Results from an Endline Study of Gender and Entrepreneurship in East Java, Indonesia

Evidence-based Report Series on Women’s Economic Empowerment

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The Indonesia trial tests whether providing financial literacy training for women who are potential bank clients and varying financial incentives to bank agents promoting a new mobile savings product make a difference in increasing women entrepreneurs’ uptake of formal savings and in improving economic outcomes.

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This report presents the endline results of a randomized controlled trial in East Java, Indonesia, of demand- and supply-side interventions to increase the use of saving and other branchless banking services by women business owners. The first report in the series (March 2018) laid out the rationale for this trial and for a complementary trial in Tanzania and presented the results for the Tanzania trial. Report 2 (April 2018) described the results of a baseline study (conducted before the trial) in Indonesia on whether differences in the characteristics of businesswomen and businessmen explain differences in outcomes and identified factors that are related to more successful entrepreneurial ventures. Report 3 (August 2018) updated results for the Indonesia trial, presenting midline impacts based on a survey in early 2018 of roughly half the project sample.

Study design

The study context

To promote full financial inclusion, the Indonesian Financial Service Authority (OJK) issued a regulation in 2014 to establish banking services not through branch networks, “branchless banking.” The Indonesian model of branchless banking, Laku Pandai (LP), uses local agents and digital technology (such as mobile phone text messaging and internet access) to provide basic banking services, such as opening a basic savings account with a low minimum and opening balance and no maintenance fees. The agents serve as intermediaries between the bank and the customers, and OJK encourages banks to prioritize unbanked and underbanked areas. Most agents are shop-owners who have been authorized to assist customers to open basic savings accounts, accept cash deposits, and disburse funds from customers’ savings accounts. Only the account holders and their banks have access to account balances, which makes the account holders less vulnerable to demands for financial assistance from relatives and other social claimants when compared with individuals saving informally. The LP basic savings accounts complement digital wallet products already widely used in Indonesia (Lembaga Keuangan Digital, or LKD).

Taking advantage of this recent introduction of branchless banking, a trial project in East Java Province, Indonesia, supported both supply-side and demand-side interventions designed to increase the use of saving and other branchless banking services by women business owners in 400 predominantly rural villages in five regencies (kabupaten). The supply-side interventions were delivered in collaboration with an Indonesian bank, herewith referred to as the “partner bank.” The interventions were randomized within an experimental design that makes it possible to assess the effectiveness and cost-effectiveness of the supply-side and demand-side interventions, both separately and in combination. The interventions were conducted in two phases to accommodate schedules in rolling out branchless banking in different localities—between December 2016 and July 2017 and between August 2017 and June 2018.

Sample and time frame

The 400 villages in the sample were among those where the partner bank planned to establish branchless banking services. Survey data were collected before and after the interventions for a random sample of 2,840 businesswomen and 1,969 businessmen (4,809 in all) and 400 female and male branchless banking agents. The entrepreneurs had to own at least one currently operating nonfarm business, be between the ages of 18 and 55, reside in the village, and have a mobile phone with an active account (since the project was introducing mobile saving services). Businesswomen had to self-identify as the primary owner or manager of the business. Seven women and five men business owners were randomly selected in each village from a village census of business owners. One branchless banking agent was recruited per village by the partner bank using standard bank selection criteria (the agents selected were in many cases bank clients with a good credit history).

The baseline survey was conducted in two phases, in late 2016/early 2017 and in mid- to late 2017. The endline survey was conducted over two months at the end of 2018. Thus, the longest time gap between the baseline and the endline was two years and the shortest gap was one year. Some 3.5 percent of all business owners and 4 percent of businesswomen were not located to be re-interviewed at endline.

Supply and demand-side interventions

The trial consisted of varying financial incentives to bank agents on the supply side and varying business training and mentoring to businesswomen on the demand side. (See box 1 for details on the survey instruments, the statistical analysis, and intervention uptake and attrition.)

The supply-side intervention tested whether financially incentivizing village bank agents increased uptake of the mobile savings product. Bank agents in the 400 sample villages received an average of three hours of one-on-one training on branchless banking by Mercy Corps Indonesia. The training emphasized the value of marketing
to underbanked groups, particularly women, and was followed by three one-on-one mentoring visits.

Bank agents were then randomly assigned to receive one of two levels of financial incentives for signing up clients. The standard fee was 2,000 rupiah (Rp., about $0.15) for agents who identified a new branchless banking client who deposited at least Rp. 20,000 (about $1.54) and who maintained an average savings balance of Rp. 20,000 over two weeks. About half (48 percent) of villages were randomly assigned to this low-incentive intervention. Bank agents in the remaining villages received the high-incentive intervention of Rp. 10,000 (about $0.77) for each new client identified, or five times the standard fee.5

On the demand side, seven businesswomen in each village (2,800 total) were randomly selected for the trial from a village census of business owners that was conducted in all sample villages. Four of the seven were randomly assigned to receive group training and follow-up mentoring from Mercy Corps Indonesia; the remaining three did not receive any training or mentoring, forming the control group.6 The group training, which averaged three hours, focused on financial and business literacy (income and expense tracking, financial and cash flow planning, and record-keeping), the importance of saving, and information on the availability and use of the partner bank’s branchless banking and digital wallet products. Following the training, the businesswomen received three group mentoring sessions to address their questions and practice the concepts they learned. This is referred to as “business training,” although group mentoring sessions and the promotion of savings and branchless banking products are added onto a basic financial and business literacy short module, delivered in a small-group setting. The design and sampling are summarized in figure 1.

This endline analysis of the trial focuses on the effects of the supply- and demand-side interventions on the businesswomen rather than on any differences in outcome between businesswomen and businessmen resulting from the interventions.

**Initial conditions**

**Business ventures at the outset revealed gender differentials favoring businessmen over businesswomen**

The baseline survey revealed that most of the sample entrepreneurs ran small or very small businesses with few or no employees.7 Close to 20 percent of the sample entrepreneurs ran a secondary business as well as their primary business, perhaps to help expand a limited local market, and some also reported wage and salary earnings.

Within this overall profile of small and subsistence-level firms, there were sharp gender differentials favoring businessmen: men earned significantly more, on average, from business and other sources of income than women, earning almost twice as much as women from their primary and secondary businesses combined (figure 2).8

Related to these differences in profits, businessmen had more business assets and more paid workers in their primary business, held more individual bank accounts, and took out more loans in the past 12 months. Businesswomen, however, were significantly more likely to report having any formal or informal savings (84 percent) than businessmen (69 percent), as well as higher savings relative to their earned income (twice as much as men), suggesting a preference for saving among women. Men, however, saved significantly more in formal bank accounts (three times more) than women, while women saved more through informal mechanisms, such as rotating savings and credit associations.

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**Figure 1. Study design and sampling**

**Supply side**

- 205 agents: low incentives*

**Demand side**

- 1,337 businesswomen: no training or mentoring†

- 1,603 businesswomen: training and mentoring†

* To promote branchless banking.
† 1,969 businessmen were also randomly selected and interviewed in all 400 study villages. Men did not receive training or mentoring.

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**Figure 2. Among entrepreneurs in East Java, men had significantly higher average monthly profits from all sources than women, 2017 baseline survey**

- **Primary/secondary business profit**
  - Women: 1.70
  - Men: 3.20

- **Other income**
  - Women: 0.21
  - Men: 0.84

- **Total earned income**
  - Women: 191
  - Men: 404

* Includes profits from other businesses and wage and salary earnings.

Surveys
The trial included a baseline survey conducted in 401 villages among those where the partner bank planned to establish branchless banking services in two phases before the trial began (November 2016–February 2017 in 107 villages and July–November 2017 in 294 villages). The survey collected extensive data on 400 agents (one per village) and on 2,840 businesswomen and 1,969 businessmen in all sample villages. The business owner data were collected in a household questionnaire that required about 1.5 hours to administer and included questions on the entrepreneurs’ characteristics, business practices, cognitive skills, mobile phone use, knowledge and use of mobile and other financial services, business assets, income from primary and secondary businesses, other income, savings and loans during the past 12 months, household asset ownership, and decision-making within the household.

An endline survey was conducted in all sample villages in November–December 2018. The household questionnaire administered to business owners included most of the same questions as the baseline survey but excluded questions on entrepreneurs’ characteristics and a few other less central questions to shorten administration time.

Statistical analysis
For most outcomes for which baseline values were available, intention-to-treat effects were estimated using linear regression models with the estimated standard errors adjusted for heteroskedasticity and clustering at the village level (reflecting the village-level intervention of high incentives). Because some of the outcomes are highly skewed, with outliers (profits, savings, capital inputs, investment) and with high concentrations of zeros (savings, investment), the sensitivity of the results was tested by winsorizing the outcome at the 99th percentile, by transforming the outcome into an inverse hyperbolic sine or natural log value, and by estimating a two-part (hurdle) model.

Baseline covariates included the businesswoman’s age; highest completed level of schooling; baseline household asset index (the first principal component of indicators of housing characteristics, durable goods ownership, and food sufficiency); baseline household size; and the baseline value of the outcome, when available.

A pre-analysis plan identifying primary and secondary outcomes and conversion of a group of related outcomes into a single aggregate outcome indicator (a standardized z-score index of the related outcomes) helped in analyzing and interpreting the multiple outcomes obtained in the study and reduced the risk of Type I errors (rejecting the null hypothesis of no effect when it is true). Z-score indices were calculated for most outcomes, with alternative aggregate measures calculated for two outcomes (business practices and household welfare). Table 1 (at the end of the report) presents the estimated effects of the interventions on these aggregate measures of businesswomen’s outcomes. The estimated effects of the interventions on the z-score indices are in standard deviation units (from the control group valued at zero). Individual indicators rather than aggregate scores were used to analyze selected outcomes (identified in advance in the pre-analysis plan) and to interpret the aggregate results.

Uptake and attrition
Some 63 percent of the businesswomen reported in the endline survey that they had taken the business training, although training records indicate that actual participation was higher. This number is consistent with the average participation rate of 65 percent reported in other business training programs with similar populations. Businesswomen who participated in the training had completed more schooling and had a higher cognitive ability score than businesswomen who had not participated.

Attrition rates were low for businesswomen; only 4 percent could not be re-interviewed at endline, although more than that did not answer questions on some key outcomes (including profits, savings, and capital inputs). Attrition was not significantly related to the randomized interventions, nor did the characteristics of those businesswomen who dropped out or failed to respond to a given question vary significantly across intervention groups.

Notes
1. In one village, the agent refused to be interviewed.
2. Study participants are analyzed as members of the intervention group to which they were randomized, regardless of whether they adhered to or received the intended intervention.
But differences in characteristics favoring men explain only a fraction of unequal outcomes

There were also significant gender differences in characteristics commonly associated with business success that favored businessmen over businesswomen, such as household assets, age, education level, cognitive ability, and willingness to take risks. The large sample made it possible to match businesswomen and businessmen on similar characteristics, and this matching reduced the gender differential in income favoring men by only 32 percent. That suggests that factors in the business environment (social customs and gender discrimination) contribute significantly to gender differentials in business performance.9

Endline results

The supply- and demand-side interventions in the trial were designed to overcome some of the constraints associated with businesswomen’s characteristics and the unfavorable environment in which they operate.

The business training worked better than the bank agent incentives

Women who received the business training were significantly more knowledgeable about branchless banking (0.75 standard deviation [sd] more) and registered for branchless banking services significantly more often (0.08 sd more) than women who did not receive the training. High bank agent incentives, in contrast, did not have a significant effect on businesswomen’s knowledge and usage of mobile banking.

Business practices improved among businesswomen who received business training, especially in villages where bank agents received the high incentives

Women who were exposed to the business training intervention in villages where agents received high incentives reported using significantly more good business practices. Compared with businesswomen in the control group, these businesswomen reported increasing the average share of 16 good business practices they used by 11 percent (significant at the .01 level). And this share increased by 8 percent for women who received business training in villages with low-incentive agents (significant at the .05 level; figure 3). More detailed analysis shows that these practices included registering the primary business, keeping records, costing products, keeping business and household money separate, and using a bank account or branchless banking account for the business.

The business training increased savings among businesswomen

Women business owners who received business training reported total savings over the past 12 months that were 13.5 percent higher than what the control group reported, while women business owners who received business training and were in high-incentive villages reported total savings that were 14.7 percent higher than what the control group reported (both significant at the .10 level; figure 4).

Figure 3. Compared with businesswomen in the control group, businesswomen who received business training reported adhering to a statistically significantly higher share of 16 good business practices in both low and high incentive villages

Increase (percent)

Control group value: 0 percent

No training + low agent incentives
No training + high agent incentives
Business training + low agent incentives
Business training + high agent incentives

* Significant at the .10 level; ** significant at the .05 level; *** significant at the .01 level.

Note: The control group was randomly selected businesswomen in low-incentive villages receiving no training or mentoring. The sample endline mean for the control group is 0.26.
There is no evidence that either intervention encouraged businesswomen to borrow more money.

There were no significant effects of either intervention on businesswomen using bank credit. Interestingly, high agent incentives had a significant negative effect on whether the businesswoman borrowed money from a moneylender during the last 12 months, which is consistent with the idea that increased savings may have reduced reliance on moneylenders, who often charge usurious interest rates.

The business training significantly increased the amount of capital women had to invest in their businesses.

Businesswomen who received business training reported a 15.6 percent increase in the total value of capital inputs into the primary and secondary businesses, compared with what the control group reported (significant at the .05 level), while businesswomen who both received business training and were in villages with high agent incentives reported a 13.5 percent increase compared with what the control group reported (significant at the .10 level; figure 5).

The business training increased women’s own labor in the primary business and decreased their time spent in the secondary business.

Compared with businesswomen in the control group, businesswomen who received training spent about 2 hours more per month working in the primary business (significant at the .05 level) and about 11 hours fewer per month working in the secondary business (significant at the .10 level), which is consistent with the absence of any effect of the interventions on profits in secondary businesses, as reported next.

The business training alone and in combination with high incentives for bank agents had a significantly positive effect on profits in businesswomen’s primary business.

Compared with the profits of businesswomen in the control group, profits increased by 15 percent for businesswomen who received business training alone and for businesswomen who received business training in combination with high bank agent incentives (significant at the .05 level). Profits increased by 11 percent for businesswomen who received no business training but were in high-incentive villages (significant at the .10 level; figure 6). The estimated effects on primary business profits were positive and usually significant for both high incentives for bank agents and for business training for businesswomen. The estimated effects on secondary business profits, however, were often negative, though not statistically significant, suggesting that businesswomen in the intervention group concentrated their growth strategy on their primary business.

The business training had a positive effect on businesswomen’s agency, as measured by their participation in household decision making.

Business training alone had a significant positive effect on businesswomen’s reported participation in household decision making (at the .05 level). There was a significant negative effect (at the .01 level) of the business training intervention on the proportion of business earnings used to meet household expenses, a finding that is consistent with increased women’s savings.
UNEQUAL VENTURES

The business training plus high bank agent incentives had a significant positive effect on household welfare

The business training had a positive effect on household welfare, measured by an index of household consumer durables. Compared with the control group, the index of household durables was 0.07 standard deviation higher for the business training and 0.08 standard deviation higher when the training was offered in villages with high agent incentives (both significant at the .05 level).

Businesswomen in the lowest 20 percent of the income distribution (measured by household assets) seemed to have benefited most from the business training

The average effects of the business training on savings, capital inputs, profits, and household welfare were positive and usually significant for businesswomen in the lowest income quintile, as measured by household assets. The effects were negative and occasionally significant for the next lowest and middle quintiles, and positive and occasionally significant for the next highest and highest quintiles. This finding is encouraging, since it suggests that the interventions may be most helpful for businesswomen who need it the most and, perhaps, for businesswomen in higher income quintiles, who have a greater potential to grow their businesses.

The mechanisms through which the interventions affect women’s businesses and welfare

The findings show that the business training alone and when offered in villages with bank agents who received high incentives had a statistically significant positive effect on businesswomen’s profits. These higher profits likely resulted from access to increased business capital, at least partly financed by increased savings, and from improved business practices and stronger women’s agency. The interventions had significant positive effects on household welfare through increased ownership of durable goods, stronger women’s agency, and reduced

Figure 5. Compared with the control group, business training significantly increased businesswomen’s capital inputs

Figure 6. Compared with the control group, business training and high agent incentives raised primary business profits significantly

* Significant at the .10 level; ** significant at the .05 level; *** significant at the .01 level.

Note: The sample endline mean for the control group is Rp. 1.319 million.
recourse to moneylenders. That all these effects are stronger for poorer women is a bonus.

The role of training and mentoring in enabling increased saving, improved business practices, and stronger women’s agency (directly and perhaps indirectly through saving behavior that encourages more economic independence) seems straightforward. For high bank agent incentives, however, the transmission mechanism is ambiguous since the higher incentives do not seem to have affected women’s uptake of mobile savings. It could be that high incentives for bank agents signaled a more friendly business environment for women clients. Figure 7 shows the proposed causal chain.

**Cost-effectiveness of the intervention**

*Cost data suggest that the high bank agent incentives were the most cost-effective intervention*

The average cost of training per person was $65 for the one-on-one training of bank agents (or $82 including an estimate of the opportunity cost of the agent’s time) and $32 for the training and mentoring of businesswomen conducted in groups of four women trained and mentored at the same time (or $52 including an estimate of the opportunity cost of the businesswoman’s time). These costs include supporting activities prior to the implementation of the training; however, the costs of the actual incentives paid are not included.10

Effectiveness is measured by each intervention’s estimated effect on primary business profits (that is, +Rp. 155,000 for high agent incentives alone, +Rp. 201,000 for business training, and +Rp. 205,000 for both treatments combined).11 Based on these numbers, the high agent incentives intervention alone is cost-effective, with a cost of $0.109 per additional dollar of discounted profits after 24 months, compared with $0.224 for the business training alone and $0.219 for both interventions combined, assuming the impacts of both interventions are constant throughout the period.12

The high agent incentives alone are more cost-effective than the business training because their costs are limited to the cost of training only one bank agent, while multiple sample businesswomen in each village benefit from its effects, whereas the additional profits from the business training are provided only for the four women trainees. Due to the strength of some of the assumptions made in the cost-benefit analysis, these results should be interpreted with caution. However, this analysis suggests the potential of supply-side interventions to reach a large population in a cost-effective manner.

**Implications of the endline findings**

That this intervention in East Java, Indonesia, worked while many other business training programs have not is likely the result of a combination of factors. On the demand side, success factors included the high quality of the Mercy Corps Indonesia training, the follow-up practical training that was done through the group mentoring sessions, and the strong motivation women had to attend the training because they were actual rather than prospective business owners. In addition, the financial literacy curriculum included a session on the benefits of saving and one on the partner bank’s savings products, which were effective and cost-effective substitutes for the capital grants often provided in other successful business training trials.13 The businesswomen may also have benefited from positive peer reinforcement effects of the training, an impact found in some other studies of group training. Finally, the large sample size made it possible to detect comparatively small training effects (percentage increases in the single digits or the teens) that might be missed in the much smaller sample size common to many business training studies.

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*Figure 7. Proposed causal chain for impact of branchless banking interventions on women’s businesses, agency, and welfare*

![Diagram showing the causal chain](image-url)
While providing village bank agents with high versus low incentives (plus the instruction on the importance of reaching women with branchless banking given to all agents) on its own did not increase women’s use of the bank’s mobile savings product, it could have motivated agents to treat women potential customers better and helped create a more woman-friendly business environment that, when combined with the business training, resulted in the positive outcomes found for the trial.

This study underscores that lack of access to business capital is a major constraint to the performance of women-owned micro and small businesses and that women prefer savings as a means of accumulating capital. The study also shows that short-duration group training in financial literacy and financial management, including practical sessions, can address knowledge gaps in basic business practices that are more common among businesswomen than businessmen. This training can be made even more effective by adding a component promoting the benefits of savings and highlighting the offer of financial products.

The study also shows that the positive effects of business training on business practices translated into higher business profits because the training motivated women to invest more capital in their primary business, partly through increased savings. Businesswomen may also have been incentivized to act because the training took place in a more women-friendly business environment that may have enhanced their self-confidence as businesswomen. The observation that women who owned secondary businesses reduced their work time in those businesses as they increased investment and profits in their primary business suggests that secondary businesses are part of survival rather than growth strategies.14 That these positive effects seem to have been especially effective for the lowest income businesswomen is a hopeful message: relatively modest interventions (as these were), if smartly designed and implemented, can overcome at least some of the major constraints encountered by subsistence-level firms owned by women in developing countries.

Finally, although supply-side incentives have smaller impacts than business training on women-owned micro and small businesses, they can be a cost-effective option. By potentially reaching large numbers of businesswomen with relatively low costs, financial incentives could help level what was at the outset of this trial a very unequal playing field for businesswomen in these 400 villages in East Java.

### Table 1. Estimated effects of the supply- and demand-side interventions on aggregate measures of businesswomen’s outcomes: Analysis of aggregate z-score indices

<table>
<thead>
<tr>
<th>Intervention Type</th>
<th>Proofs Mean (Std. Dev.)</th>
<th>Capital Inputs Mean (Std. Dev.)</th>
<th>Labor Inputs Mean (Std. Dev.)</th>
<th>Index of adherence to recommended business practices Mean (Std. Dev.)</th>
<th>Savings: past 12 months and current balance Mean (Std. Dev.)</th>
<th>Savings: shift to formal saving Mean (Std. Dev.)</th>
<th>Access to credit Mean (Std. Dev.)</th>
<th>Women’s agency: household decision-making power Mean (Std. Dev.)</th>
<th>Women’s agency: spousal cooperation Mean (Std. Dev.)</th>
<th>Household welfare: index of the ownership of household durables Mean (Std. Dev.)</th>
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</thead>
<tbody>
<tr>
<td>High agent incentives</td>
<td>0.037 (0.050)</td>
<td>0.180* (0.095)</td>
<td>-0.037 (0.033)</td>
<td>-0.001 (0.043)</td>
<td>0.001 (0.033)</td>
<td>-0.019 (0.025)</td>
<td>0.024 (0.046)</td>
<td>0.041 (0.025)</td>
<td>0.072 (0.060)</td>
<td></td>
</tr>
<tr>
<td>Business training and mentoring</td>
<td>0.107** (0.042)</td>
<td>0.059* (0.035)</td>
<td>0.044 (0.038)</td>
<td>0.020** (0.009)</td>
<td>0.042 (0.034)</td>
<td>-0.009 (0.030)</td>
<td>0.023 (0.024)</td>
<td>0.087** (0.040)</td>
<td>-0.022 (0.023)</td>
<td>0.104** (0.050)</td>
</tr>
<tr>
<td>Both interventions</td>
<td>0.130** (0.054)</td>
<td>0.111*** (0.040)</td>
<td>0.017 (0.031)</td>
<td>0.029*** (0.010)</td>
<td>0.013 (0.033)</td>
<td>0.004 (0.038)</td>
<td>0.012 (0.029)</td>
<td>0.013 (0.045)</td>
<td>-0.003 (0.024)</td>
<td>0.120** (0.057)</td>
</tr>
<tr>
<td>Test of no intervention effects</td>
<td>0.023* (0.054)</td>
<td>0.023** (0.040)</td>
<td>0.095* (0.031)</td>
<td>0.006*** (0.010)</td>
<td>0.610 (0.033)</td>
<td>0.981 (0.038)</td>
<td>0.359 (0.029)</td>
<td>0.108 (0.045)</td>
<td>0.060* (0.024)</td>
<td>0.112</td>
</tr>
<tr>
<td>Test of no agent incentives effect</td>
<td>0.705 (0.045)</td>
<td>0.123 (0.040)</td>
<td>0.412 (0.031)</td>
<td>0.646 (0.033)</td>
<td>0.734 (0.033)</td>
<td>0.935 (0.038)</td>
<td>0.692 (0.029)</td>
<td>0.131 (0.045)</td>
<td>0.227 (0.024)</td>
<td>0.474</td>
</tr>
<tr>
<td>Test of no business training effect</td>
<td>0.009*** (0.054)</td>
<td>0.182 (0.040)</td>
<td>0.071* (0.031)</td>
<td>0.002*** (0.010)</td>
<td>0.416 (0.033)</td>
<td>0.953 (0.038)</td>
<td>0.347 (0.029)</td>
<td>0.093* (0.045)</td>
<td>0.094* (0.024)</td>
<td>0.089</td>
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<tr>
<td>Test of no interaction effect</td>
<td>0.842 (0.045)</td>
<td>0.185 (0.040)</td>
<td>0.824 (0.031)</td>
<td>0.545 (0.033)</td>
<td>0.598 (0.033)</td>
<td>0.798 (0.038)</td>
<td>0.837 (0.029)</td>
<td>0.085* (0.045)</td>
<td>0.501 (0.024)</td>
<td>0.474</td>
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<tr>
<td>Test of equality in agent incentives and business training and mentoring effects</td>
<td>0.135 (0.054)</td>
<td>0.219 (0.040)</td>
<td>0.023** (0.010)</td>
<td>0.061* (0.010)</td>
<td>0.330 (0.033)</td>
<td>0.758 (0.038)</td>
<td>0.082* (0.029)</td>
<td>0.132 (0.045)</td>
<td>0.009*** (0.024)</td>
<td>0.598</td>
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<tr>
<td>Endline control group mean</td>
<td>0.000</td>
<td>-0.000</td>
<td>-0.000</td>
<td>0.258 (0.033)</td>
<td>-0.000 (0.033)</td>
<td>0.000 (0.033)</td>
<td>0.000 (0.033)</td>
<td>-0.000 (0.033)</td>
<td>0.000 (0.033)</td>
<td>-0.132</td>
</tr>
<tr>
<td>Standard deviation of z-score index</td>
<td>1.061 (1.169)</td>
<td>0.644 (0.258)</td>
<td>0.755 (0.624)</td>
<td>0.532 (0.741)</td>
<td>0.413 (0.413)</td>
<td>1.492 (1.492)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample size</td>
<td>2,657</td>
<td>2,599</td>
<td>2,678</td>
<td>2,678</td>
<td>2,723</td>
<td>2,723</td>
<td>2,723</td>
<td>2,723</td>
<td>2,443</td>
<td>2,723</td>
</tr>
</tbody>
</table>

* Significant at the .10 level; ** significant at the .05 level; *** significant at the .01 level.

Note: Estimated standard errors have been corrected for heteroskedasticity and clustering at the village level.

a. The sample mean of survey responses indicating whether the businesswomen respondents reported adhering to 16 recommended business practices.

b. The first principal component of indicators of the ownership of 20 consumer durables.
Notes
1. A more detailed endline assessment report, including all statistical tables and analysis, is forthcoming on the Center for Global Development website.

2. The five regencies are Bojonegoro, Gresik, Lamongan, Ngawi, and Tuban, with a combined population in 2010 of 5.56 million. Most of the villages (352, or 88 percent) are rural, but some (48, or 12 percent) are semi-urban.

3. A forthcoming study, using survey and administrative data, will examine the effects of varying supply-side incentives on the full sample of businesswomen and businessmen.

4. The time elapsed since baseline is balanced across the interventions. The interventions were also conducted in two batches—between December 2016 and July 2017, and between August 2017 and June 2018.

5. In addition, all agents earn Rp. 1,000 for each cash deposit of a minimum of Rp. 10,000, Rp. 2,500 for cash withdrawals under Rp. 200,000, and Rp. 4,000 for cash withdrawals of Rp. 200,000 and higher.

6. Given the study’s objective of promoting women’s economic empowerment, the demand side interventions were delivered only to female entrepreneurs.

7. Among businesswomen, 92 percent reported having no paid employees in their primary business at baseline, and only 1 percent reported having three or more paid employees.


10. Administrative data enabling accurate calculation of the cost of the incentives were not available at the time of publication. As the per-unit cost of the incentives is low, however, it is unlikely that including these costs would reverse the conclusions.

11. These are the estimated treatment effects on primary business profits winsorized at the 99 percent level.

12. As this may be a strong assumption, forthcoming publications will explore the sensitivity of the cost-benefit analysis to this assumption.


14. A survival strategy refers to the notion that entrepreneurs are motivated by the need to provide basic needs for themselves and their households. A growth strategy refers to the notion that entrepreneurs are motivated by the prospect of running an efficient and profitable business.