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## The Ghana Experiment: Overview of Findings<sup>1</sup>

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<sup>1</sup> This chapter is based on the following two research publications: Chowa, Gina, Rainier Masa, Isaac Osei-Akoto, et al. 2015. *Impacts of Financial Inclusion on Youth Development: Findings from the Ghana YouthSave Experiment* (CSD Research Report 15-35). St. Louis, MO: Washington University, Center for Social Development. Lee, Yungsoo, Lissa Johnson, Michael Sherraden, et al. 2015. *Taking the Bank to the Youth: Impacts on Saving and Asset Building from the Ghana YouthSave Experiment*. (CSD Working Paper No. 15-43). St. Louis, MO: Washington University, Center for Social Development.

The Ghana Experiment in YouthSave is a large-scale, rigorous test of the impacts of youth savings accounts (YSAs) on savings performance and developmental outcomes for youth and their households. The study used a cluster randomized experimental design and mixed methods. Researchers randomly selected 100 sample junior high schools within the catchment area of HFC Bank (the YouthSave financial institution partner in Ghana) to participate in the experiment. Fifty of the schools were randomly assigned to treatment conditions, and the remaining 50 assigned to control conditions. Within the 50 treatment schools, 25 were randomly selected to receive “in-school banking services” from HFC Bank (a treatment category consisting of school-based deposit collection and financial education) and the other 25 treatment schools received “marketing outreach,” that is, marketing of the savings product from HFC Bank but no actual in-school banking services. At least 60 students



were selected from each of the 100 schools (the control schools and the two categories of treatment schools) for a total sample size of more than 6,000 youth. A separate analysis was conducted using the experimental framework and the SDA data but with all students who are in the treatment and control group schools (22,468 students including those in the survey sample) to assess savings performance.

The Center for Social Development (CSD), in partnership with researchers from the University of North Carolina at Chapel Hill and the Institute for Statistical, Social and Economic

## Implementation Challenges and Accomplishments

### Challenges

*Product development and rollout challenges.* Researchers collected baseline data in May 2011 as scheduled, but HFC Bank could not launch the YouthSave product until a year later, primarily due to delays in getting approval from the Central Bank of Ghana. Product delivery to the treatment schools did not always happen as planned either. Lack of buy-in from school authorities and geographical inaccessibility of some schools prevented HFC Bank from



Research (ISSER) at the University of Ghana, implemented the project, one of the largest social research experiments of any kind in the developing world. Because of the rigor and long-term nature of the research design, the Ghana Experiment has the potential to offer the strongest evidence in the developing world for or against the expansion of YSAs and their viability as a development tool. The findings of the experiment suggest directions in products, services, and policy.

reaching all treatment schools; in the schools where HFC was able to roll out the product, the depth and number of engagements with the research participants varied from school to school. Furthermore, because the experiment was a school-based design, the implementation had to be aligned with the school academic calendar. Any time schools were in recess, all product launch, rollout, and marketing activities had to be put on hold.

*Research challenges.* The pre- and post-test research design required that researchers track more than 10,000 interviewees (i.e., 6,000 youth and 4,000 parents) from 2011 through 2015. Ghana does not have a national address system, and some research participants graduated from school or relocated during the course of the study, complicating the researchers' task and necessitating multiple home visits, phone calls, and leads from key informants to track down research participants for the endline survey. Through the leadership of ISSER, the researchers were able to achieve a response rate of over 70 percent at endline data collection despite these challenges. (It should also be noted that such challenges are to be expected in the context of a developing country and in fact would likely arise in any setting.)

## Accomplishments

*Building partnership.* From the outset, the research team built a trusting, cordial relationship with HFC Bank. The sense of collegiality was essential to the ultimate successful execution of the Ghana Experiment.

*Opening accounts in schools.* In consultation with YouthSave researchers, HFC Bank worked to visit hard-to-reach communities and to get buy-in from teachers, Parent Teacher Associations, and—most importantly—the school head teachers who had initially opposed HFC engaging with the pupils. In all, HFC was able to introduce the YouthSave product to over 90 percent of the 50 treatment schools. (HFC has since successfully adapted the product to attract schools that were not in the experiment including senior high schools.)

## Baseline Demographics and Household Characteristics

### Financial capability

Baseline results suggested youth in the Ghana Experiment regularly set aside money for future use, but in small amounts and for near-term purposes (e.g., school supplies, personal care items). Youth generally did not associate setting

aside money with achieving a long-term goal, and very few used formal financial services. Less than half said they usually or always followed a plan for how to use their money.

## Education

Overall, academic performance was low. The majority (61 percent) of youth scored below average in math and English. While this result is of course less than ideal, it should be understood in the broader context: nationally, over 90 percent of Ghanaian youth score below 50 percent in math and English. Males showed a slight edge over females in academic performance. Baseline results also indicated that working is not associated with academic performance. One notable finding was that nearly half of participants (47 percent) did not see a connection between school and success in life. Consistent with results of other studies, a majority (>70 percent) of Ghanaian parents reported being involved in their children's education, and the level of involvement tended to be stronger when parents were married.

## Health

Most youth (95 percent) had positive perceptions of their health. Most (90 percent) received support, encouragement, advice, and guidance from their parents or guardians sometimes or more frequently. However, a lower percentage of youth (52 percent) reported discussing sensitive issues with parents or guardians. Most youth (more than 80 percent) had negative attitudes toward sex at an early age, and positive attitudes toward HIV prevention and condom use.

## Preliminary Impact Assessment on Savings Performance<sup>2</sup>

Savings performance in the Ghana Experiment was measured with a robust strategy that combined the experimental framework with the Savings Demand Assessment (SDA). Because the SDA dataset contained the youths' school

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<sup>2</sup> Section based on Lee, Yungsoo, Lissa Johnson, Michael Sherraden et al. (2015)

attachment (if there was one), and because data was available on school populations, the research team could carry out intent-to-treat impact assessment regarding savings with full school populations (not just the survey sample). The full school population of in-school banking was 5,501 students; for market outreach schools, it was 7,207 students; for control group schools it was 9,760 students. Combining the experimental framework with the SDA data enabled a much larger sample size (full school populations) and much more accurate data on savings (actual bank data rather than self-report). A summary of results follows.

### Account opening

In the in-school banking schools, 21.1 percent of the student population opened accounts. The comparable figures for the marketing outreach schools and the control schools were 11.4 percent and 0.3 percent, respectively. Differences between treatment and control are statistically significant, and represent a meaningful impact on increasing youth financial participation.

### Depositing

The average number of monthly deposits in full school populations were as follows: marketing outreach schools at .03, in-school banking schools at .05, and control schools at .0006. Again, differences are statistically significant. Among students who opened accounts, those in the in-school banking schools average .24 and those in market outreach schools average .26 deposits per month. For both groups, this equates to about 3 deposits per year, but with twice as many students represented in the in-school banking group.

### Savings

The average monthly net savings (AMNS) per student across the full school populations are as follows: in-school banking schools at USD 0.43, marketing outreach schools at USD 0.21, and control schools at USD 0.01. Again, we find the same pattern: the AMNS at in-school

banking schools is about twice the AMNS per student in marketing outreach schools (and control schools' AMNS is almost nothing). Differences are statistically significant but the average monthly net savings amounts are small. In assessing the savings of those students who have opened accounts (let us call them "savers"), the researchers find that the average monthly net savings among "savers" at in-school banking schools is USD 2.06 and those at marketing outreach schools is USD 1.85. At these rates, net savings amounts would be up to USD 25 on an annualized basis. These are meaningful amounts for school-aged children in Ghana. If this amount were to be saved year after year throughout primary school, total savings could be a substantial contribution to costs for secondary schooling.

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## Preliminary Impact Assessment on Youth Well-Being

The Ghana Experiment aimed to investigate the potential impacts of savings on financial capability, education, health, and psychosocial wellbeing of youth. As described in the baseline report,<sup>3</sup> an emerging body of evidence shows positive effects of savings on a range of youth development outcomes.<sup>4</sup> The experiment's theory of change is described in more detail in

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3 Chowa, Gina, David Ansong, Rainier Masa, et al. 2012. *Youth and Saving in Ghana: A Baseline Report from the YouthSave Ghana Experiment*. St. Louis, MO: Center for Social Development at Washington University

4 For a review of the relevant evidence, see for example Masa, Rainier, Margaret Sherraden, Li Zou et al. 2010. *Youth Savings Around the World: Youth Characteristics, Savings Performance, and Potential Effects* (CSD Research Report 10-15). St. Louis, MO: Center for Social Development at Washington University.

the baseline and endline reports. The endline report also includes definition of outcomes, description of measures, and more detailed experimental findings.

## Financial capability

Youth in both treatment and control groups experienced modest increases in financial capability outcomes (including awareness, skills, and actual behaviors) from baseline to endline. As might be expected, the treatment group youth had greater positive changes compared to control group on behavior-related outcomes, *i.e.*, actually using financial institutions to save money. For instance, the percentage point increase from baseline to endline of treatment youth who reported that they used banks to make savings deposits was almost 10 percent contrasted with less than 5 percent for control youth ( $p < .001$ ). Young people in both marketing outreach schools and in-school banking schools experienced statistically significant increases compared to those in the control schools. In addition, there was a significant difference between treatment and control youth (baseline to endline change) in saving for either college or to start a business. Furthermore, along with the actual behavior-change indicators, the treatment youth experienced a positive change compared to control youth on knowledge, attitudes, and expectations concerning the use of banks to save. For instance, compared to control youth, more treatment youth agreed that having a savings account with a bank can help with saving for education.

## Educational outcomes

The intervention had modest positive effects on education. The treatment group overall was more stable than the control group in retaining commitment to education. However, in terms of the amount of time that youth reported spending on their schoolwork outside normal school hours, neither the treatment nor control group reported significant changes in how long

they study. At baseline, more control-group youth were oriented toward future success, whereas at endline, more treatment-group youth were oriented toward future success, but the difference is not statistically significant.

## Health

YouthSave appears to have had modest positive effects on health outcomes. Treatment youth reported slightly higher endline scores on a range of health outcomes compared to control youth. Although not statistically significant, treatment youth had a higher mean score on awareness of susceptibility to HIV, and a lower mean score on perceived barriers to condom use compared with control youth. Among sexually active youth, treatment youth were also more likely to report condom use at last sexual intercourse compared with control youth.

## Summary

The Ghana Experiment indicates that YouthSave had an impact on savings account uptake, average savings, cumulative savings, and postponing consumption. The experiment showed that boys had more money than girls. As might be expected, a higher percentage of youth in the treatment group owned a savings account in a financial institution than in the control group. Nonfinancial impacts appear to be modest, with suggestive patterns regarding education, health, and future orientation, though sometimes falling short of statistical significance.

We do not know whether holding accounts for a longer period of time might have made these results more pronounced, one way or the other. These impact findings provide seminal evidence for youth development outcomes of savings in Sub-Saharan Africa. Future research could focus on longitudinal impacts, and analysis that investigates differences of youth outcomes based on gender, developmental stage, and treatment exposure. ■



# References and Background Reading

The YouthSave Consortium is grateful to all the scholars and practitioners whose writings have helped shape our project and the fields of youth financial services and youth wellbeing generally. Where possible, we have provided URLs where interested readers can download the works cited in this report. Please note that URLs were valid at the time of writing. We regret that, with the exception of YouthSave's own work products, we cannot be responsible for any links that may break or decay over time, nor can we ensure that downloads are or will remain free of charge. Works produced under the auspices of the YouthSave Consortium itself are indicated with an asterisk (\*).

## Publications

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