

Can Financial Education Change Behaviour? A Randomised Evaluation in Indonesia

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Research Question

- Access to finance increasingly recognised as critical for welfare:
 - Financial deepening and macro growth;
 - Lack of finance leads to poverty traps.
- A lot of focus on credit; very little on savings, even though savings a first step for many households entering the formal (or informal) financial system.
- We study the size of barriers to accessing a savings account.

Research Question Cont'd

- Lack of financial literacy is viewed as a major inhibitor of financial access for the poor.
- Low financial literacy correlated with low use of financial services & low household income.
- However, no *causal* evidence presented as yet.
- Our paper addresses this gap with a randomised evaluation.

Research Design

- Evaluate whether giving households financial literacy training makes them more likely to open a bank account.
- Piggy-backed experiment on a nationally representative household survey of access to finance in Indonesia.
- Provided previously un-banked households:
 - i. financial literacy training in groups at village level;
 - ii. financial incentives to open bank accounts.
- Per capita cost of providing financial education approx. \$20.

Advantages of Randomisation

- Randomised experiments are the gold standard of impact evaluation; same as used in medical drug trials.
- Only randomly selected subset of households received financial literacy training.
- Randomisation allows us to identify the causal effect of financial literacy training by comparing outcomes for the treatment and control groups.
- Outcomes will be identical unless literacy training has an effect.

Access to finance in Indonesia

- World Bank surveyed 3,360 households across Indonesia in 2007.
- 64% of households do not have a formal sector bank account.
- 47% of households have savings with village or informal sector institutions.
- 60% of households have a loan.
- Average household expenditure per capita of \$90 per month.

Measuring Financial Literacy

- Households asked four questions to assess their level of financial literacy.
- Example question:
“Suppose you borrowed Rupiah 100,000 from a moneylender and the rate of interest was 2% per month. If you made no repayment for three months how much would you owe: (a) less than Rupiah 102,000; (b) exactly Rupiah 102,000; (c) more than Rupiah 102,000.”

Financial Literacy

- Households with higher financial literacy had:
 - Higher rates of financial sector participation.
 - 21% of households below median financial literacy had bank accounts;
 - 50% of households above median financial literacy had bank accounts.
 - Higher household expenditure;
 - More schooling;
 - Higher scores on a maths test.
- Hard to disentangle cause and effect in survey data.
 - Does higher financial literacy cause higher income?
 - Or, do richer households have an incentive to learn more about financial products?

Experiment

- 564 un-banked households in Java participated in experiment.
- Invited 274 of these households to financial literacy training.
- All households offered financial incentive to open a bank account. Incentive randomly chosen to be either Rupiah 25,000 (\$3), 75,000 (\$8) or 125,000 (\$14).
- Use of financial incentives allows us:
 - i. To track which households open an account;
 - ii. To quantify households' willingness to open an account.

Experiment Results

- No effect of financial literacy training on average household.
- 9% of households opened a bank account.
 - 8% of households invited to financial literacy training opened an account.
 - 10% of households not invited opened an account.
- Strong effect of financial incentives.
 - Low incentive: 4% of households opened account.
 - High incentive: 13% of households opened account.

Experiment Results Cont'd

- Significant effects of financial literacy training on households with low initial financial knowledge.
- Inviting a household to financial literacy training increased the chance it opened a bank account by:
 - 10 percentage points for households below the median level of financial literacy;
 - 15 percentage points for illiterate households.

Conclusions

- Using a randomised evaluation, we measure the *causal* impact of financial literacy training on the likelihood of opening a bank account.
- We find:
 - Financial education programs are effective for specific segments of the population: the uneducated and those with low initial financial knowledge.
 - However, for the average population (or for literacy programs administered *en masse*) financial incentives are a more (cost) effective mechanism for inducing households to open bank accounts.
 - But financial education may have extra benefits beyond opening a bank account (e.g. better internal savings). Future work will test for other effects of financial education.