UNEQUAL VENTURES

Update: Empowering Women Entrepreneurs in East Java, Indonesia



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Center © Global Development Women own more than half of all micro, small, and medium enterprises in Indonesia. But of the estimated 22–33 million businesswomen in the country, most operate informal unregistered microenterprises, with significantly fewer assets and profits than men's.

The stark gender inequalities in entrepreneurial ventures are evident in our baseline analysis of women and men entrepreneurs in East Java.1 That analysis showed that business assets and outcomes are skewed 2 to 1 in favor of the men. Only 32% of the observed gap in earnings is explained by differences in characteristics (age, marital status, education, cognitive ability, risk taking, and business and household assets) that give men entrepreneurs a headstart over women.² So, to unlock these women's economic potential, policies must go beyond equalizing characteristics between men and women to addressing social customs and gender discrimination in service provision that tilt business environments in favor of men.

Ongoing study of supply- and demandside interventions

An ongoing randomized controlled trial (RCT) to study the effectiveness of supply- and demand-side interventions on the constraints to women entrepreneurs' access to mobile savings offers early indications of efforts to empower women and equalize business environments in East Java (see box).³

The mobile savings RCT design: A random sample of 4,828 business owners (59% women and 41% men) was selected for the study in 401 villages in East Java in which mobile savings products were available. Half of the 2,800 women were randomly selected and offered an average three-hour group session for training in financial literacy—including information on using mobile phones for banking, signing up for a mobile savings account, and engaging in profitable business practices.

At three subsequent group mentoring visits, the businesswomen could ask questions and practice what they had learned in the financial literacy training, to test whether the training and the mentoring affect women's uptake of mobile savings products (therefore addressing demand-side constraints). The other half of the women and all of the men did not receive the training but could sign up for the mobile product (control).

The supply-side intervention tested whether financially incentivizing village bank agents increases uptake of mobile savings products. It recruited 400 male and female branchless-banking agents (at least one per village, 47% of them women) to receive two levels of monetary

Testing supply and demand

Village-based branchless banking agents randomly received low or high financial incentives to promote mobile savings products to new customers. Half of the businesswomen randomly received group training and mentoring to increase the uptake of the mobile savings products. All bank agents received training on the product and information on the importance of targeting the underserved, especially women.

2,800 women entrepreneurs (+2,000 men entrepreneurs)

- 1,200 women (mobile savings)
- 1,600 women (mobile savings + group financial literacy training)

400 branchless bank agents (men + women)

- 200 agents (low incentives + training)
- 200 agents (high incentives + training)

incentives for signing up clients. Half were randomly assigned to receive a low incentive payment (Rp. 2,500, about \$0.20), and the other half a high incentive payment (Rp. 20,000, about \$1.50). All agents received training, including on the importance of targeting the financially underserved, especially women.

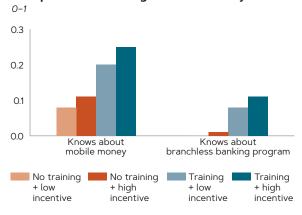
Short-term results—one year after baseline survey

The results reported here summarize findings from a survey in early 2018 to roughly half the total sample, about a year after the baseline survey. The data are for 2,319 entrepreneurs: 1,344 women and 975 men from 200 villages. Data were also gathered from bank administrative records on 189 agents from the same villages and on total mobile financial transactions by village. Logistical problems with agent recruitment and training, which had to be phased over several months, and connectivity problems with the mobile platform (both now resolved) delayed full implementation of the supply-side treatment. These problems, and the resulting delay, were the reason for restricting the short-term measure to half the sample and for focusing the analysis on results of the demand-side intervention on the businesswomen.4

The short-term results suggest that the financial literacy training was effective and that it had an unexpected "empowerment" effect that was bolstered in villages with bank agents under high incentives. No other supply-side effect was significant in this set of results. Here are the results in more detail:

1. The training increased women's knowledge of mobile money generally and mobile savings in particular. The training had a highly significant effect in increasing women's knowledge of mobile money and mobile savings (see figure). These direct outcomes, as expected, were not affected by the level of incentives given to bank agents.

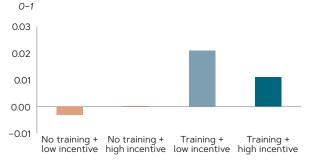
Effect of training and incentive on female entrepreneurs' knowledge of mobile money



2. The training—and additional knowledge—also increased businesswomen's likelihood of opening a mobile saving account.

This effect is significant but small (owing to difficulties in recruiting agents and operating the mobile platform). Similarly, agents' incentive levels had no noticeable effect on this outcome (see figure).

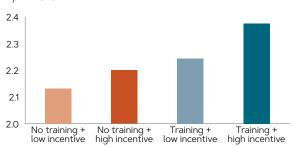
Purchased mobile money product from an agent



- 3. The training had a marginally significant effect on women's savings balances and e-savings during the past three months but no significant effects on borrowing (see figures). There is suggestive evidence that when bank agents receive the high incentive, women's saving balances and e-savings are enhanced.
- 4. There were, however, no significant effects on reported business outcomes (business assets, revenue, profits, numbers of paid and unpaid workers, establishment of a second business). The lack of significant effects of the training and the agent incentives could be related to the supply-side treatments not being fully operational during the entire reporting period. So, it is difficult to make inferences about the interventions' possible lack of economic impacts.

Current total savings balance

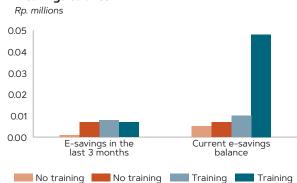
Rp. millions



E-savings balance

+ low

incentive



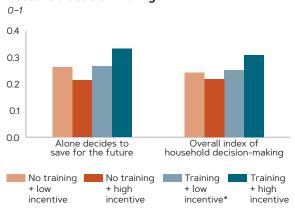
+ low

incentive

+ high

5. The training and mentoring increased the likelihood of women reporting that they were the sole decision-makers on several household decisions, and the presence of agents with the high incentive enhanced this effect. The training's effects on these self-reported measures of empowerment (measured through household decision-making questions) were consistent and significant; there is also a positive significant effect of the higher agent incentive on these empowerment outcomes and an interaction effect between training and incentives (see figure). The high incentives augmented the empowerment effect of the training.

Household decision-making



* Values are insignificant

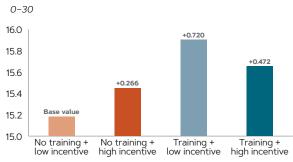
Since the businesswomen did not increase their earnings, the empowerment effect is likely related to greater self-confidence from increased knowledge about mobile savings and accessing this financial product (encouraging economic self-reliance) and

from the social validation or affirmation from training and mentoring with peers.

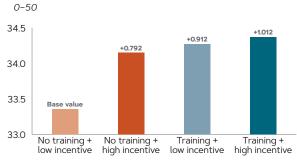
Self-confidence was likely bolstered by awareness of being served by a highly paid agent. Agents were randomly assigned to either a "public" or "private" condition—in the former, entrepreneurs knew the level of incentive the agents received, but in the latter they did not. Further analyses disaggregating by "public" versus "private" showed that the interaction effect between training and incentives was significant for four of six outcomes when incentives were public and only for one of six when incentives were private. This suggests that the entrepreneurs' knowledge that they were receiving high-quality services (because the agents were being paid more)—rather than the improved service of highly paid agents—is what contributed to this empowerment effect.

6. Consistent with these empowerment effects, the training and high incentives had positive general welfare effects on the businesswomen. The training had a positive significant effect on both women's assertiveness and their positive attitudes (see figures). In addition, the training and the high incentive had a significant positive effect on a household asset index (constructed from a list of 20 consumer durables owned by the household; see figure). This positive effect on the index is not easily explainable, however, given the insignificant or small estimated effects of the training and the incentives on business outcomes and other income measures. But it is possible that small gains in business income from access to mobile savings plus women's increased household decision-making power resulted in significant growth in household assets without accompanying significant growth in business outcomes.

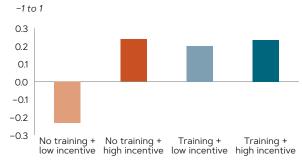
Assertiveness index



Positive attitude index



Estimated change in household asset index from its mean value of zero



Summarizing, the overall results show a consistent picture: the financial literacy training had, aside from direct effects on knowledge of financial products and saving behavior, an empowerment effect on businesswomen that for some measures was enhanced by the presence of more highly paid service providers (bank agents "publicly" receiving higher incentives). In addition, both the training and the high incentives seem to have had a household welfare-enhancing effect.

Empowerment effects—lasting or short-lived?

Are these empowerment effects of the financial literacy training (enhanced by the presence of a knowingly highly paid service provider) lasting or short-lived?

There is evidence for both in the experimental literature. An evaluation of a series of multifaceted graduation programs for the very poor found only a short-lived effect on women's empowerment that vanished a year after the programs ended. This suggests Hawthorne-like effects (that is, the women increased their agency perhaps only as result of the attention they received in the experiment). But other studies that combined business training with affirming or self-confidence-enhancing psychological messages—or the supportive presence of a friend empowered women over a longer time and resulted in positive economic outcomes.7 In a more intensive case of this psychological boosting, cognitive behavioral therapy (16 sessions) had a similar empowerment effect on the decision-making over household expenditures of perinatally depressed mothers in rural Pakistan—which was observed 7 years after the psychological intervention ended.8

Stay tuned

The East Java project has since implemented additional measures to address the logistical and operational problems encountered during the project's initial year, and a follow-up assessment is planned for the end of this year. This follow-up should give a better indication of whether these observed empowerment effects were just an experimental artifact or are more lasting and help to equalize business environments for women and men in East Java. Similarly, this follow-up measure should clarify the possible household welfare-enhancing effect of the training and the high incentive.



The midline survey data were collected during a one-month period in February 2018 in 200 of the 401 study villages in East Java (the 200 villages were not randomly selected intentionally; they are the villages in which the agent and business owner training had been completed by the time of the survey). In each village, 7 women and 5 men entrepreneurs were randomly selected for the study and responded to a baseline questionnaire in two phases (107 villages from November 2016 to February 2017 and 294 villages from July to November 2017). Of the respondents, 1,344 women entrepreneurs and 975 men entrepreneurs were re-interviewed, as well as 189 bank agents (one agent per village). All the entrepreneurs were business owners between 18 and 55 years old, resided in the village, and owned a mobile phone.

Half the women were randomly selected to receive an average three-hour group sessions for financial literacy training, including information on using mobile phones for banking, on signing up for a mobile savings account, and on engaging in profitable business practices, plus three group mentoring sessions following the training for asking questions and practicing what they learned (90% of the women completed the training and the mentoring). The other half received no training but could open mobile savings accounts. Half the bank agents were

randomly assigned to receive high incentives when signing in a new client and half to receive low incentives. All agents were informed of the importance of reaching the financially underserved, including women. The control group for the statistical analyses is the businesswomen not receiving training and residing in a village with low agent incentives.

The survey contained 225 questions and took about 60 to 75 minutes to fill out. Interviewers used tablets for registering responses. Linear regression was used for continuous or dichotomous dependent variables, Poisson regressions for count-dependent variables (0,1,2,3...), and an ordered logit regression for dependent variables with ordered qualitative responses. Ordinary least squares was used to estimate the parameters of the linear regression models, while maximum likelihood estimation was used to estimate the parameters of the nonlinear Poisson regression and ordered logit models. The covariates include the baseline value of the dependent variable (or a close substitute) as well as baseline values of the following entrepreneurs' characteristics: age, schooling level completed, number of children, cognitive ability, willingness to take risk, marital status, head of household, household size, and household asset index. The estimated standard errors are adjusted for clustering at the village level. (More details on the analysis and the results are in Knowles 2018b.)

Acknowledgements

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Notes

- 1. Buvinic, M., J. C. Knowles, and F. Witoelar. 2018. "Unequal Ventures: Results from a Baseline Study of Gender and Entrepreneurship in East Java, Indonesia." CGD Notes. Washington, DC: Center for Global Development. https://www.cgdev.org/publication/unequal-ventures.
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- 3. This ongoing research project is coordinated by the Center for Global Development in collaboration with

Mercy Corps Indonesia, academic researchers from the Kellogg School of Business and Pompeu Fabra University, J-PAL Indonesia, SurveyMETER Indonesia, the World Bank East Asia and Pacific Gender Innovation Lab, and an Indonesian bank. Connect with us at http://www.shecounts.com or http://www.cgdev.org/she-counts to receive updates on the evidence base.

- 4. Results from the incentive treatment are weak—as would be expected given the operational problems (43% of the bank agents included in this short-term measure had worked in their jobs for fewer than six months)—and are therefore only suggestive of trends.
- Knowles, J. C. 2018b. "Midline Effects of a Randomized Controlled Trial to Increase Access to the Utilization of Financial Services by Women Entrepreneurs in Rural Indonesia.." Background Paper. Washington, DC: Center for Global Development. https://www.cgdev.org/ sites/default/files/impact-evaluation-midline-survey .pdf. (forthcoming)
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- 8. Baranov, V., S. Bhalotra, J. Maselko, S. Sikander, and A. Rahman. 2017. *The Long-term Impact of Treating Maternal Depression: Evidence from a Randomized Controlled Trial in Pakistan*. Working Paper. https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=RES Conf2016&paper_id=1186.