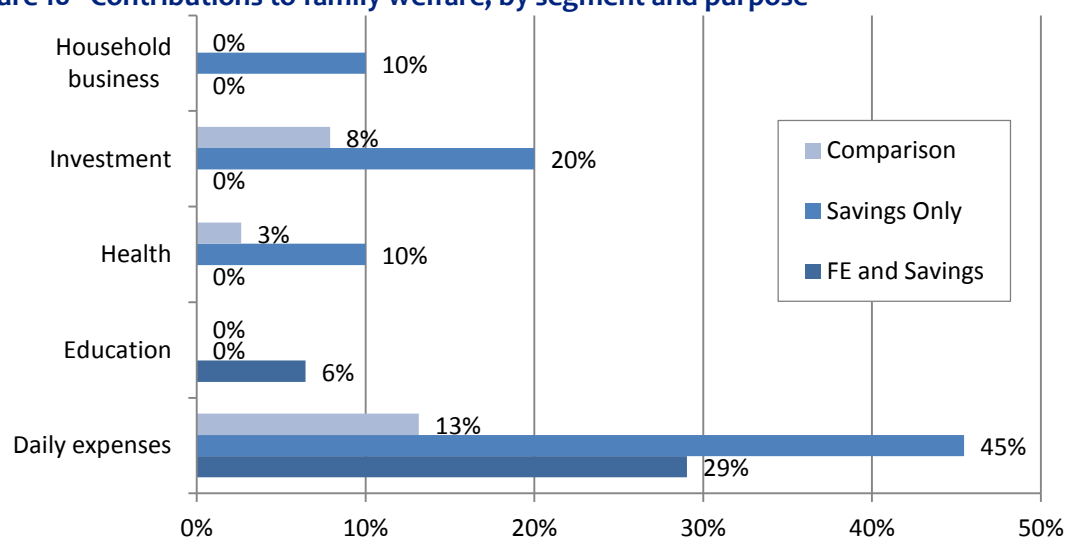
The SEP data showed that Intervention girls are more likely to contribute to their families, as shown in Figure 9. Only 18% of Comparison girls reported used their own money to contribute to their family's well-being, compared to 35% in the FE + Savings segment and 64% in the Savings Only segment. The differences may be explained in part by the different age of the girls in each of the samples, particularly the Savings Girls, who are more independent, more likely to have summer income, and also are beginning to seriously consider the cost of their post-secondary educations to their families.

Figure 9 - Percentage of endline girls contributing to family welfare, by segment



The SEP data also shows that the contributions of girls in all segments were directed mainly to support the daily expenses of their households (see Figure 10). A small number of girls in the Comparison group also contributed to their families' health and investment expenses, while 6% of FE + Savings girls contributed money for education in their families. Savings Only girls contributed for the most diverse reasons, but surprisingly none claimed to currently contribute to her families' education costs. The willingness of Savings Only girls to contribute to their families may be linked to their household occupations. Specifically, 46% of the parents of Savings Only girls were self-employed, out of all the parents of Savings Only girls for whom a profession was reported. The next most common reported professions were government workers at 17% and teachers at 13%. The daughters of self-employed parents may be more likely to contribute to their families compared to girls with parents in other occupations; they may also be more likely to open savings accounts.

Figure 10 - Contributions to family welfare, by segment and purpose



The SEP data also showed that Savings Only girls who contributed to their families also spent the most money in doing so, as shown in Table 10. The median contribution of Savings Only girls per week was 12,000 MNT (USD \$9.56), three times more than the contribution of FE + Savings girls, and four times the amount contributed by Comparison girls. Because these girls work more over the summer than the girls in other segments, it is possible that they are using their summer income to help their families.

Table 10- Median weekly contribution to family welfare

Segment	Contribution (MNT)	Contribution in USD \$
FE + Savings	4,000	\$3.19
Savings	12,000	\$9.56
Comparison	3,000	\$2.39

Why do Savings Only girls contribute so much more frequently, and in greater amounts, than girls in other segments? Girls in this segment were older, and a higher proportion of Savings Only girls worked over the summer than girls in the other segments. A large proportion of these girls are also from families with self-employed parents, whose income is likely to fluctuate more than that of salaried parents, affecting the household budget. They may therefore feel more obligation to contribute based on their increased awareness of household needs, and many of them have the means to make contributions than younger girls who do not yet have income from non-family sources, seasonal or otherwise. It is possible that managing their own accounts has increased their sense of the value of money, but if that is the case then it might be expected for FE + Savings girls to also show greatly increased contribution levels in relation to the Comparison sample. Like Savings Only girls, FE + Savings girls are also older than the Comparison girls, but based on their qualitative comments, they seem to be more aware of the needs of their families. FE + Savings girls were not able to contribute to the degree or in the amount of Savings Only girls, which should not be surprising considering their lower average age and their lower frequency of summer employment.

Behavior: Baseline to endline comparison

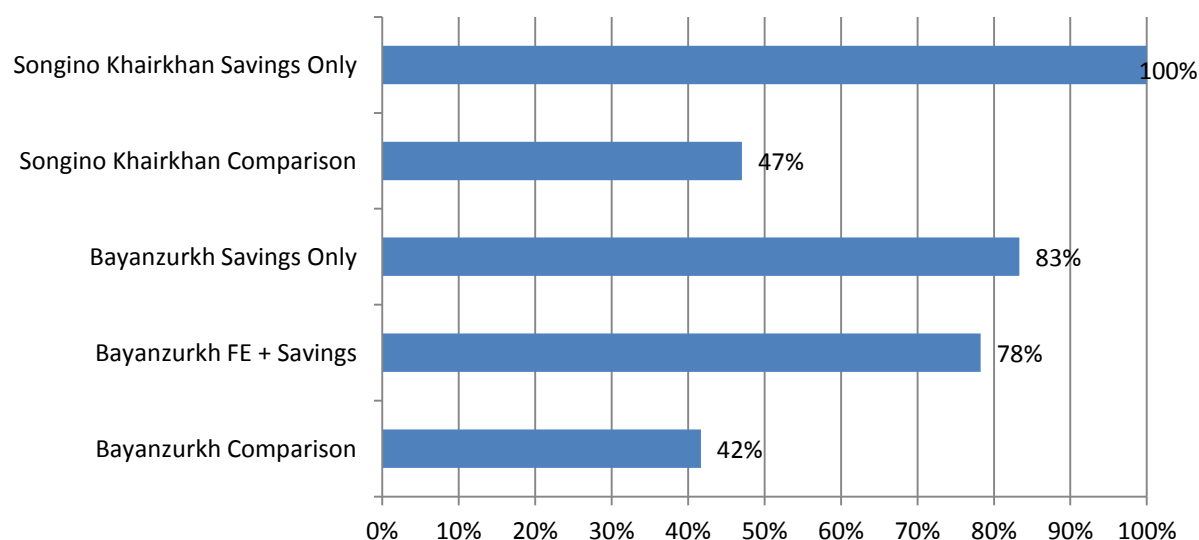
In order to present the most relevant information for assessing the Temuulel program, the baseline to endline comparison focuses on the specific behavior indicators cited at the beginning of the Behaviors section, which ask 1) whether girls are following their savings plan and have experience or practice saving regularly; and 2) if girls increasingly invest in their own or families' development through educational support for themselves or younger siblings.

Saving money

More girls in the endline research reported saving money than girls in the baseline research. The only baseline sample segment in which 100% of girls reported saving was the Songino Khairkhan Savings Only segment, while Bayanzurkh Savings Only girls reported an 83% savings rate. By comparison, 100% of all Savings Only girls in the endline reported that they saved. FE + Savings girls at baseline reported saving at a rate of 83%, compared to 97% at the endline. The Bayanzurkh and Songino Khairkhan baseline Comparison groups reported saving 42% and 47% of the time, respectively, compared to 71% and 75% at the endline. Increased percentages in the Comparison sample may be related to the higher

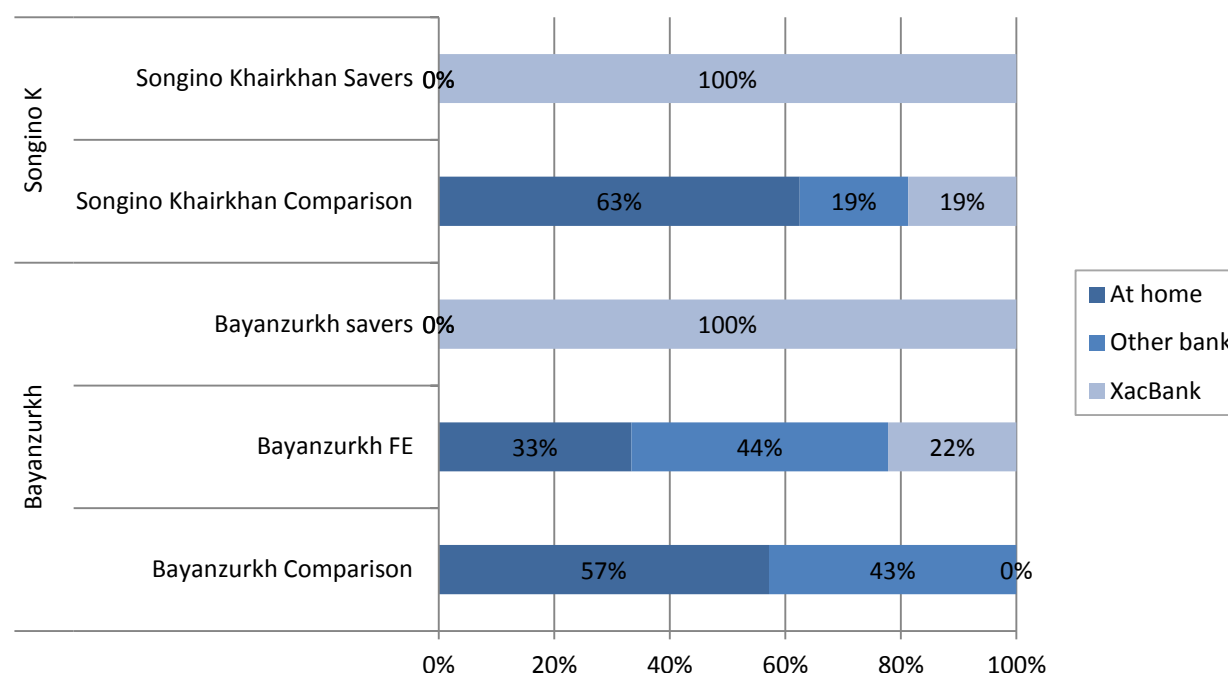
socioeconomic level of endline Comparison girls compared to their baseline counterparts. Higher rates of saving in the endline Savings Only group could be due to a combination of exposure to Temuulel and the increased maturity of girls in the endline segment, but the sample at both points in the research was small. Increases in savings rates among FE + Savings girls may have been affected by their exposure to the Temuulel program.

Figure 11 – Percentage of girl savers at baseline, by segment and district



The savings locations cited in the baseline sample were different than those cited in the endline, particularly those cited by FE + Savings girls, who at baseline had not yet taken financial education and may not have even been aware of Temuulel products. Of the baseline FE + Savings girls who saved, 33% did so at home, 44% at another bank, and 22% at XacBank, though the accounts held at these banks were most likely custodial products such as XacBank's Future Millionaire account; 97% of endline FE + Savings girls saved in their Temuulel accounts. The baseline Comparison groups saved at home 57% of the time (Bayanzurkh) and 63% of the time (Songino Khairkhan), compared to 67% of the time for the endline Comparison segment. Forty-three percent and nineteen percent of baseline Bayanzurkh and Songino Khairkhan Comparison girls, respectively, saved in another bank, compared to 22% in the endline Comparison segment. No baseline Bayanzurkh Comparison girls saved at XacBank, compared to 19% of baseline Songino Khairkhan girls and 7% of endline Comparison girls. All of the Savings Only girls at baseline and endline reported saving at XacBank. Increases in savings percentages by FE + Savings girls seem likely to have been affected by their participation in the financial education program, in which girls were offered the opportunity to open Temuulel accounts on visits to XacBank branches. There was no significant change from baseline to endline in the percentage of Comparison girls who saved in banks.

Figure 12 - Primary savings location at baseline, by segment and district



Qualitatively, girls in the baseline sample reported experiencing considerable difficulties in saving money. Their frustrations were tied to the low amounts of money they were given by their parents to manage, and the lack of access to secure savings locations.

Many baseline girls in all segments related stories such as this when asked about their savings experiences:

I save 100 MNT to 200 MNT (US \$0.07-\$0.14) of the daily pocket money in my wallet. Saving money requires a lot of patience and personal strength. Even saving a small amount of money on a regular basis is good. (Endline FGD 11)

This girl's experience was typical of many baseline girls who considered saving to be the accumulation of relatively small sums of money for use in the near term, such as going to movies or going out with friends. One of the main problems that girls experienced was spending their money impulsively, often on sweets, particularly because there are no transaction costs involved in accessing money stored inside a wallet. Most baseline girls, including Savings Only girls, did not seriously consider the possibility of saving larger sums over the medium- to long-term. Baseline girls with savings plans were exceptions.

By contrast, many Intervention girls at endline chose to save in Temuulel accounts because they knew that the savings they had deposited in XacBank were more secure from diverse risks including theft by younger siblings or accidental destruction. More importantly, they chose to save in a bank because they realized that the transaction costs they incurred in accessing their deposits served as an effective deterrent to impulse purchases.

However, endline Intervention girls did not show significant improvements in their ability to plan their savings over baseline girls. This may be related to the small sums of money made available for them to manage. It may also be related to their expectations regarding large future costs. The parents of many

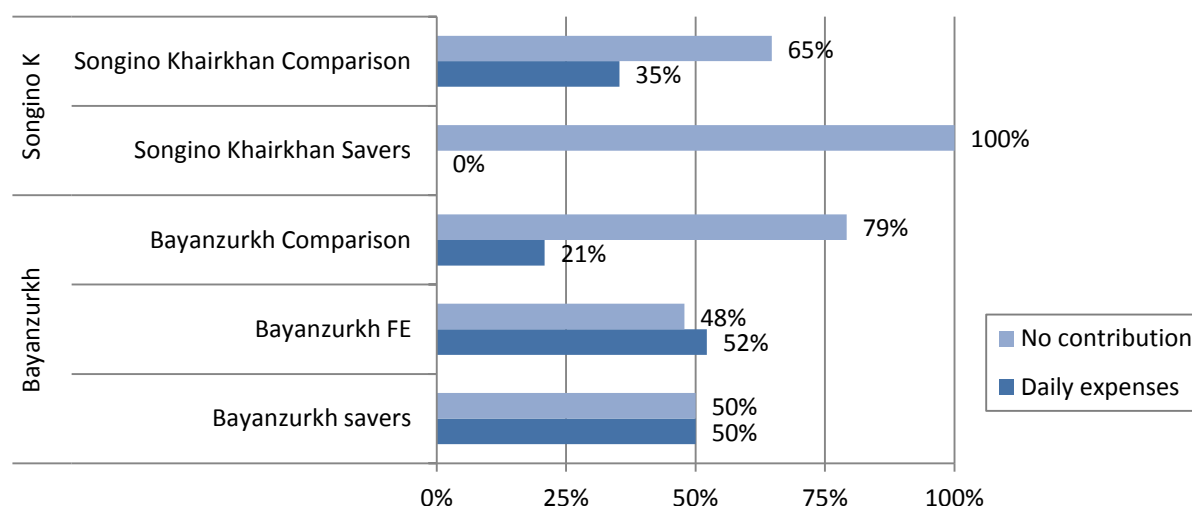
if not most girls expect to pay for their post-secondary educational costs. While girls tended to take savings more seriously as the reality of those post-secondary educational expenses loomed closer, they did not appear to be planning to save specific amounts of money with any particular frequency.

Because changes in savings planning are behavioral, significant improvements would be unlikely according to the model of change used for this study. All endline girls were more likely to save money, and Intervention girls were much more likely to save in banks, and overwhelmingly in their Temuulel accounts. The fact that endline Intervention girls are saving in bank accounts is noteworthy, even if they do not tend to plan their savings more than other girls. Having a savings account may make it easier for many of them to follow their savings plans than if they only save at home.

Contributing to family

Changes in contributions to family well-being would be considered a positive effect according to the indicators for this project. According to the SEP data, girls in the endline Comparison and FE + Savings segments contributed less to their families' well-being (18% and 35% respectively) than their peers at baseline (baseline Songino Khaikhan and Bayanzurkh Comparison registered 35% and 21%, and baseline FE + Savings recorded 52%). Savings Only girls at endline, however, recorded higher rates of contributions (64%) than their peers at baseline (none for Songino Khaikhan and 50% for Bayanzurkh).

Figure 13 - Percentage of baseline girls contributing to family welfare, by segment and district



The percentage rates of girls who contribute to their family's well-being do not necessarily indicate that baseline girls had a greater commitment to assisting their families in times of need than endline girls. There are two important considerations that percentage rates of contributions do not take into account. First, girls who contributed to their families at baseline universally contributed to daily expenses like purchasing groceries or treats for younger siblings. Endline girls, particularly those in the Savings Only segment, contributed to their families' well-being for a more diverse range of reasons. This suggests that these girls had a better understanding of the range and relative importance of the needs their households faced, perhaps because being older, they had developed greater maturity. Endline Savings Only girls also reported working over the summer in greater proportion than any other segment of girls, meaning they had access to resources independent of their families. It is not clear if their family environments predisposed them in any way to work over the summer and open savings accounts.

It is also worth noting that the baseline research revealed a pattern of contributing to family needs that amounted to girls returning money to their parents that they had been given for their daily needs. If girls have not spent the money they are allotted for transportation or food, their parents may lay claim to it for other household needs. It is questionable whether this amounts to a real or meaningful contribution to the family's welfare on behalf of the girls who contribute in this way.

Social empowerment impacts

The Girl Effect model predicts that girls will not only be financially empowered by the interventions, but that they will be socially empowered. Social empowerment refers to the ability of girls to set and achieve non-monetary goals and to build effective personal networks. While these indicators are separated from indicators of financial empowerment for the purposes of the study, in practice the two are related because girls will need to access resources from their networks in order to attain their goals. While many goals require financial planning, the indicators for social empowerment also assess girls' ability to transfer planning skills from the financial realm to other aspects of their lives, for instance pursuing a university degree. The study used both attitude and behavior indicators to assess girls' social empowerment. Girls' attitudes were assessed based on their increasing belief in their own power to set goals and accomplish them. Their behavior was assessed by asking if they are making new friends when they participate in financial education, and if they are able to plan for their future.

Social empowerment indicators:

Attitudes:

- Girls increasingly believe in their own power to set goals and accomplish them;
- Girls increasingly plan for the future in non-financial ways.

Behaviors:

- Percentage of girls who have new friends as a result of participating in Financial Education training (only assessed for FE + Savings segment).

Endline analysis: Social empowerment attitudes

In order to assess their belief in their power to set goals and accomplish them, girls in the study were asked to discuss their ability to save money and what they have done themselves to achieve their future goals. Financial education training should give girls the ability to identify a savings goal and effectively plan to achieve it, and girls with savings accounts may also learn through using them to develop a longer-term outlook. The skills needed to plan and achieve savings goals should also be applicable in reaching other goals, including determining what individual steps must be accomplished, calculating how long they will take, and deciding what resources will be needed.

Social empowerment findings:

Attitudes:

- All girls at baseline and endline were determined to pursue postsecondary education, and most had a strong belief in their ability to attain their goals;
- There were small increases in the number of FE + Savings and Savings Only girls who showed an ability to effectively plan for the future.

Behaviors:

- In half the FE + Savings FGDs, there were girls who had made new friends through the FE classes.

Most girls across all segments intended to go to college or university, though some did not have a sense of what they would study or what profession they would like to pursue. More Mongolian women pursue and complete higher education than men, and girls are expected to do so by their families, so it is normal that girls would harbor these expectations.

There were some differences in groups when girls were asked to identify what challenges they would need to meet to accomplish their goals. Most girls identified passing their exams and paying for their higher education expenses as the main obstacles they had to face. However, the overwhelming majority of parents interviewed, across segments, believed themselves responsible for girls' educational expenses, including higher education.

Many girls may have worried about their families' ability to pay for higher education, but few girls in any groups addressed the concrete steps they would need to take to overcome the obstacles to their educational and career goals. There were some exceptions in two of the FGDs with FE + Savings girls and one in a Savings Only FGD. For example, one FE + Savings girl in Bayanzurkh stated:

There are challenges every day. Among these challenges are finishing 9th grade, graduating secondary school, graduating college, finding a good job and then becoming a member of a team. The level of education and knowledge you have will determine how much you earn, and spending that money wisely is another challenge.
(Endline FGD 4)

This girl is relatively young as a ninth grader, yet she gave the clearest description of the successive challenges that she will need to meet in moving from adolescence to adulthood. It is possible that she comes from a higher income or more educated household than other girls, but her capacity to consider the incremental accomplishment of small goals would also have been strengthened through exposure to the FE course and use of her account. It is noteworthy that she is not just concerned with getting an education and a job, but becoming part of a team, suggesting that she knows that modern work requires teamwork, a skill that an MEA administrator mentioned as a behavioral outcome for most financial education program participants.

Endline analysis: Social empowerment behaviors

To understand the behaviors that indicate social empowerment, the study examines whether girls make new friends through financial education training. Girls were asked if and how they had made new

friends during the past year, to assess if participation in the FE training program offered them opportunities to expand their social network.

Most of the girls made new friends in similar ways in their schools, neighborhoods, or through summer activities in their rural homelands, where many families go during the warmer months of the year. It was very common for girls to meet new friends when they changed classes or schools. Many girls also made new friends through extracurricular activities, such as clubs or training courses. In half of the FE + Savings FGDs, girls mentioned making friends through their Temuulel clubs. A Songino Khairkhan girl explained how she made new friends over the past year:

When I attended Temuulel training, I met most of the girls in my 9th grade class and made friends with them. Also, because I am a member of the school newspaper club and the student council, I have many friends from these activities. (Endline FGD 5)

This girl appears from her comments to be fairly outgoing, as she is involved in other activities that girls say are those that expand their social networks. Still, the financial education class has introduced her to new girls in her class, and given her the opportunity to befriend them. Lower-income girls may not have the same opportunities to meet new friends due to the fees associated with many extracurricular and educational enrichment activities and the burden of household chores that many must shoulder. The fact that girls have been able to make new friends through financial education classes, which are offered at no cost, suggests that the social empowerment benefits may actually be greater for lower-income girls who are able to participate, who are less able to afford paid extracurricular activities.

These results are encouraging and point to real social empowerment of FE girls in the all-female club model. However, it is not apparent that girls will make as many new friends in mixed clubs when their entire school class is enrolled en masse. Girls already interact with their classmates, and have opportunities to get to know them. The social empowerment benefit of the financial education program for girls may therefore be less pronounced for girls after the introduction of boys into the program and the ways that clubs have been reconfigured to accommodate them.

An MEA administrator pointed to another social empowerment benefit built into the financial education program itself, which was not part of any indicator in the research for this study. She explained that the Mongolian educational system is extremely hierarchical, and students are not encouraged to work together in teams on projects or to interact during class. The Temuulel financial education program incorporates interaction and teamwork exercises in an effort to engage students and give them important social skills. The MEA administrator remarked that these skills are increasingly in demand in the Mongolian labor market. XacBank is a notable example of a workplace which emphasizes collaborative work, and this unintended effect of the program could be very beneficial to FE participants who enter the private sector in the future, and to the enterprises which employ them.

Social empowerment: Baseline to endline comparison

The attitudes of endline girls towards savings showed some improvement over attitudes registered by girls in the baseline. In the baseline study, girls were concerned about the resources they would need to access to accomplish their higher education goals, and some were concerned that health problems could prove an obstacle. Very few expressed any step-by-step plan to achieve their goals. The goals of the girls in the baseline and endline research were similar, but by the endline, girls who had taken FE were more likely to describe how they would overcome successive challenges to reach their goals in life.

It is possible that some of these girls, particularly middle income girls from Bayanzurkh, were influenced by their families' planning habits and capabilities.

There are indications that participation in the financial education program changed girls' behaviors by helping to grow their social networks. A significant number of FE girls stated that they made new friends in their schools through participation in the financial education program, which they are unlikely to have done without the Temuulel program. Participating girls were also exposed to teamwork skills that are not normally taught in the Mongolian educational system, increasing their skills and potential marketability to future employers.

3.3. IMPACTS ON PARENTS

The theory of change predicts that providing financial education and savings accounts to girls will positively affect their families. Two indicators were selected to assess the impact of the girls' involvement in the program on parents.

Parent-level indicators:

- Parents and guardians are increasingly exposed to Financial Education concepts through their girls;
- Parents and guardians have increased awareness of XacBank's savings products and/or Financial Education program.

Parent-level findings:

- At endline most parents of FE + Savings girls talked about FE concepts with their girls and no Savings Only girls did; at baseline only one mother discussed FE concepts with her daughter.
- Parents were increasingly aware of XacBank's savings products and the financial education program.

Endline analysis

Parents in the impact study were interviewed to better understand how they relate to their daughters concerning money matters. Parents of FE + Savings girls in the endline study were asked about their awareness of both components of the Temuulel program, but parents of Savings Only girls were only asked about their awareness of Temuulel savings accounts.

Usually, parents and particularly mothers expose their children to financial management ideas and strategies, because there are few other sources for financial education available in Mongolia. In fact, only one parent in the baseline study mentioned her girl receiving financial management training outside the household.

Comparison parents said that they tended to discuss money with their daughters when they were shopping together, or when daughters were asking for money. One comparison mother from Bayanzurkh explained the nature of her discussions with her daughter:

She knows how much we earn and how much we can spend each month. She's

comfortable talking about money. She advises me on how much to spend, and may tell me that she doesn't need clothes when I offer to buy her some. (IDI Comparison Parent Bayanzurkh)

This mother shares information with her daughter on the family's income and monthly budget. When shopping, her daughter will also tell her what she needs. However, it does not seem that the two are actively budgeting together. The girl is being permitted to voice her opinion on expenses that would directly affect her, but she does not seem to have a voice in other family budget decisions.

Other Comparison mothers said that girls should learn about managing money after they reach a certain age and maturity level. For instance, this Comparison mother says that:

(My daughter) says she will save money in the bank when she becomes an adult. I started talking with her recently because she's growing older now, and if she gets into medical school, she'll have a good job and will need to manage her money properly. (IDI Comparison Parent Bayanzurkh)

This quote shows that in some families, saving money is thought of as an adult activity. While the mother is talking with her daughter about saving, she is doing so in preparation for her daughter's career after post-secondary education, rather than for her immediate needs or for her post-secondary education costs. Considering that she and her husband feel that their daughter is too young to work and that they expect to pay for her post-secondary tuition, their daughter might not have any earned income of her own until she completes post-secondary school. Overall, the views of Comparison parents matched those of Comparison girls, and few actively engaged in financial management with them during adolescence.

Parents of girls in the Temuulel program tended to have different relationships with their daughters surrounding money than parents of Comparison girls. The relationship of parents of Savings Only girls with their daughters varied depending on their own occupations. Two mothers who were entrepreneurs talked about their business budgets with their daughters, while the other two mothers said that they did not discuss money matters with their girls. Here is how one of the entrepreneur mothers described her discussions with her daughter:

I don't talk directly to her about money. But I do calculate the sales and expenses of oil and lubricants that I'm dealing now. I talk with her about how to run a business. (IDI Savings Only Parent, Songino Khairkhan)

This entrepreneur mother doesn't even think about her business budgeting as a money management discussion, though her daughter is probably learning valuable lessons. There is no indication from this or the other entrepreneur Savings Only mother that they initiated these discussions with their daughters because of their daughters' opening of a Temuulel account. In fact, both the girls with entrepreneur mothers initiated the opening of their accounts. This suggests that girls with entrepreneur parents may be predisposed to opening Temuulel accounts as a result of exposure to the business activities of their parents, suggesting a potential marketing strategy for XacBank.

Profile of a Mother of an Ideal Saver?

In the Behaviors section, we presented Odval, a 15 year old saver who was interviewed for the baseline research with her mother. Odval's mother remained proud of her daughter, but she revealed some possible negative consequences of the financial decisions that her family makes. She made it clear that as parents, they were going to pay for Odval's university tuition. And while Odval helps her mother when she is sick, Odval does not contribute to her family's budget. However, she pushed her to do work during the summer of 2010 which may not be in Odval's best interest:

In July, most households kill a sheep for the Naadam holiday. My daughter buys the hides from families who have slaughtered a sheep, and then resells them to wholesalers. She uses her small profit to buy her school supplies and clothes.

I asked her to do that so that she understands the value of money. Now when she asks for expensive clothes, she'll realize why I can't buy them for her.

This year, she said she doesn't want to do this work. She says that her classmates saw her trading skins and she was embarrassed. I told her, "Ok, if you don't need the money don't do it. But if you want the money, that's how you're going to get it."

While Odval is learning valuable lessons about managing her money from her summer work, she feels that she is losing social status in the eyes of her peers. Worse, handling animal carcasses in potentially unsanitary conditions could have very negative consequences for Odval's health. While she is earning money and paying for some of her educational expenses, a serious illness could rapidly wipe out her and her parents' savings.

Odval's mother also revealed that her daughter's saving practices are having some potentially negative effects on Odval and her mother:

I give her 2,000 MNT daily. Last year, when I was interviewed, I said that I didn't give her that much money. This year I give her more money as she stays later at school. I'm not sure if she understands why I used to give her 1,000 MNT instead of 2,000 MNT every day. I don't know what she does with it – maybe she doesn't eat so that she can save her money.

She has become more economical, even stingy, since she opened her account. If I need a small amount of money, she will claim she doesn't even have 100 or 200 MNT, and then when I ask again, she'll finally give it to me!

Odval's example raises questions about the difficult decisions about saving that low-income households face. Is Odval skipping meals to save her money? Are her savings habits causing problems in her relationship with her mother?

All of the FE + Savings parents discussed the course with their daughters and encouraged them to enroll. One mother described the importance of the financial education class and the complementary nature of the Aspire accounts:

I supported her when she enrolled in the financial education class. I thought it was important for her and her future, and if she has a savings account, she can save more for her future. Her older sister told her she was taking an important class that will help her manage her money. (IDI FE + Savings Parent Songino Khaikhan)

The fact that this girl received encouragement from her older sister indicates that they discussed the class as well, and perhaps XacBank as well. Two out of the three of the FE + Savings mothers recalled some details of the concepts that their daughters had discussed with them. The following Songino Khaikhan mother had the most specific memory:

Every time she learned a new topic, she would share it with me. I remember her telling me when they learned about banks and bank services. She said that the bank staff are

nice, and that the Temuulel account can be connected to the Amar ATM card. (IDI Parent Songino Khaikhhan)

While this is only one comment, it is noteworthy that the daughter mentioned, and the mother remembered, that she had learned about XacBank and its products as part of the financial education program. This mother does not have her own savings account, though her husband has a Khaan Bank account which he uses to send money to the countryside. Considering her positive reaction to her daughter's participation in FE and Temuulel account, this mother may be encouraged to purchase a XacBank product in the future, though the nearest branch is quite far from their home.

Parents and guardians were increasingly aware of XacBank's savings products and financial education program. Daughters tended to introduce their parents to both the financial education program and the accounts, and many FE + Savings girls described receiving encouragement from their parents when they asked them about enrolling in the financial education program. One mother of an FE + Savings girl described how she heard about Aspire accounts, and how she responded:

We discussed the account before she opened it. The people from the bank introduced her to it (at school) and she wanted to open one. So I gave her 3,000 MNT to open it. (IDI Parent Songino Khaikhhan)

Because Temuulel coordinators and other school teachers or administrators provide the main channel for publicity about the financial education program, it is probable that the majority of parents learn about the financial education program solely through their daughters. Parental awareness about XacBank's savings products has not been achieved solely from exposure to the knowledge shared by their daughters, because XacBank does considerable marketing of its products in Mongolia. Interviews with parents and girls revealed that one parent heard about the Temuulel savings product through a flyer in the bank. However, there is evidence that girls talk with their peers and siblings about the accounts. One Savings Only mother mentioned that her youngest daughter, who did not participate in the study, would also get her own Temuulel account when she was old enough. This suggests that her mother was happy with the experience of her Savings Only daughter, and, generally, that siblings may be exposed to Temuulel through sisters who take accounts.

Evidence at the endline suggests that the project did increase overall parental awareness of XacBank and its products.

Parental impacts: Baseline to endline comparison

Data from the baseline on parental impacts showed parents in the study to be roughly similar in their relationships with their daughters to endline Comparison parents. A substantial number did not have significant discussions of money or money management with their daughters, though a very small minority actively budgeted with their daughters. One mother mentioned that her daughter was exposed to FE lessons in her sociology class, leading her daughter to initiate budgeting discussions with her mother.

By contrast, the kinds of relationships that endline girls had with their parents around money tended to cluster by segment. Parents of Savings Only girls who ran their own businesses had more discussions with their daughters about budgeting than girls whose parents were not entrepreneurs, but their discussions tended to be about the parents' business rather than personal finance. Parents of FE +

Savings girls repeatedly described being told by their daughters about the financial education program, which provided them an opportunity to discuss money management topics with their daughters, in many cases over the eight-week duration of the classroom sessions. It is possible that such a consistent dialogue about course topics could create the basis for ongoing discussions about managing and saving money between parents and daughters after the conclusion of the course.

In terms of exposure to XacBank and its products, Savings Only and FE + Savings girls did tend to tell their parents about the savings accounts. Sometimes parents would go with their daughters to open their accounts at the bank, but there is little evidence that that parents learned much about other XacBank accounts on these trips, or that this led any parents to open accounts at XacBank.

3.4. INSTITUTIONAL IMPACTS

The Girl Effect model predicts that the financial education and savings product programs will positively impact not just girls and their communities, but also the institutional partners on the project. One positive effect on institutions would be an increased awareness of the benefit of providing programming directed specifically at girls. In programming terms, this would mean institutions devoting more resources to Temuulel programs, seeking more partners, and expressing a commitment to continuing the program or a similar one past the lifetime of the project. An additional institutional impact would be the increased public profile of XacBank and an improvement in its reputation among participants and their families.

Institutional impact indicators:

- Increased funding for providing financial services for girls;
- New or expanded partnerships for providing financial services for girls;
- Increased or continued funding for providing Financial Education for girls;
- New or expanded partnerships for providing Financial Education for girls;
- Increased level of commitment of XacBank to continuing to provide savings products for girls;
- Increased level of commitment of XacBank and local education partners to continuing to provide Financial Education to girls;
- Change in XacBank's public image among girls.

Financial services

XacBank headquarters staff members remain enthusiastic about the Temuulel savings product as a tool to attract adolescent customers and build brand loyalty. Since the baseline, XacBank has extended eligibility to boys. Because the retail banking sector is becoming more competitive in Mongolia, XacBank is trying to attract as many young consumers and keep them with the bank as long as possible. XacBank is striving to service customers from cradle to grave.

Institutional impact findings:

- Funding for Temuulel savings accounts continues, and services have been added, and the accounts have opened to boys;
- No new partnerships for providing financial services for girls have emerged;
- Funding has continued for the Temuulel FE program, but boys are now included;
- XacBank is now partnering with the GFDA to provide FE for girls and boys, is now offering the Aflatoun program, and is seeking a partnership with the Ministry of Education regarding the potential inclusion of FE in the national public school curriculum;
- XacBank is enthusiastically committed to providing savings products for girls;
- XacBank and its partners are tentatively committed to continuing to provide the FE program to girls, but they now also offer the program to boys;
- XacBank has a more positive image among girls with accounts.

XacBank has not introduced new products for girls, nor is there evidence that they have increased the funding to provide financial services for girls. XacBank aims to increase the number of Temuulel accounts to 10,500 by the end of 2011 (Bat-Ochir, 2011). Executives interviewed for the research remain committed to the Temuulel program despite what they considered to be low average balances and activity rates. In order to encourage increased usage rates, unspecified changes to the incentives structure are being considered. Some frontline staff and administrators remarked that more frequent branch-level trainings about the Temuulel savings product would help in maintaining service quality in light of staff turnover and changes to the program.

In expanding Temuulel product eligibility to boys, XacBank is also planning to produce new or additional marketing and publicity materials that are either less gender-specific or tailored to boys' tastes. XacBank also recognized that there was a need to revise their marketing strategy and activities to appeal to boys as well as girls. As a result, XacBank planned to revise the television campaign over the summer of 2011 in order to launch a new advertisement appealing to a broader audience, including boys, in September of 2011. New promotional items will be designed to coincide with the launch of the television commercial, including Temuulel-branded items designed to appeal to boys. Changes to the reward criteria were also being considered in order to encourage increased account activity rather than reaching balance milestones.

Financial Education

While the savings product design process for the Temuulel project was more involved than usual for XacBank, it was not altogether new. However, the bank has no experience in administering a financial education program, and generally XacBank leadership view the current program as too costly to be supported by the bank alone. MEA and Equal Step are more concerned with the social impact of the program, but feel dependent on XacBank for funding for the program. They also felt that the rights to the program belonged to XacBank, and in interviews indicated that they had no plans to continue the program beyond the grant period.

Based on this research, the prospects for the continuation of the financial education program are uncertain, as XacBank and its partners have taken a passive approach to fundraising.

XacBank

Executives interviewed about the financial education component felt that the program was worthwhile and they were actively seeking ways to continue and expand it through new partnerships. However, they also felt that it fell outside the core competencies of bank staff and was expensive to implement. When the initial support for the implementation of the financial education program provided by (Nike/WWB) ended, XacBank sought and received support from the SEEP Network to continue it while exploring ways to reduce its cost while maintaining its quality. Responsibility for the financial education program was assigned to the GFDA because XacBank officials felt that as a social program, it would be more effectively managed by an NGO staffed by professionals with appropriate skills and experience. This also took a burden off the savings product officers who formerly had to administer Temuulel FE through both the MEA and Equal Step. The move also puts the burden of finding future funding for the financial education program on the GFDA rather than XacBank. As an NGO, the GFDA is more suited to applying for further funding than XacBank.

XacBank is also working with the Ministry of Education and Cultural Affairs to explore whether all or some of the Temuulel FE curriculum could be included in the public school curriculum, perhaps as a topic taught as part of the school social work curriculum. This would greatly reduce the cost of administering the student teacher program through the MEA, and provide additional support through the school administration. If the program were to be included in the government's secondary school curriculum, it may not be possible to advocate for or market the Temuulel savings product as is the case now. At the time of the endline research, executives had met with the Minister and his aides, but this possibility was still being explored in very general terms.

NGOs

Employees and staff members at MEA and the GFDA were enthusiastic about the promise of the financial education program. They were unsure about the prospects for future funding, and they felt dependent on XacBank.

While the Equal Step Center is still involved in the Temuulel program, it was not surveyed as part of the endline research.

MEA

Financial education is seen by MEA as valuable for Mongolian adolescents, and the program is viewed as very successful. The MEA is looking to XacBank to provide leadership in continuing the program, but administrators suggested that they would be willing to seek other funding to support the program in the future. Because the program is branded with the XacBank logo, however, there is concern about the expense of rebranding if the program were to continue independently of XacBank or the GFDA.

While MEA officially supported the inclusion of boys in the program, an administrator at the MEA also expressed her personal discomfort with the decision. This official was concerned about changing the curriculum, which was designed for use with girls, and felt that if it is to be used with boys, it should be properly redesigned. There was also concern that gendered learning styles alter the classroom dynamic in mixed clubs, potentially hindered the ability of both girls and boys to master the material. Student teachers did not express as much concern as MEA administrators about the classroom dynamics.

GFDA

GFDA's participation in the Temuulel program is very recent, but the impact of its participation in the Temuulel program has been significant on it institutionally. The GFDA hired a new staff member to coordinate the Temuulel FE campaign, and under XacBank's guidance is seeking to link the Temuulel financial education program for adolescents with the Aflatoun program for pre-teens, including girls. The GFDA envisions continuing to fund the Temuulel financial education program in the future.

At the same time, the GFDA joined the project at a time after XacBank decided to include boys in both the savings and financial education components of the project, a move which the GFDA supports. The evidence does not suggest that the GFDA supports dedicated financial education for girls, but it does support their continued inclusion in financial education programming.

Public perception of XacBank

XacBank has experienced rapid growth in market share recently, but executives remain uncertain about its public image. They expect to increase the bank's recognition among adolescent girls and their families through the Temuulel project. In order to evaluate girls' knowledge of XacBank, focus group discussions included questions asking girls to identify bank logos and explain what they knew about the banks.

The interventions appear to be successful in increasing the recognition of XacBank. Intervention girls in the endline research easily and consistently recognized the XacBank and Temuulel logos in FGDs. In two of the Comparison segment FGDs, girls did not recognize these logos, but girls in other Comparison segment groups did. The recognition levels suggest that exposure to the interventions contributes to awareness of XacBank.

The interventions also seem to be encouraging loyalty among Temuulel account holders. Not all Intervention girls discussed their plans for their accounts when they were no longer eligible, but several said that when their eligibility had expired they were going to establish adult savings accounts with XacBank. This suggests that some girls are developing brand loyalty to XacBank through the Temuulel program. Additionally, while girls' exposure to program interventions was not proven to have a significant spillover effect among their parents, several girls did discuss their accounts with their peers, and encouraged them to open their own accounts (for example, see the text box "An Ideal Saver?" in the Behavior section of this report). This represents a kind of word-of-mouth marketing for XacBank, and personal testimonials from account holders may help convince girls to open their own accounts. This seems especially true where girls attend schools with very active Temuulel coordinators, such as the teacher who served as a coordinator at School 48 in Bayanzurkh. Many girls at School 48 looked up to the coordinator, and mentioned her by name in explaining why they enrolled in the financial education program and opened Temuulel accounts.

4. CONCLUSION

This impact assessment study reports on the results of baseline and endline research on the Savings and Financial Education Program for Girls in Mongolia. The study examines the project's impact on the financial and social empowerment of girls, as well as its impact on the Mongolian institutions that implemented the program. The assessment was designed to gauge project impacts based on a set of predetermined indicators. Based on those indicators, the project achieved success in changing the knowledge, skills, and attitudes of participating girls towards saving and money management, and it showed mixed success in changing their behaviors and fostering financial and social empowerment. The project was generally successful in creating institutional change, though some of these changes, such as the inclusion of boys, do not correspond to the objectives of the Girl Effect model. In addition to summarizing the main findings, this section incorporates a brief discussion of several issues raised by the research which were not captured in sufficient depth within the formal assessment framework based on that model.

KNOWLEDGE:

Overall, girls in the Savings Only and FE + Savings groups had a more well-developed knowledge of banks and bank services, particularly use of savings accounts, than Comparison or baseline Girls. They also had more experience going to banks than Comparison or baseline girls. The program appears to have contributed positively to participating girls' levels of knowledge, particularly of banking and savings.

SKILLS:

The Temuulel program positively affected the financial autonomy and money management skills of girls in the Intervention segments. Most importantly, girls who opened accounts increased their financial autonomy by gaining a secure and confidential way to save. The research also showed that girls who opened accounts, or took FE and opened accounts, could discuss these actions with their parents, demonstrating their interest in becoming more financially responsible and independent. In opening a discussion about finances with their parents, girls indicated receptiveness to encouragement and coaching from their parents in managing their money responsibly. The financial education program appears to have helped participating girls open conversations about finances with their fathers. The same opportunities to express a desire for financial autonomy and to exercise financial management skills did not appear to be available to girls in the baseline and Comparison groups.

ATTITUDES:

Girls who participated in program interventions developed stronger rationales for their positive attitudes towards savings and were more comfortable doing business in banks than Comparison girls. They also reported feeling a sense of maturity associated with owning an account, which they associated with adulthood. These girls tended to be more comfortable discussing money with their parents. It appears that girls with individual experience using banks themselves, and especially those who are educated about how they work, are more likely to become astute banking consumers at an earlier age than girls who do not have the same exposure. This reinforces or deepens their positive attitudes about savings and banking.

BEHAVIORS:

Evidence for behavioral change in the form of more frequent savings and contributions to family well-being was sought. Findings on these behavior changes in the girls who participated in program

interventions were mixed. All Endline girls were more likely to save money than baseline girls, though FE + Savings girls saved more frequently than Savings Only girls. All endline Intervention girls were much more likely to save in banks, and overwhelmingly in their Temuulel accounts. By contrast, Savings Only girls contributed more frequently to their family well-being than FE + Savings girls. However, behavioral change is very complex and occurs over time, and it remains to be seen whether further positive changes will develop, or be maintained if they already exist. Because of the small sample size, these findings are not generalizable.

SOCIAL EMPOWERMENT:

The research showed mixed social empowerment effects as defined by the indicators. The capacity to plan for the future was not found to be more pronounced in Intervention girls than in baseline or comparison girls. FE + Savings girls were fairly likely to expand their social networks through participation in the financial education program, but the addition of boys to financial education classes may alter their comfort level in making new friends in the program, and creating financial education classes that mirror existing classes will decrease the chance that girls will meet new people through participation. However, the research suggests that the financial education program provided girls with an opportunity to learn important teamwork skills. This was an unanticipated social empowerment benefit, but one that is important in preparing girls for their entry into the work force.

The value of financial education:

The findings suggest that the financial education classes contributed to differences in outcomes between FE + Savings girls and Savings Only girls. In the school-based financial education model, girls were exposed to ideas about financial management and savings at an earlier age than most Comparison girls and at a younger age than Savings Only girls in the study. This suggests that if girls are offered financial education at school, they will be more likely to acquire financial management acumen at a younger age than other girls. The class also offers them the opportunity to change their behavior by opening a bank savings account at a younger age than other girls are motivated to do so.

IMPACTS ON PARENTS AND PEERS:

The project did have positive effects on some parents, particularly in terms of raising their awareness of the Temuulel savings product and the financial education program. It is not clear that parental awareness of XacBank's adult savings products was increased as a result of a daughter's acquisition of a savings account. However, participating girls were fairly likely to try to influence their peers to open Temuulel savings accounts. This result is an unintended positive benefit of the program, though it will probably take a longer time for XacBank to reap the benefits of this spillover effect because participating girls' peers are less likely to have the resources to open accounts than girls' parents, particularly in low-income communities.

INSTITUTIONAL IMPACTS:

XacBank views the Temuulel project as a success. The success of the the program has led XacBank to open up the savings product and financial education classes to boys. While this does not represent an explicit increase in support support for programs benefitting adolescent girls, it may help sustain the program for girls as well. The project defines positive impacts on institutions as continued or increased interest in serving girls, but because of the relative empowerment of girls and women in Mongolia, many institutional participants in the research questioned the rationale for excluding boys.

The inclusion of boys in the program may have made the program's continuation more feasible through

economies of scale, which is a larger concern for the Temuulel financial education program than the associated savings accounts. It could be argued that unlike changes to the savings accounts, which are administered to individuals, changes to the financial educational classes are qualitatively detrimental to the learning experience of girls because of the ways that boys reportedly tend to dominate class discussions and demand a faster pace. However, if opening eligibility to boys helps to attract funding for FE or results in its incorporation into the national school curriculum, it is possible that more girls will be exposed to FE than if the program were dropped altogether.

DISCUSSION:

This impact study used qualitative research methods, which uncovered a great deal of contextual data not usually attainable using solely quantitative methods. The results of the impact assessment highlight areas which merit deeper consideration in this and other similar contexts. Five points of concern are discussed below.

1) Perceptions of gender equality:

Many Mongolians tend to perceive that their country has attained a state of gender equality. Evidence for this can be found in higher levels of educational achievement for women compared to men, among other things. For this reason, many of the universal indicators around marriage and pregnancy did not tend to reveal significant differences among populations in the study sample. This is probably due to the significant social pressure for girls to avoid marriage and pregnancy until after they have completed secondary and even postsecondary education, resulting in a relatively low adolescent fertility rate of 20 births per 1,000 adolescent girls aged 15-19 (World Bank, 2011). Collaborators in Mongolian institutions implementing the project often viewed the emphasis on girls with curiosity.

2) Judicious savings and use of money:

There is an assumption among some proponents of youth finance that saving by adolescents is always and everywhere a positive behavior. The endline research raises a question about this assumption. The small amounts of money that girls are allotted for their daily needs, such as food and transport, are carefully calculated by their parents. Some parents may intend for their children to spend some of their money on candy or treats, but some parents give their children the bare minimum to pay for lunch and transport. If girls given minimal allowances skimp on lunch or bus fare to save money, using some of that money to save may not be in their overall best interest. This is particularly true of low-income girls, whose household resources are probably stretched in the first place. Girls who work over the summer or receive lump sum gifts during holidays or summer vacations could be encouraged to save that money instead of diverting money from their daily needs to savings.

3) Contributions to families:

There is a common assumption that girls' contributions to their families will result in net gains for the family. However, girls with no independent income are not able to effectively contribute to their family's net financial well-being. In the Mongolian context, the money that girls accrue most often comes from their family's budget in the first place. Any money they contribute often amounts to a recycling of family resources rather than an outright contribution.

4) Parental influence:

Parents in Mongolia are still highly influential on adolescent girls, and assessing the project based on the influence that girls have on their parents may underestimate the benefits of the program on girls and their families. Many girls up to the age of 18 (and older) seek parental approval and encouragement, and lack the position in their families to influence their parents or even recognize when they have done so.

But parents can reinforce positive messages that girls receive, especially in contexts such as Mongolia where household money management and savings are viewed as a fundamentally female domain.

5) Peer influence:

The research revealed that girls do not tend to have much influence over their parents' financial decisions, but they do discuss their financial decisions with their peers and siblings and influence them to change their behavior. The effects that girls have in spreading information about savings accounts and financial management among others in their own age group was not anticipated in the project, and so it was not effectively measured using the preselected indicators.

5. RECOMMENDATIONS

The impact research produced a wide range of information, some of which suggests areas in which program impacts could be increased through improved implementation.

TRANSACTION COSTS:

Girls with Temuulel accounts realized that there were external transaction costs, such as the time and expense needed to travel to a bank branch, associated with making deposits and withdrawals. Many of them appreciated the costs of withdrawals as a way to help them resist the temptation to spend their money. However, the costs associated with making deposits prevented some girls from using their accounts as much as they would have liked, and in a way that would help them form beneficial and lasting habits. If XacBank can reduce the costs incurred in making deposits, while maintaining the costs of withdrawals, it may be possible to increase average balances and usage at the same time. In other words, XacBank may be able to nudge girl savers to use their accounts in ways that are potentially more beneficial to both themselves and the bank.

INFLUENCE OF PARENTS AND TEACHERS:

Parents continue to have a great deal of influence over adolescents, and can nudge them towards positive behaviors, which XacBank has recognized and encouraged through its in-branch cross-marketing efforts. Teachers are also highly influential on many girls, particularly in an educational system like Mongolia where the authority of teachers is stressed. It may be possible for XacBank's marketing to incorporate scenarios showing parents and teachers responding to girls opening and using Temuulel accounts. This could help to promote the kind of relationship in which savings is valued.

It should also be considered how the role and responses of parents could help to facilitate girls' learning in the financial education classes. For instance, girls could be encouraged to seek the counsel of a parent in coming up with a savings plan. This could not only help girls to demonstrate their serious interest in financial management to their parents, but it could help them to craft more realistic plans and open up important discussions with their parents about family budgeting and savings.

PEER INFLUENCE:

Girls indicated that they discussed their savings and money management with their peers, and even tried to influence their behavior. If XacBank can help activate this kind peer influence, it could prove to be a strong encouragement to girls and even boys to open and use accounts. The combination of parental and peer influence could prove to be a powerful combination.

CAPTURING LUMP SUMS AND SUMMER INCOME:

The research found that most girls receive some cash gifts during the year, usually around holidays such as Naadam and during summer vacation. Many girls also work during the summer. It is tempting for girls to spend these sums of money immediately; many may not even think about the possibility of saving gifts or summer income. Capturing these gifts as deposits would benefit XacBank as well as girls who are saving for future educational expenses or other important needs. Introducing such scenarios to the Temuulel marketing strategy may prompt more girls to take up the practice of depositing such sums when they receive them.

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ANNEX 1: BASELINE SEP AND ENDLINE MIS DATA TABLES

Table 11- Baseline SEP and universal indicator data by district

Profile data	Bayanzurkh	Songino Khairkhan
Ger households	43%	58%
House in <i>hasha</i>	47%	42%
Apartment households	9%	0%
Female-headed households	11%	42%
Universal indicators	Bayanzurkh	Songino Khairkhan
Marital status – single	100%	100%
Pregnancy incidence	0%	0%
Average age	15.2	15.1
Age started grade 1	7.3	7.3
No. of school years	8.5	8.2
Current grade	9.2	8.7
Contribute to family expenses	42%	33%

Table 12 - MIS account data for endline Temuulel savers by segment

	Time accts	Demand accts	Total # of deposits	Total deposit value (MNT)	Average total # of with- drawals	Average total with- drawal amounts (MNT)	Average number of deposits / month	Average deposit amount / month (MNT)	Average # of with- drawals / month	Average with- drawal amount / month	Average max. balance	% of accts with >1 deps / quarter avg	% of accounts with activity in last 6 months
FE + Savings	9	24	3.18	53,712	3.12	37,552	0.40	6,664	0.32	3,939	27,002	45%	54.55%
Savings Only	1	14	4.33	44,457	3.53	31,790	0.47	4,426	0.38	3,351	18,846	47%	53.33%
ALL	10	38	3.54	50,820	3.25	35,751	0.42	5,965	0.34	3,755	24,453	46%	54.17%