MINDFUL SAVING

Exploring the Power of Savings for Women

Evidence-based Report Series on Women's Economic Empowerment

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MINDFUL SAVING

Rose Kibona, a 59-year-old widow in the city of Mbeya, Tanzania, has a stall in an open market where she sells soft drinks and prepared meals during the day, adding beer in the evenings. She recently took a six-week business training course from TechnoServe, which included instruction on how to access M-Pawa, a new Vodafone mobile savings platform. When we met her, she spoke well of the training, especially about how it had taught her to separate her business income from personal income and keep business records. She was using M-Pawa to save, though she had been saving informally for years.

She invited us to her home to see her savings strategy. From her (locked) bedroom she unearthed three saving tools: a glass jar with coins, a gigantic treasure trove of coins overflowing the bag containing them, and a wooden lockbox a carpenter had built for her. When the glass jar was full, she would transfer those coins to the coins in the bag, which she planned to use to buy a car. The lockbox savings were for emergencies, and M-Pawa was for her business investments.

She exemplifies the mindful saving behavior of many women entrepreneurs—micro and small—in developing countries, using mental discipline and ingenuity to save. Mentally allocating or earmarking savings for a purpose makes the money less fungible and helps her feel less obligated to share available money with others.

Saving is important for her, but she should not have to rely on insecure jars, bags, or lockboxes to save. These methods are inefficient, impractical, and potentially dangerous. How can we bring her fully into the formal banking system? More generally, how can we help bridge the gap between women and banks?

This series uses empirical evidence to address these issues. Mobile savings hold great promise, because they can considerably reduce transaction costs that can be unduly heavy for women. Two questions guide us: how can we encourage more women microentrepreneurs to access formal savings accounts, and is mobile saving a particularly fitting solution?

ABOUT THE WOMEN'S ECONOMIC OPPORTUNITY INITIATIVE

In 2005 the ExxonMobil Foundation launched the "Women's Economic Opportunity Initiative," a global effort to help women fulfill their economic potential and drive economic and social change in their communities. ExxonMobil has invested more than $120 million on programs for women entrepreneurs to improve their productivity and income and empower them economically. ExxonMobil states that when women move forward, the world moves with them.

ExxonMobil also insists on documenting results with rigorous evidence. Along with many other organizations that work on economic development, the Foundation soon realized that it did not know whether the programs it was supporting worked. There was evidence on numbers of women trained and numbers of women using productive technologies, but only anecdotal evidence on outcomes and impact. This awareness led the ExxonMobil Foundation to launch a major effort to gather empirical evidence on what works to empower women economically.

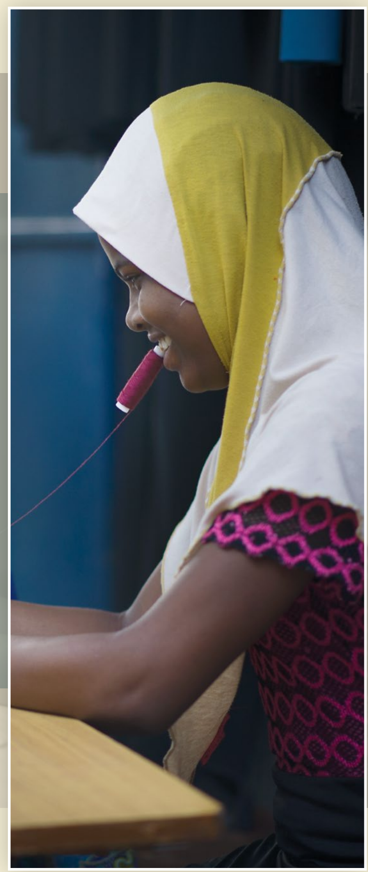
In 2013, in collaboration with the UN Foundation, ExxonMobil published *A Roadmap for Promoting Women's Economic Empowerment* (*Women's Roadmap* for short), which summarized the rigorous evidence on what worked to empower women economically, for whom, and where. The database for the *Women's Roadmap* was updated in 2016 in *Revisiting What Works*.

In 2015, in collaboration with Data2X, a gender data initiative of the UN Foundation, ExxonMobil published guidance on how to measure women's economic empowerment and on the theory of change behind this measurement. It devised a simple set of common metrics and encouraged Foundation grantees to use them to report progress. It also adjusted its investments to reflect the lessons learned and multiply their potential impact.

The same year, ExxonMobil, in collaboration with the Center for Global Development and partner researchers and project implementers, designed a pilot study consisting of two rigorous experiments to further test messages from the *Women's Roadmap* review. The pilot study looked at the impacts of mobile savings tools and businesses training on the growth of women's businesses and incomes in two countries: Indonesia and Tanzania.

ABOUT THE EVIDENCE-BASED REPORT SERIES ON WOMEN'S ECONOMIC EMPOWERMENT

This series summarizes the rich evidence generated through ExxonMobil Foundation's drive to back action on women's economic empowerment with rigorous research. It presents summary findings and links to the detailed research. The series opens with this report, *Mindful Saving*, which highlights the main messages from the research to date about what empowers women economically and how to measure it. It explores the impact of providing women with access to savings and to business training programs. And it presents the initial findings from an evaluation of a mobile savings and training program in Tanzania.



HIGHLIGHTS

1. What Works and How to Measure It

A database of around 230 rigorous program evaluations underpins the messages on what works to empower women economically and how to measure it.

Smart designs providing stipends for travel and childcare and adjusting training schedules and delivery systems can better address women's time burdens

Women differ from one another, and very poor, rural women need more than a single intervention to improve their incomes

Both objective and subjective dimensions of economic empowerment are important for lasting economic gains and should be measured

Direct, intermediate, and final outcomes need to be documented and measured

2. Exploring the Power of Savings Accounts

A unique data set from Chile and a meta-analysis of 13 experimental studies in various country contexts on savings accounts support the conclusion that women prefer savings more than men do for business development or expansion.

Women want savings accounts more than men do

- Of more than 20 million savings accounts from all banks in Chile in 2015, women held 139 savings accounts for every 100 held by men.
- Of 6.6 million individual borrowers in Chile, there were 92 women for every 100 men in 2015.
- In a meta-analysis of 13 savings experiments across various country contexts, if a savings account with low or no transaction costs were offered to adults, 63% of women are predicted to accept, against 26% of men.

Despite the half billion rise in the number of formal bank accounts between 2014 and 2017, the 7 percentage point gender gap in access has not budged—and 9 points in developing countries

- In South Asia, the gap stuck at 18 points, and among the poor it's wider still.

3. New Evidence on Savings Accounts for Women

Savings accounts have multiple benefits for women
Access to savings accounts that women can use privately and securely decreases the pressure on them to share income or to spend it right away—and increases their decisionmaking power and economic independence.

Access to savings accounts especially helps less empowered women

- Even just mentally labeling the use of money as savings makes it less available for other uses, including sharing with relatives—women feel more pressure to share than men, especially less empowered women (Kenya and Chile).
- In Kenya, women, but not men, did not use ATM cards, even with lower fees, because the cards reduced security since husbands could also use them.
- Soft commitments, such as labeling savings for particular uses, help women save.
- Mobile savings provides women with privacy and control over their income, which boost their likelihood of saving and reduce rates of poverty.

Savings accounts may not work for the very poor or in very traditional settings

Women's preference for relying on savings over investments and insurance may lead them to more conservative, less profitable business choices

To help very poor rural women, savings may need to be part of a package of productively oriented interventions

The subjective empowerment effects of savings interventions may not last, may be context specific, or may be slow to emerge

4. New Evidence on Business Training

Women have less access than men to business information and networks that can increase their productivity and income

High-quality business management training can improve economic outcomes for women entrepreneurs

High-quality programs change business practices first

- Informal firms with better business practices had better business performance, as measured by higher rates of firm survival and sales growth.
- The average training program increased the use of good business practices by only about 6–7 percentage points. The effects of high-quality training programs on business profits emerge slowly.
- High-quality training programs should include measures to increase female trainees' confidence and self-affirmation.

5. Exploring the Power of Mobile Saving in Tanzania

Access to the M-Pawa mobile savings platform had a substantial impact on women's savings, and business training enhanced that impact

- Average weekly savings were TS1,900 ($0.90) in the M-Pawa group and TS3,000 ($1.40) in the M-Pawa plus business training group, compared with TS600 ($0.30) in the control group,
- On average, women in the M-Pawa group saved three times more money weekly than women in the control group, while those in the M-Pawa plus business training group saved close to five times more.
- Women shifted savings from alternative sources to M-Pawa: there was a 4.6 percentage point reduction in the likelihood that women would save at home or through a bank or microfinance.

Access to M-Pawa also increased borrowing from the mobile platform

- M-Pawa increased the probability of receiving a loan by 14 percentage points and increased the probability of loan repayment by 11 percentage points.

Business training increased good business practices

- Business training significantly increased use of record keeping by 32% and financial planning by 25%.

The short-term impacts on business survival or profits were not significant

But women who had access to the M-Pawa mobile savings platform plus business training expanded their business activities by operating a second business, increasing their profits

- Women in the M-Pawa plus business training group were 4.6 percentage points more likely to operate a second business and, as a result, generated about $2 more in monthly profits.

The mobile savings platform also had a positive impact on women's subjective empowerment and well-being

- Women assigned to M-Pawa were 5.0 percentage points more likely to report being very happy and 4.8 percentage points more likely to report that their lives have improved.

It may take time for gains from mobile savings, business practices, and increased subjective empowerment to materialize—or the program may not have adequately eased business constraints

So, stay tuned

A follow-up evaluation is now under way, and findings from Indonesia are forthcoming. These should offer a more definitive answer to the questions whether improved access to mobile savings increases business investments and profits and whether business training enhances the effect. It will also yield information to evaluate the cost-effectiveness of these interventions.

Connect with us at http://www.shecounts.com
to receive updates on the pilot study.

Obstacles or constraints related to women's gender help explain persistent gaps in productivity and earnings between women and men that are evident across regions, countries, and occupations

1. WHAT WORKS AND HOW TO MEASURE IT

A database of around 230 rigorous program evaluations underpins the overall messages on what works to empower women economically and how to measure it, as well as the more in-depth review of programs that provide access to savings and to business management training. All evaluations included in the database use experimental or statistical controls to ensure that the outcomes are the result of the program that is being evaluated and not of unobserved factors in the selection of participating entrepreneurs, such as personal attributes (selection bias), or associated with the program, such as the program taking place in a favorable or unfavorable economic climate (placement biases).

Women face obstacles that impair their economic performance

Obstacles or constraints related to women's gender help explain persistent gaps in productivity and earnings between women and men that are evident across regions, countries, and occupations and are especially constricting in poor countries and poor families (World Bank 2012; World Bank and One Campaign 2014). Understanding these gender constraints and how they operate is a first step toward addressing them through development action.

Here we identify three broad sets of gender constraints that project interventions can address (and a fourth that only government can remedy). One set is linked to women's subordinate position in the family, lower decision-making power, and greater exposure to pressures from family, community, and themselves to spend or share their money rather than invest scare resources in economic activities.

A second set stems from women's traditional household and childcare responsibilities, which impose time and travel restrictions that affect women's uptake of programs that address the gender gap in education and access to modern technologies. Women's double roles as caregivers and economic actors may also influence their perception of financial risks and lead to less than optimal business decisions, adversely affecting their productivity and income.

And third, traditional social norms often further restrict women's access to productive resources and services, with negative economic consequences. Such services, especially those that seek to economically empower poor people, may even compound the disadvantages women face by favoring male over female clients. There is growing evidence that implicit and explicit biases tilt workplace environments against women. Services may embed social and cultural stereotypes and biases about women—the most important being the perception that women are not economic actors and are economically dependent on men—and thus help perpetuate inequality of opportunity between men and women.

There is a fourth major constraint that only government can remedy through policy and law reform: legal and structural obstacles that women entrepreneurs and farmers face. These reforms, while important, are not covered in this series, which focuses on programs that the private sector can undertake either alone or in collaboration with government agencies.

Smart designs that address gender constraints can bring substantial benefits to women

While many of the obstacles women, especially poor women, face in the workplace are entrenched in traditional cultural practices and biased working environments, "smart design" features that address gender constraints head-on can make visible headway. They can often bring about more gender-equal outcomes and can be relatively simple to implement.

Examples include measures to ensure the privacy of financial accounts, which encourage women's economic independence and self-reliance and can improve economic outcomes. Peer support and adjustments to loan terms may increase women's confidence in their business decisions and financial risk-taking, helping them overcome risk aversion and make more profitable (but also riskier) business choices.

Providing incentives for program participation, stipends for travel and childcare, and adjusting training schedules and delivery systems can address women's additional time burdens and childcare demands. Overlooking these traditional demands leads to low program uptake and high attrition rates, wasted program resources, and failed programs. Including peer support or other forms of social support or validation, which improve women's confidence and self-affirmation, boost the effectiveness of training programs, especially for less empowered women, and should be a core element of high-quality programs. Confidence training can also address the implicit self-defeating biases that women themselves may have about their abilities.

The substandard treatment of women in working environments can be reduced or eliminated through information and incentives to service providers. Traditional social norms should be addressed through sustained economic empowerment interventions. However, when social norms are severely restrictive and prevent women from doing any paid work, program interventions alone will have a hard time easing gender constraints. Unfortunately, these are limitations that the programs covered in this series cannot address; they will be resolved only with dedicated, long-term investments in girls' and women's human capital formation and with legal and policy reforms for ensuring more equitable economic opportunities for girls and women.

Women differ from one another, and very poor women need more than a single intervention to improve their incomes

A bundle of services that meet very poor women's greater needs is required to increase their productivity and income. Such strategies are expensive but can be transformative and cost-effective. There is no single solution for very poor women, but there are programs that, if well designed, can transform their occupations.

Economic empowerment has both objective and subjective dimensions; both are important for lasting economic gains and should be measured

We define economic empowerment to include the well-accepted objective dimension, measured by increases in productivity and income, as well as the subjective dimension, measured by increased agency and well-being. These subjective dimensions are both valued in themselves and can be instrumental in empowering women economically.

Measuring objective dimensions of economic empowerment is straightforward in concept but may be difficult in practice

Measuring changes in the productivity and earnings of individual women is especially complex for women in low-income settings who farm and are self-employed, combine producing goods for the market and family consumption, have highly variable earnings, share business ownership with a spouse or relative, or manage the business but do not have ownership. Measurable objective empowerment outcomes include business creation and survival, business revenues and profits, growth in physical and financial assets, improvements in earnings stability, and increases in time spent on the business.

Metrics for assessing the subjective dimension of economic empowerment should be culturally appropriate and designed for the context and research question

If measuring the objective dimensions of empowerment is already complex, measuring the subjective dimensions adds the challenge of assessing nonobservable events. Indicators to measure subjective dimensions need to capture processes and mindsets. This is typically done by asking women to report on items such as decisionmaking influence or bargaining power (usually over household expenditures); economic autonomy, self-reliance, and self-control; self-confidence, self-esteem, and perception of agency and efficacy (usually measured using psychological tests); and more general satisfaction with life or well-being. Self-reports, however, can be misleading, so researchers need to construct these measures carefully.

A consistent message in the literature on measuring empowerment is that culture and context matter and that "measures of the mind" in particular need to be validated and adapted before being used. Such measures need to be culturally appropriate and context specific and the research question should reflect them.

Objective and subjective measures of economic empowerment can yield contradictory results

Metrics are needed on both the objective and subjective dimensions of empowerment. Because the two dimensions reflect different aspects of empowerment, they can diverge. The objective measure can yield a positive value, while the subjective measure yields a negative value, and vice versa. A typical example is the case where men took control of the increased revenues of women entrepreneurs in the Walmart supply chain (Scott et al. 2016). Without a measure capturing who controlled the growing income from accessing the supply chain, the study would have falsely concluded that these women advanced economically, whereas they did not.

The causal chain between project intervention and outcomes encompasses direct, intermediate, and final economic empowerment outcomes, and each needs to be documented and measured

A direct outcome in women's economic empowerment programs is the knowledge, skill, or asset acquired from a specific intervention (for example, opening or knowing how to open a savings account, learning a new business concept). An intermediate outcome is the practice or behavior change that results from the direct outcome (using a savings account for deposits or investing savings in a business start-up; changing or adapting a business practice, such as keeping business records). Subjective economic empowerment indicators, such as increased economic autonomy or self-confidence can also be intermediate outcomes in the causal chain. The final outcome is the intended principal effect of the program and includes both objective indicators of economic empowerment (such as increased income) and subjective indicators (such as increased economic independence). Every step in this causal chain needs to be measured.

Observed outcomes may change over time

Project impacts do not all necessarily occur immediately or simultaneously, and evaluation timetables may not allow sufficient time for positive results to emerge or for fully understanding what may occur in the long-term. Outcomes are often unstable or transitory. In some cases, positive income and empowerment effects are short-lived; in others, effects are cumulative and emerge with a lag. Gender norms seem to influence how outcomes unfold. While social restrictions against women can override project gains, project gains can help to change gender norms, with a delayed effect.

That women like to save more than men does not mean, however, that women have equal access to bank accounts and other formal savings instruments

2. EXPLORING THE POWER OF SAVINGS ACCOUNTS: EVIDENCE FROM CHILE AND 13 OTHER STUDIES

A unique data set from Chile and a meta-analysis of 13 experimental studies on savings accounts support the conclusion that women prefer savings more than men do for business development or expansion. That women like to save more than men does not mean, however, that women have equal access to bank accounts and other formal savings instruments. With few exceptions (including Chile), a gender gap in access to bank accounts persists.

Women in Chile want savings accounts more than men do

The government of Chile, while establishing a performance-based budgeting process, began in 2002 requiring that all banks provide sex-disaggregated information on their clients for annual publication by the Superintendency of Banks, the government's regulatory body. The first year, the superintendency used civil registration data to identify clients' sex in the data provided by banks. In later years, banks coded and provided the information directly. This rich store of data covered more than 20 million individual accounts in 2015. (Chile's population at the time was around 16 million people.)

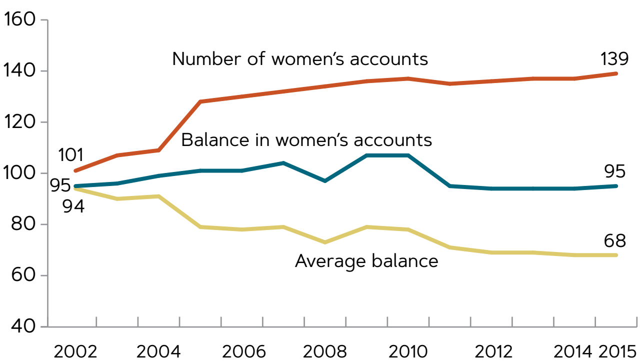
The data reveal women's stronger preference for saving compared to men. Women held 101 savings accounts for every 100 savings accounts held by men in 2002; by 2015 women held 139 (or around 11.4 million of 20 million accounts in 2015; figure 1).

Men, by contrast, are the majority of individual borrowers in Chile

In 2015, men were still a majority of borrowers in Chile, although women were catching up (figure 2). For every 100 male borrowers, there were 56 female borrowers in 2002 and 92 in 2015, when there were 6.6 million individual borrowers. In 2015, 58% of individual savings accounts were in a woman's name, and women constituted 48% of all borrowers.

Figure 1. Women's savings accounts outnumbered men's in Chile in every year from 2002 to 2015

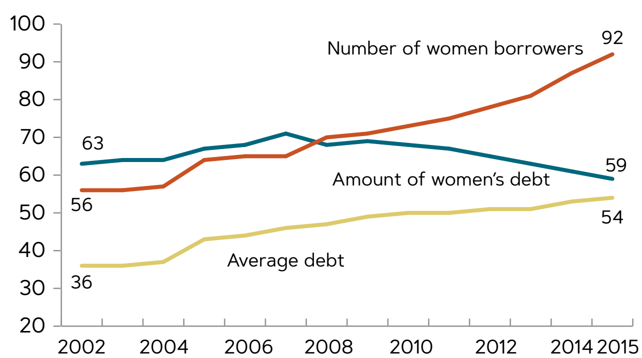
Women's values as a percentage of men's values



Note: There were 20,395,000 deposit accounts in 2015.
Source: Chile Superintendency of Banks (https://www.sbif.cl/sbifweb3/internet/archivos/Info_Fin_864_15473.pdf).

Figure 2. More men than women are borrowers in Chile, but women are catching up, 2002–2015

Women's values as a percentage of men's values



Note: There were 6,665,831 borrowers in 2015; women constituted 48% of total borrowers.
Source: Chile Superintendency of Banks (https://www.sbif.cl/sbifweb3/internet/archivos/Info_Fin_864_15473.pdf).

The notion that women prefer savings is also supported by the results of 13 savings experiments, covering different countries and populations

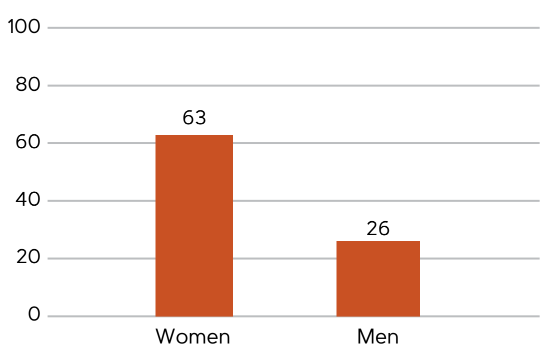
As persuasive as the Chile data are in showing women's preference for savings accounts, it is hard to generalize results from one country to others, even if the numbers cover the country's entire population. Fortunately, experiments facilitating access to basic savings accounts have multiplied in recent years and provide useful data over a broad range of conditions.

A meta-analysis of the experimental evidence for this series over the last 14 years (2004–2018) identified 49 randomized controlled trials covering different regions and populations (Knowles, 2018) [access report online]. Of these, 13 experiments offered access to a basic no-frills savings account with minimal transaction costs and had no other interventions bundled along with the savings, and were thus comparable. All 13 studies reported on accounts that were opened and had received at least one deposit (only 6 of the 13 experiments reported whether accounts were actively used, typically, two or more deposits over a year) [access table with the 13 studies online].

The studies varied in settings (seven in Sub-Saharan Africa, three in South Asia, and one each in Europe, Latin America, and North America); characteristics of study participants (farmers, microentrepreneurs, and international migrants); location; and gender.

A random effects meta-analysis looked at whether there were gender differences in opening savings accounts (uptake) and making at least one deposit in this account (an important intermediate outcome in the results chain; see chapter 3). That analysis found that an estimated 46% of adults would accept an offer to open a savings account with minimal or no account opening and transaction costs. Women had a much higher uptake rate than men (not surprisingly, with only 13 observations, the differences were not statistically significant). Analysis found that a sample composed entirely of women has a predicted 63% rate of opening a savings account with at least one deposit, while an all-male sample has only a predicted 26% rate (figure 3). This is a large difference.

Figure 3. Share of adults who would accept an offer to open a savings account involving minimal or no account opening and transactions costs is predicted as much higher for women than for men
Percent



Source: Knowles (2018).

Despite women's preference for savings, there is a persistent global gender gap in access to bank accounts and savings

Saving reduces poverty by helping people manage financial risks, smooth consumption, and invest in the future (Demirgüç-Kunt and Singer 2017). In addition, access to savings can have multiple benefits for women.

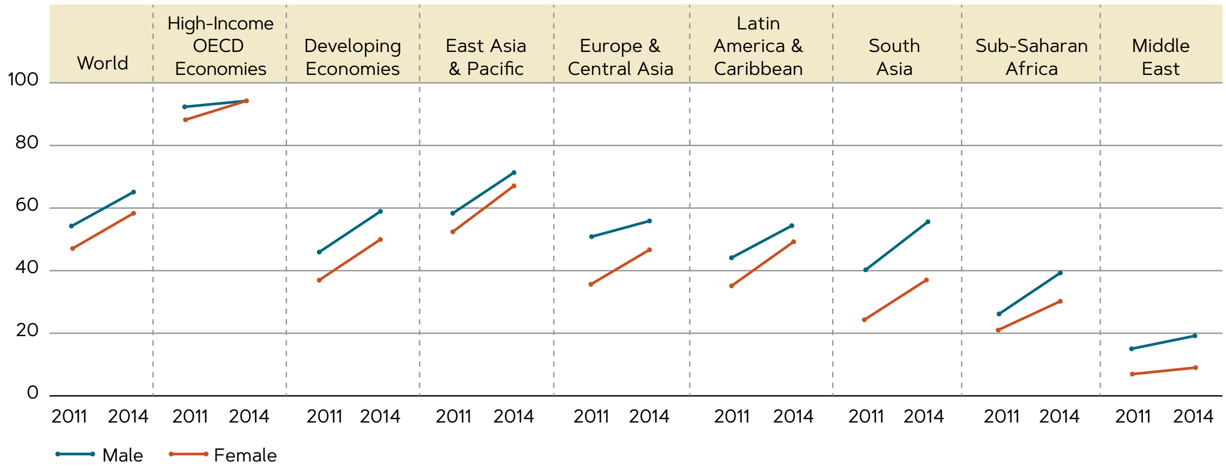
That women like to save more than men does not mean, however, that they have equal access to bank accounts and other formal savings instruments. Chile is one of the few countries where this gap is disappearing, but this is not happening globally, especially not in poor countries.

While the number of formal bank accounts has risen considerably in the past few years, the gender gap in access to accounts has not budged. The 7 percentage point gap between men and women in access to bank accounts globally, and the 9 percentage point gap in developing economies, did not change between 2011 and 2014 (Global Findex 2016; figure 4). In the Middle East, women are half as likely as men to have an account. In absolute terms, the gender gap is largest in South Asia, at 18 percentage points. Among the poor, the gender gap is larger still.

Women face barriers to opening a bank account on both the demand and the supply sides. Factors on the demand side include lack of assets for collateral, lack of formal identification documents, and lower rate of cell phone ownership; on the supply side are inappropriate product offerings and distribution channels. In addition, women experience legal and regulatory barriers that men do not. With less access to formal financial services, women save informally, using all kinds of strategies and vehicles.

Figure 4. The gender gap between men and women in access to bank accounts globally and by region improved little between 2011 and 2014

Percentage of adults with a bank account



Source: Findex (2016; figure 4).

Women often have less decisionmaking power in the household, including over spending, saving, and investing the income they generate

3. RECENT EVIDENCE ON SAVINGS ACCOUNTS FOR WOMEN

The causal chain for saving accounts includes opening or knowing how to open a savings account as a direct outcome that needs to be measured, which should translate into increased economic self-reliance (subjective empowerment) as an intermediate outcome and increased income and economic independence (subjective empowerment) as final outcomes (figure 5).

Women's subordinate position in the family reduces their economic independence and negatively affects their business performance

Women often have less decisionmaking power in the household, including over spending, saving, and investing the income they generate. They are also burdened disproportionately by the "kin tax"—pressures from family members to share money that women have earned and would otherwise use for business purposes—which weakens their economic performance and perpetuates gender differentials in earnings.

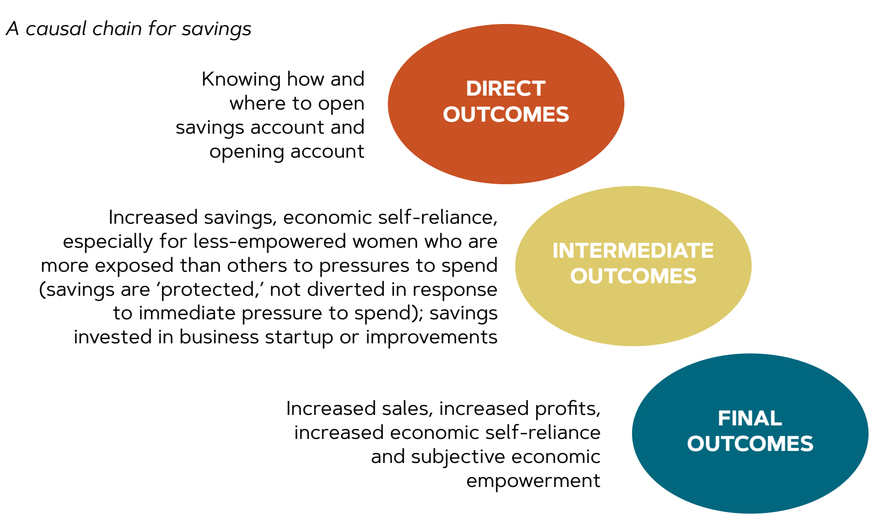
Savings accounts have multiple benefits for women

Access to savings accounts that women can use privately and securely, including those made accessible over mobile phones and those that build in some form of commitment to incentivize saving rather than sharing or spending, have positive economic outcomes. Such accounts decrease the pressure on women to share income or to spend it right away and increase their decisionmaking power and economic independence (Hoff and Stiglitz 2016).

Access to savings accounts especially helps less empowered women

At the time the *Women's Roadmap* was published in 2013, only two rigorous experiments (one in Kenya and one in the Philippines) provided evi-

Figure 5. The causal chain between project intervention and outcomes for women's savings accounts encompasses direct, intermediate, and final economic empowerment outcomes



dence on the positive impact of savings accounts on women. Since then, experiments in Chile, Kenya, and Nepal, along with a study in Malawi focused on men and a panel study in Kenya, support this earlier evidence on savings accounts as particularly beneficial to women [access the summary table with the savings studies and references online].

The new evidence finds that even just mentally labeling the use of money as savings makes it less available for other uses, including pressure to share with relatives (Kenya); that this pressure affects women more than men, especially less empowered women (Kenya and Chile); and that both women and men prefer individual, secure savings accounts over joint accounts. In Malawi, unbanked men and women preferred individual or joint no-frills bank accounts. In Kenya, women, but not men, did not use ATM cards, even with lower fees, because the cards reduced security since husbands could also use them.

While soft commitments, such as using lockboxes and labeling savings for particular uses, help women save, under certain circumstances liquid savings, which allow money to be freely withdrawn, can work as well as commitment savings, which prevent individuals from withdrawing funds until they have reached a self-specified goal (for example, with female heads of households in Nepal's urban slums and women microentrepreneurs in urban Chile).

Mobile savings boost women's likelihood of saving and reduce poverty

Two recent studies, both in Kenya, are the first to yield evidence on the benefits of mobile savings for women. A six-year study of the effects of access to a mobile savings platform found that increases in mobile savings reduced poverty rates among vulnerable groups. The impacts were more pronounced for women than for men, especially for women heads of households. Having a private, low-cost way to save and to manage financial resources increased households' financial resilience. Another study suggested that women are more likely to save than men and that access to a mobile savings platform boosts the likelihood of saving and significantly increases the amount saved.

The empowerment effect of access to savings accounts for women has limitations

The notion that saving is the answer to empowering women economically has limitations, however. Saving alone may not have the desired impact for very poor rural women and for women in very traditional settings. Also, women's preferred option of saving rather than investing, which entails more risk, may not be the most profitable one.

Savings accounts may not work for the very poor or in very traditional settings

Both poverty and distance from banks discouraged unbanked poor rural people interviewed in Malawi and Uganda, a majority of them women, from opening free, bare-bones bank accounts. In Nepal, in contrast, very poor women in the urban slums who opened savings accounts had access to mobile bank branches that reduced travel costs.

Marked gender inequality that keeps women from paid work altogether may also prevent women from realizing the positive impacts of savings accounts. In very traditional Somali agro-pastoralist communities in Eastern Kenya, for instance, women faced less rather than more family pressure (the more common finding) than men did to share income with relatives (the "kin tax," which access to private savings helps to overcome). However, this was because women's work options were so severely restricted in these communities that they were not expected to help support relatives.

The preference for relying on savings over investments and insurance may lead women to more conservative, less profitable business choices

Women's distinct preference for savings over investment compared with men may reflect greater financial risk aversion among women. Women may prefer to hold savings to deal with emergencies and thus prefer to use their own savings, rather than borrowed capital, for business investments (Croson and Gneezy 2009). Complementary explanations for women's greater risk aversion are that women's perceptions of risk are different or that they face a wider set of risks—particularly health risks associated with fertility and childcare—than men do. This may lead women to make more conservative choices in the short term, such as opening savings accounts (less profitable) rather than purchasing agricultural insurance (more profitable). This preference for savings over agricultural insurance, resulting in lower profits for women than for men, was observed in a field experiment with farmers, a majority of them women, in Burkina Faso and Senegal.

To help very poor rural women, savings may need to be part of a package of productively oriented interventions

A rigorous evaluation of BRAC programs for very poor people in six countries that provided bundled savings and services (including a capital asset, training and technical assistance, and others) found that this big push helped overcome poverty traps and had positive economic outcomes that were maintained a year after the program ended. Savings rose considerably beyond the level required as part of the program during the first year. Total program costs were comparatively high, but the benefits were much larger than the costs in all but one of the cases studied.

The study samples in the six countries were representative of the very poor overall, and most of the results were reported for households rather than individuals. However, in four of the six countries (all but Ethiopia and Peru), the BRAC programs were directed to women in these very poor households. In India and Pakistan, the programs preferred households with able-bodied female members and no economically active males. In Ghana, the program excluded households with no female members, and in Honduras the program targeted female heads of household, who were required to open a savings account.

While it is not yet known why this big push that bundled savings and services may work especially well for very poor people, it could be that the transfer of a large physical asset (nondivisible) nudges very poor women (who tend to be under heavy pressures to spend) to keep rather than consume the asset. Their savings may reinforce this behavior, fostering self-reliance and thus may be particularly beneficial to these women. However, there is as yet no conclusive evidence that these programs are more beneficial to very poor women than to very poor men.

The subjective empowerment effects of savings interventions may not last

A puzzling finding from the evaluation of these BRAC programs for the very poor is a reported short-lived effect on women's subjective empowerment. The increase in women's empowerment (measured through self-reported influence on household decision-making) picked up in most of the six programs dissipated within the year. A possible explanation is that women's income and their control over it did not increase enough to overcome traditional social norms. An evaluation of a similar program for very poor people in Bangladesh that carefully tracked economic empowerment outcomes by gender found that, while women recorded intermediate economic gains—their ownership and control over livestock increased—men reaped the final economic benefits of the project. Men assumed ownership of new agricultural investments, consistent with traditional social norms, even though the women had tended the livestock and produced the revenue that led to these investments.

Subjective empowerment effects may be context specific or may be slow to emerge

A complementary explanation is that increased independence and self-reliance in the workplace do not necessarily translate into increased power in family decisionmaking or in social interactions. These effects may depend on the context. Because social norms take time to change, some impacts may be slow to emerge. A review of Oxfam projects that focused on women's empowerment found that improvements in women's economic outcomes do not automatically translate into improvements in other areas, including changes in household power dynamics (Lombardini and McCollum 2017).

These findings suggest that gender constraints are more deeply embedded in some contexts and therefore more impervious to change. They may require more intensive, multifaceted interventions (including elements of smart design) to meaningfully improve economic outcomes and transform gendered power dynamics.

Women have historically been excluded from information and networks that provide entrepreneurs and farmers with skills, market information, peer support, and other crucial foundations for growing businesses or increasing agricultural productivity

4. RECENT EVIDENCE ON BUSINESS TRAINING

The causal chain for business training includes increased business knowledge as a direct outcome that needs to be measured, which should translate into improved business practices as the intermediate outcome and increased business survival rates and profits as the final outcome (figure 6).

Women have less access than men to business information and networks that can increase their productivity and income

Women have historically been excluded from information and networks that provide entrepreneurs and farmers with skills, market information, peer support, and other crucial foundations for growing businesses, increasing agricultural productivity, or transitioning from education to high-quality employment. Business management training can help overcome these gender gaps, but only if it is high quality and takes women's disproportionate unpaid home and care work responsibilities into account—along with the time and mobility obstacles they impose.

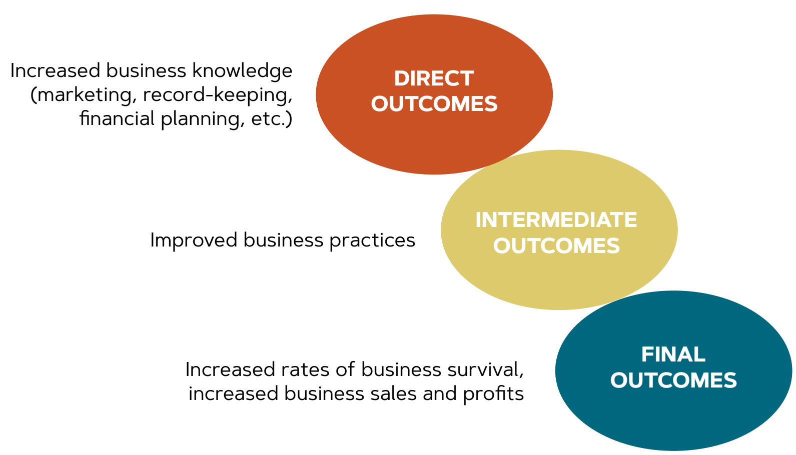
A related, often overlooked barrier is the implicit and explicit biases against women in some training environments, including biases from both trainers and trainees (including women themselves) that limit women's ability to benefit from the training. Programs that actively seek to lower these barriers can have positive outcomes. Those that do not tend to perpetuate women's educational and economic disadvantages.

High-quality business management training can improve economic outcomes for women entrepreneurs

Measuring the impact of business management training is difficult because of differences in course quality, length, depth, and breadth. That said, the consensus of the earlier evidence documented in the *Women's Roadmap* is that the average training program improved business practices (for example,

Figure 6. The causal chain between project intervention and outcomes for women's business training encompasses direct, intermediate, and final economic empowerment outcomes

A causal chain for business training programs for poor women microentrepreneurs



formal accounting and marketing activities) but had few measurable effects on business survivorship or profits. This lack of positive final outcomes was not restricted to women but was observed more consistently for women than for men. This was attributed to women engaging in less profitable businesses and facing more binding external constraints, including more childcare and household duties and limited say in household decisions.

The recent evidence is more nuanced. It suggests that high-quality training of reasonable duration can have positive economic outcomes for poor entrepreneurs, including women. However, that impact depends on high attendance and low attrition rates, in addition to high quality training [access the summary table with the training studies and references online].

High-quality programs change business practices first

A study of the business practices and performance of mostly informal firms in seven sample groups between 2008 and 2014 found that firms with better business practices had better business performance, as measured by higher rates of firm survival and sales growth. The study concluded that good business practices are important to long-term business success and that the nonsignificant effect of business training programs found in earlier studies stemmed from an inability to change business practices sufficiently. For instance, the average training program increased the use of good business practices by only about 6–7 percentage points. Although the recent findings are not disaggregated by the business owner's sex, three of the seven samples (Kenya, Mexico, and Sri Lanka) consisted exclusively of female-owned firms, which lends confidence that the findings are applicable to women as well as to men.

Effects of high-quality training programs on business profits emerge slowly

Training that changes business practices and increases profits must be high quality (in training materials, trainers, and duration) and address gender constraints (time and other costs) by adapting training hours to women's schedules and providing incentives for attendance, among others. This translates into courses delivered by specialized professionals that last more than a day or two (often a month or six weeks) and include participant incentives to encourage regular attendance (Kenya, Mexico, and Peru). Some of the training effects on business profits also take more time to manifest (two years in Peru, three years in Kenya) and thus may not be picked up in the initial measures soon after the training is completed.

Learning environments can be biased against women, impairing their training outcomes

Information on training programs that are biased against women trainees is sparse, partly because evaluations of programs that fail are usually not published. An exception is a three-month long apprenticeship program for poor vulnerable youth (orphans or school dropouts) ages 15– 24 in Malawi from which a third of participants dropped out. Female participants dropped out more often because of external constraints, whereas men dropped out more often to take advantage of unrelated job opportunities. The training was costlier for women, who had less access to financing and used more of their personal savings.

Women were treated worse than men by the trainers, who favored men over women, providing them with more food, stipends, and paid work during the apprenticeship. Biases can affect trainees as well as trainers. Also in Malawi, maize farmers who were taught improved farming technique by female agents had higher yields than those taught by male agents. Nevertheless, both male and female farmers perceived the male agents to be more able farmers and more knowledgeable about agricultural technology. Small, performance-based incentives helped to counteract this bias.

There is considerable room to better document gender biases in training environments and to improve learning environments so that they benefit women and men equally.

High-quality training programs should include measures to increase female trainees' confidence and self-affirmation

In addition to the more traditional components of program quality that address women's time and other constraints, training programs should include some form of social support or confidence building as a core part of high-quality programs.

Programs with such components seem to be more effective, especially for less empowered women. In India, women microentrepreneurs with a savings account in a Self Employed Women's Association (SEWA) bank who trained alongside a friend reported increased business activity and income four months after training; there was no change in reported business behavior for women who trained alone. A friend's presence seems to have raised these women's aspirations to work outside the home. Similarly, in rural Uganda pairing a woman cotton farmer with another randomly selected woman cotton farmer improved farming knowledge and yields.

Supporting these mindset interventions is new evidence suggesting that training designed to zero in on improving self-confidence, personal initiative, and other noncognitive soft skills may be as effective in improving business outcomes as traditional training designed solely to convey business management knowledge—if not more effective. In Togo, personal initiative training increased the firm profits of female- and male-owned businesses. In Malawi, female farmers with higher soft noncognitive skills were more likely to adopt more profitable cash crops. And in urban Nigeria, training that explicitly focused on reversing women's own self-defeating biases in entering the information and technology sector boosted their engagement in the sector.

In summary, information and social supports from others may be particularly important in enabling poorer and less empowered women to gain the knowledge and confidence to make appropriate business choices and take greater financial risks.

On average, women in the M-Pawa group saved three times more money weekly than women in the control group, while those in the M-Pawa plus business training group saved close to five times more

5. TANZANIA: ACCESS TO MOBILE SAVINGS PLUS BUSINESS TRAINING BOOSTS SAVINGS AND SUBJECTIVE EMPOWERMENT

The *Women's Roadmap* identified savings vehicles as one of the few programs that could increase the productivity and earnings of both poor and nonpoor women, and thus found it to be a worthy investment. Based on this initial evidence, and suggestive evidence on the potential of mobile technologies to overcome women's mobility and time constraints, the ExxonMobil Foundation invested in further testing the power of mobile savings and the effects of business training. Two randomized controlled trials were launched in 2015, in Indonesia and in Tanzania, to assess the power of mobile savings and training for women entrepreneurs. This chapter reports on the Tanzania trials.

The trials in Indonesia and Tanzania were designed to test complementary demand- and supply-side interventions

The studies were designed to answer complementary questions. They, and the interventions they evaluated, were conducted independently by different research and implementing teams, but the measures were designed to be as comparable as possible. The Indonesia study tested both demand- and supply-side interventions (supporting entrepreneurs and supporting financial institutions), while the Tanzania study measured the propensity to save from the demand-side (supporting entrepreneurs [access the Tanzania report online]).

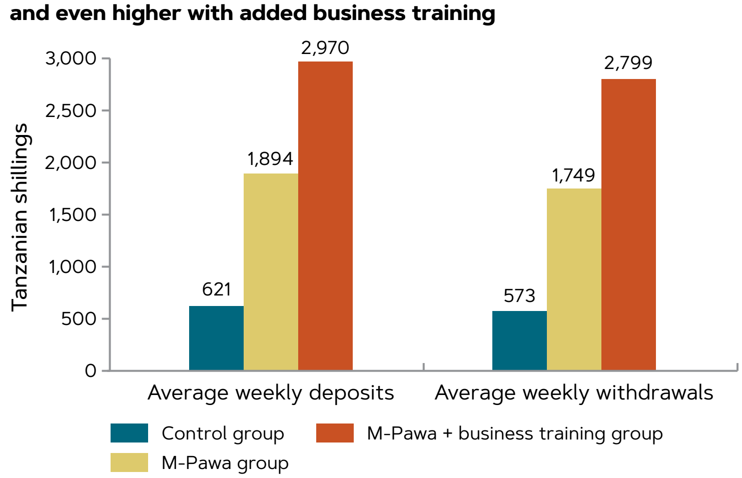
The Indonesia intervention, forthcoming in this series, tested whether varying financial incentives to bank agents promoting a new mobile savings product makes a difference in increasing entrepreneurs' uptake of savings products, helping bridge the gender divide (all bank agents are told of the potential benefits that the product brings to women entrepreneurs). The Tanzania intervention tested whether access to a new mobile savings technology on its own could improve women's business profits or whether complementary business skills training is also needed.

In the Tanzania intervention, women microentrepreneurs (mostly market and street vendors) in two cities were provided access to an interest-bearing mobile savings platform, M-Pawa, plus weekly reminders to save. They also received twelve 2.5 hour weekly training sessions on business skills. After a few months, users of M-Pawa also became eligible for microloans. (See box 1 for the design of the intervention.)

Access to M-Pawa had a substantial impact on women's savings, and the business training enhanced these impacts

Women assigned to receive M-Pawa had significantly more and larger deposits and withdrawals in the 58 weeks after the start of M-Pawa compared to controls, and the business training boosted this behavior (figure 7). On average, women in the M-Pawa group saved three times more money weekly than women in the control group, while those in the

Figure 7. Total weekly deposits and withdrawals in the 58 weeks after the start of M-Pawa were higher among the M-Pawa group—and even higher with added business training



Source: Project administrative (mobile phone) data.

BOX 1

DESIGN OF THE TANZANIA INTERVENTION

Participants in the Tanzania intervention received access to an interest-bearing mobile savings platform, M-Pawa, plus weekly reminders to save. Some also received 12 weekly 2.5 hour face-to-face training, implemented by Techno-Serve, along with training videos. Women who completed the training received a training manual, a certificate of completion, and access to a mobile learning platform to reinforce training messages.

Study sample

Some 4,000 women microentrepreneurs were randomly assigned to participate in the trials: 1,000 women in the mobile savings platform alone, 2,000 in the mobile savings plus business training platform, and 1,000 to a control group with no intervention (see figure). All women were interviewed at baseline and six months after they completed the training. The World Bank Africa Gender Innovation Lab conducted the experimental evaluation [access the full study online]. The main question the study addressed was whether mobile savings alone or in combination with business training increases business incomes and empowers women economically.

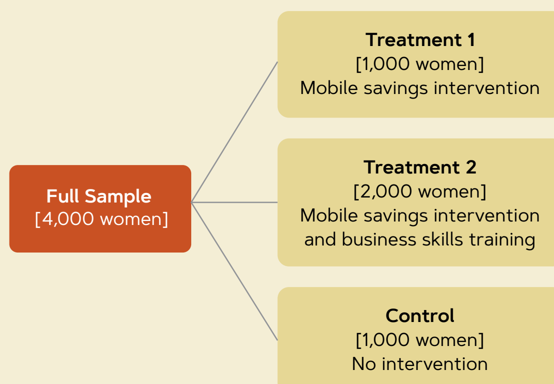
Who are the women?

The average female microentrepreneur in the intervention was 37 years old and had nine years of education and three children. About 60% of the women were married. Only 11% of the microenterprises had employees. The mean firm earned $250 a month in sales and $74 a month in profits, had capital stock of $177 and savings of $116 over the previous 12 months. About 46% of the firms had received a loan from any source (formal or informal) in the past 12 months.

At baseline, the average firm implemented just under half of the 26 business practices the study tested. The female microentrepreneurs' use of formal institutions was very low. At baseline, only 19% used a bank or a microfinance agency, although most of them had savings (90%).

Overall, despite high geographic mobility rates, the study was able to track 90.5% of the sample at the six-month interval.

Study Sample



M-Pawa plus business training group saved almost five times more. Average weekly savings were 600 Tanzanian shillings (TS; equivalent to $0.30) in the control group, TS1,900 ($0.90) in the M-Pawa group, and TS3,000 ($1.40) in the M-Pawa plus business training group. Women shifted savings from alternative sources to M-Pawa: there was a 4.6 percentage point reduction in the likelihood that women would save in an alternative form (at home or through a bank or microfinance).

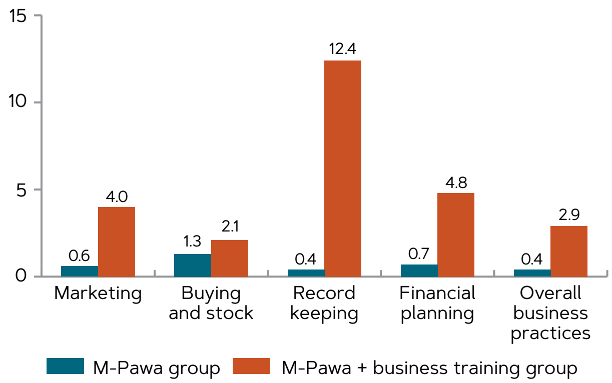
Borrowing from the mobile platform also increased with access to M-Pawa

Women who participated in M-Pawa also borrowed at significantly higher rates than women in the control group: M-Pawa increased the probability of receiving a loan by 14 percentage points and increased the probability of loan repayment by 11 percentage points.

Business training increased use of good business practices, such as record keeping and financial planning

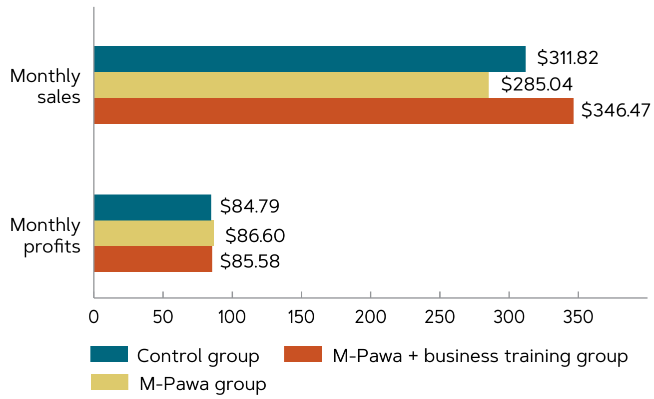
Business training was effective in increasing women's use of good business practices. The largest and significant impacts were increased use of record keeping (up 32%, or 12.4 percentage points) and financial planning (up 25%, or 4.8 percentage points) relative to the control group (figure 8).

Figure 8. Business training increased women's use of business practices compared with the control group
Percentage point increase from baseline control mean



Note: Baseline means were 53% for the marketing index, 69% for the buying and stock index, 39% for the record keeping index, and 19% for the financial planning index.

Figure 9. Neither access to mobile savings nor business training had a significant impact on business survival or profits
Average main business sales and profits at 58 weeks



But the short-term impacts on business survival or profits were not significant

Neither intervention had a significant impact on the final outcomes—business survival or profits (figure 9)—of the primary business six months after the training ended.

However, women who had access to both the mobile savings platform and business training expanded their business activities by operating a second business, increasing their profits

Relative to women in the control group, women assigned to M-Pawa plus business training were 4.6 percentage points more likely to operate a second business and, as a result, generated approximately $2 in additional monthly profits (figure 10).

The mobile savings platform had a positive impact on women's subjective empowerment and well-being

The overall positive and significant impact of access to M-Pawa on women's subjective empowerment was driven mainly by women's increased say over how to spend money earned from their businesses and over major household expenditures. The finding that women have greater control over their business incomes is consistent with the idea that mobile savings provide access to a safe and private savings platform that can boost financial independence to counter the social pressures that women might face to share their incomes with family and friends. The business training did not have these empowerment impacts.

All women reported a high level of life satisfaction: 38% of the women in the control group reported that they were very happy, and 51% reported that their lives were improving (figure 11). The M-Pawa intervention significantly raised women's satisfaction with their lives. These women were 5.0 percentage points more likely to report being very happy and 4.8 percentage points more likely to report that their lives have improved.

The absence of business gains may indicate that it takes time for gains from mobile savings, business practices, and increased subjective empowerment to materialize—or that the program did not adequately ease business constraints

The Tanzania results are encouraging and consistent with the evidence on savings and business training reviewed in this report. They reinforce the attractiveness of mobile savings for these businesswomen and their importance for boosting subjective economic empowerment. The results also show that high-quality business training that translates into good business practices enhances the positive effects of mobile savings.

There are two possible complementary explanations for the fact that increased mobile savings, better business practices, and increased subjective empowerment have yet to yield increased business investments, revenues, and profits. The business gains from these inexpensive "light touch" interventions may be too small for the statistical tests to detect. Most women in the sample, like the entrepreneur featured at the start of this report, were

Figure 10. Women who had access to M-Pawa and received business training increased profits by operating a second business

Impacts on main and other business profits control mean

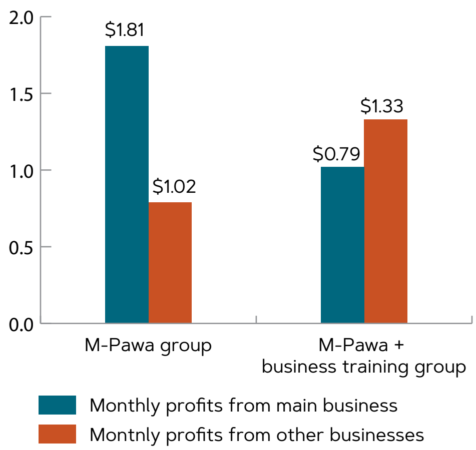
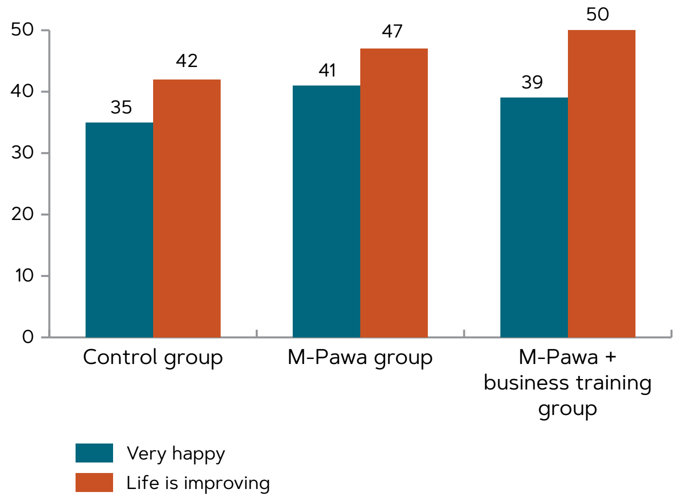


Figure 11. M-Pawa increased women's happiness and optimism

Percent of study participants answering "yes"



already saving. Thus, M-Pawa may have offered the additional benefits of shifting savings to a mobile savings device rather than the full benefits of incentivizing additional savings. Alternatively, the gains are just starting to accumulate and are not evident six months post-intervention, but will be reflected in the near future.

Stay tuned

A follow up measure now under way should offer a more definitive answer to the question whether improved access to mobile savings increases business investments and profits and whether business training enhances the effect. It will also yield information to evaluate the cost-effectiveness of these interventions.

Women microentrepreneurs, like the Tanzanian entrepreneur featured in the opening of this report, demand and deserve full access to financial services, including savings vehicles, that are reliable, convenient, safe, and—as documented here for the case of mobile savings—potentially empowering.

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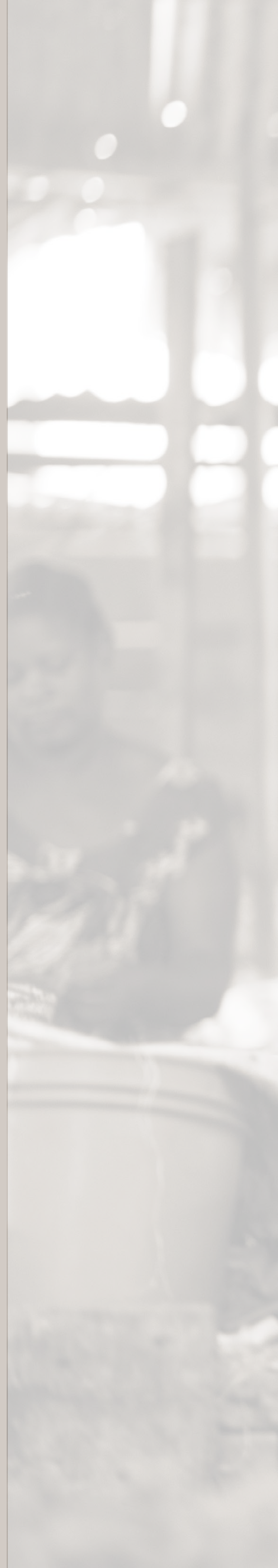

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