

Development economics

Lecture 12: Microcredit evaluations (financial capital)

Vojtěch Bartoš

LMU, May 28, 2018

Seven evaluation studies of microcredit

Seven evaluation studies of microcredit

- ▶ Results: no transformative impact on poverty, but offers more freedom in optimizing the ways the poor make money, consume, and invest.
- ▶ Studies conducted between 2003 and 2012
- ▶ Countries covered:
 - ▶ For profit: India, Mexico, Mongolia, Philippines
 - ▶ Non-profit: Ethiopia, Morocco
 - ▶ Anonymous: Bosnia and Herzegovina
- ▶ Questions asked:
 - ▶ What is the impact of access to microcredit on financial behavior, business activity, and household welfare?
 - ▶ Do borrowers' investments translate into increased income?
 - ▶ Does access to microcredit help empower women or increase household investments in education or health?

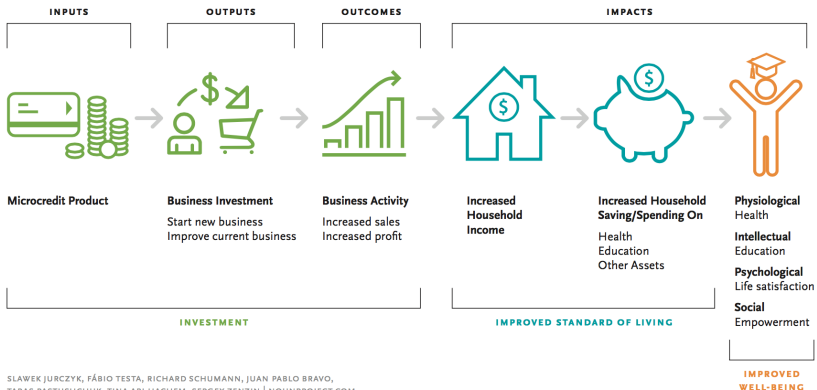
Design of the evaluation studies

Country	Researchers	Partner MFI	Gender of borrowers	Targeted to entrepreneurs?	Eligibility	Liability model	Approximate loan size in PPP USD (% of average household annual income)	Repayment frequency	Annual percentage rate (APR)	Repayment performance	Offer randomization level
Bosnia and Herzegovina	Augsburg, De Haas, Harmgart, Meghir	Anonymous	40% female	Yes (borrower planned to invest in a new or existing business)	Marginally creditworthy loan applicants with collateral	Individual	\$1,815 (9%)	Monthly payments over an average of 14 months	22%	45% ever late, 26% written off	Individual
Ethiopia	Tarazzi, Dieal, Johnson	Amhara Credit and Savings Institute Oromiya Credit and Savings and Share Company	13% female household head	Yes (borrower had a business plan)	Poor households with a business plan and collateral	"Small groups"	\$500 (18%)	"Regular payments" over 12 months	12%	5% default*	Peasant associations
India	Banerjee, Duflo, Clemester, Kinnan	Spandana Sphoorty Financial Limited	Female	No restriction to entrepreneurs	Women from non-migrating households identified as likely borrowers; at least 80% must be homeowners	Groups of 6 to 10	\$600 (22%)	Weekly payments over 12 months	24%	45% ever late	Neighborhoods
Mexico	Angelucci, Karlan, Zinman	Compartamos Blanco	Female	Yes (borrower owned or wanted to start a business)	Women	Groups of 10 to 50	\$450 (6%)	Weekly payments over 4 months	110%	10% ever late, 1% default	Neighborhoods or villages
Mongolia	Attanasio, Augsburg, De Haas, Fitzsimons, Harmgart	XacBank	Female	No (borrower interested in receiving a loan)	Poor women	Individual	\$470 (29%)	Monthly payments over an average of 8 months	27%	5% ever late	Villages
Mongolia	Attanasio, Augsburg, De Haas, Fitzsimons, Harmgart	XacBank	Female	No (borrower interested in receiving a loan)	Poor women	Groups of 7 to 15	\$700 (43%)	Monthly payments over an average of 6 months	27%	9% ever late	Villages
Morocco	Chapon, Diebolt, Duflo, Parienté	Al Amana	5% female household head	Yes (borrower owned a business other than non-livestock agriculture)	Households with a business other than non-livestock agriculture	Groups of 3 to 4	\$1,080 (21%)	Weekly, biweekly, or monthly payments over an average of 16 months	15%	no data	Villages
Philippines	Karlan, Zinman	First Macro Bank (FMB)	85% female**	Yes	Marginally creditworthy loan applicants with businesses who are homeowners or long-term renters	Individual	\$220 (3%)	Weekly payments over 3 months	60%	33% ever late, 7.4% default	Individual

Source: JPAL (2015)

Microcredit: theory of change

FIGURE 1 A THEORY OF CHANGE FOR MICROCREDIT



SLAWEK JURCZYK, FÁBIO TESTA, RICHARD SCHUMANN, JUAN PABLO BRAVO,
 TARAS PASTUSHCHUK, TINA ABI HACHEM, SERGEY ZENZIN | NOUNPROJECT.COM

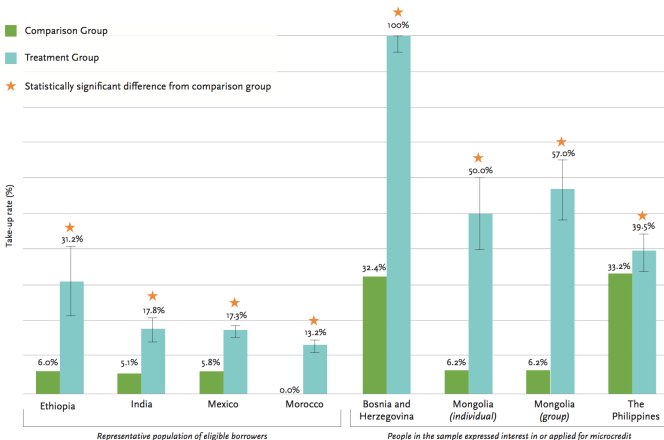
Source: JPAL (2015)

Take-up of microcredit services

- ▶ Demand for many of the microcredit products was modest.
- ▶ Ethiopia, India, Mexico, and Morocco:
 - ▶ Microcredit offered to eligible borrowers.
 - ▶ Result: Take-up ranged from 13 to 31 percent
 - ▶ Much lower than partner MFIs originally forecasted.
- ▶ Takeaway: Microcredit may be valued as a useful financial tool by some, but not all, borrowers.

Microcredit: take-up

FIGURE 2 MICROCREDIT TAKE-UP WAS MODEST WHEN MFIS OFFERED IT TO A GENERAL POPULATION OF ELIGIBLE BORROWERS



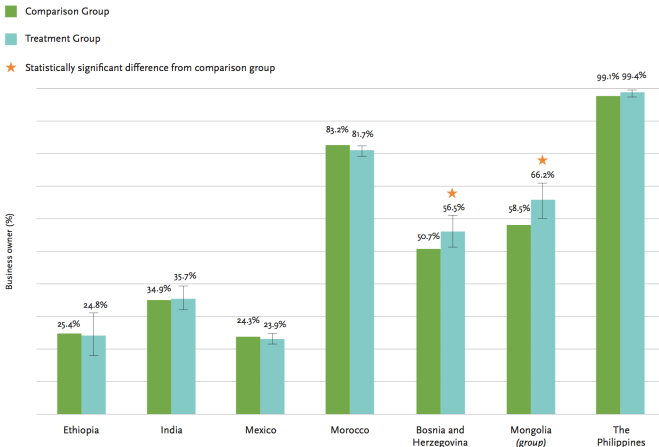
Note: Statistical significance is noted at the 90 percent confidence level or higher and error bars represent 90 percent confidence intervals; In Ethiopia, India, Mexico, Mongolia, and Morocco, take-up is measured as having any loans from the partner MFI at the time of the endline survey; In India, the results displayed are from the first endline survey (1.5 years), and there is also a statistically significant difference after 3.5 years; in Bosnia and Herzegovina, comparison group take-up is measured as having any outstanding loan from any MFI and treatment group take-up is a direct measurement of those who took up the partner MFI's microcredit offer (76.3 percent of borrowers in the treatment group reported having any loans from any MFI at the time of the endline survey); In the Philippines, take-up is measured as having any loan from any financial institution in the month preceding the endline survey.

Microcredit and business ownership

- ▶ Bosnia and Herzegovina and Mongolia: access to microcredit increased business ownership (other studies no effect).
- ▶ Higher investment in businesses, no effect on profits.
 - ▶ Saturated markets, very small and non-diversified businesses.
 - ▶ Lack of business training (Bjorvatn and Tungodden, 2010)
- ▶ All but one study showed some evidence of expanded business activity, but investments rarely resulted in profit increases.

Microcredit: business ownership

FIGURE 3 MICROCREDIT ACCESS INCREASED BUSINESS OWNERSHIP IN TWO OF THE SEVEN STUDIES



Note: Statistical significance is noted at the 90 percent confidence level or higher and error bars represent 90 percent confidence intervals; In Ethiopia, ownership is measured for non-farm businesses; In India, displayed results are from the first endline survey (1.5 years), and there is also no statistically significant difference after 3.5 years; In Bosnia and Herzegovina, differences in business ownership are not significant for multiple hypotheses testing; In Mongolia, displayed results are for household businesses. There was also a positive statistically significant difference for respondent businesses.

Microcredit and income

- ▶ No substantial increases in income:
 - ▶ Despite some evidence of business expansion, none of the seven studies found a significant impact on average household income for borrowers.
 - ▶ Many small-scale entrepreneurs may not be good at growing their businesses without additional training or support.
 - ▶ Some entrepreneurs may be entrepreneurs out of necessity rather than choice!

Microcredit and freedom of choice

- ▶ More freedom in optimizing how the poor earn and spend money:
 - ▶ Six studies: microcredit an important role in increasing borrowers' freedom of choice in the ways they made money, consumed, invested, and managed risk.
 - ▶ Morocco and Bosnia and Herzegovina: increase in self-employment (wage labor less desirable and less stable!) – no increase in income!
 - ▶ Mexico: women did not have to sell household assets in times of distress
 - ▶ India and Mexico: less spending on temptation goods and higher investment in business
 - ▶ Philippines: increased social ties, better risk-coping

Microcredit and women's empowerment or harmful effects

- ▶ Women's empowerment:
 - ▶ Little evidence of positive effects on women's empowerment or investment in children's schooling.
 - ▶ Microcredit did not lead to increase in children's schooling (measured in six studies)
- ▶ Harmful effects:
 - ▶ Microcredit access did not have harmful effects on the average borrower in neither study (even with individual-liability lending or a high interest rate).
 - ▶ No falling into debt-traps
 - ▶ People know what they are doing - recall the low take-up of microcredit, those who might be harmed do not take microcredit up!

Microcredit design and the future of microcredit

- ▶ Grace period: 20 percent increase in incomes after 3 years (West Bengal, India) But: riskier business, more default
 - ▶ Field, Erica, Rohini Pande, John Papp, and Natalia Rigol. 2013. "Does the Classic Microfinance Model Discourage Entrepreneurship Among the Poor? Experimental Evidence from India."
- ▶ Using fingerprints identification: increased repayment rates among high risk borrowers (Malawi)
 - ▶ Giné, Xavier, Jessica Goldberg, and Dean Yang. 2012. "Credit Market Consequences of Improved Personal Identification: Field Experimental Evidence from Malawi."
- ▶ Switching from weekly to monthly meetings did not lead to change in default rates, costs of collecting deposits lower for the organization (West Bengal, India)
 - ▶ Field, Erica and Rohini Pande. 2008. "Repayment Frequency and Default in Micro-Finance: Evidence from India."

Seven evaluations

1. Angelucci, M., Karlan, D., and Zinman, J. (2015). Microcredit Impacts: Evidence from a Randomized Microcredit Program Placement Experiment by Compartamos Banco. *AEJ: Applied Economics*, 7(1), 38.
2. Attanasio, O., Augsburg, B., Haas, R. De, Fitzsimons, E., and Harmgart, H. (2015). The Impacts of Microfinance: Evidence from Joint-Liability Lending in Mongolia. *AEJ: Applied Economics*, 7(1), 90-122.
3. Augsburg, B., Haas, R. De, Harmgart, H., and Meghir, C. (2015). The Impacts of Microcredit: Evidence from Bosnia and Herzegovina. *AEJ: Applied Economics*, 7(1), 183-203.
4. Banerjee, A. V., Duflo, E., Glennerster, R., and Kinnan, C. G. (2015). The miracle of microfinance? Evidence from a randomized evaluation. *AEJ: Applied Economics*, 7(1), 22-53.
5. Crépon, B., Devoto, F., Duflo, E., and Pariente, W. (2015). Estimating the Impact of Microcredit on Those Who Take It Up: Evidence from a Randomized Experiment in Morocco. *AEJ: Applied Economics*, 7(1), 123-150.
6. Karlan, D., and Zinman, J. (2011). Microcredit in theory and practice: using randomized credit scoring for impact evaluation. *Science*, 332(6035), 1278-1284.
7. Tarozzi, A., Desai, J., and Johnson, K. (2015). The Impacts of Microcredit: Evidence from Ethiopia. *AEJ: Applied Economics*, 7(1), 54-89.