# Poverty eradication through self-employment and livelihoods development: the role of microcredit, variations on traditional microcredit, and alternatives to microcredit

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The premise of microcredit is simple: the poor lack suitable employment opportunities, and in the absence of these opportunities the next best solution is to help the poor engage in self-employment. Whether the provision of credit has a role in the eradication of poverty rests on at least three premises: 1) the poor have an unmet need for working capital to start or expand self-employment activities; 2) when provided capital they invest it in income-generating activities; 3) they can generate returns in excess of the cost of borrowing, with the profits helping to lift their households out of poverty. Based on these premises the microcredit industry achieved spectacular growth in the provision of financial services to the poor. These services, including credit, savings, and insurance, have helped millions of poor households invest in businesses, smooth consumption, and weather shocks. At the same time the history of microcredit services as a cautionary tale of overenthusiasm for an antipoverty strategy based on limited evidence for its efficacy. This paper will review some of the evidence of the impact of microcredit, which shows generally positive outcomes but limited impact on poverty reduction. The paper will then consider the potential for the impact of variations on the traditional microcredit model, as well as alternatives to microcredit, including savings, cash transfers, and the graduation approach.

Early microcredit advocates spoke of unleashing the entrepreneurial spirit of the poor by providing them with capital to start small businesses. Interestingly the fundamental premise behind microcredit—that the poor would generate returns on the capital invested in their businesses—was not rigorously tested until 2005 when researchers gave cash grants to business owners in Sri Lanka. By 2005 the Microcredit Summit Campaign reported that globally there were 3,133 microcredit institutions collectively reaching over 113 million borrowers (Daley-Harris, 2006). In the aftermath of the 2004 Indian Ocean Tsunami researchers gave randomly selected microenterprises in Sri Lanka small grants (cash or equipment) worth \$100-\$200 and compared those microenterprises to a control group. For those who received cash (rather than in-kind grants) on average, 58% of the cash was invested in the business. The rest was primarily saved, used to repay loans, or spent on household consumption or home repairs. Across the entire sample the grants produced substantial increases in profits: the average return to capital was around 60 percent per year, well above the cost of borrowing at market rates. But the returns were heterogeneous: women business owners showed no return at all (De Mel, McKenzie, & Woodruff, 2008). A follow-up study in Ghana, where women participate more frequently in the labor force, found that while men generated high returns from either cash or in-kind investment (as in Sri Lanka), women benefited only from in-kind grants of equipment. Women were more likely to spend cash grants on household purchases rather than in their businesses, and women operating subsistence enterprises spent nearly *all* of the grants on household expenditures and transfers to non-household members.

Women with below-median initial profits saw no benefit from either cash or in-kind grants (Fafchamps, McKenzie, Quinn, & Woodruff, 2014).

So far the evidence suggests two conclusions: 1) there is a potential role for credit for certain types of micro-entrepreneurs; and 2) certain populations, notably poorer women, may need different interventions or additional support to move out of poverty. A concurrent wave of randomized studies conducted between 2003 and 2012 evaluated the impact of microcredit on borrowers. Seven randomized evaluations<sup>1</sup> assessed some of the most import questions about microcredit:

- 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?

These studies cover products tested in seven countries spanning four continents and a wide range of contexts and borrower types. Taken together, they are fairly representative of the global microcredit industry. Four of the partner microfinance institutions (MFIs) were for-profit lenders (in India, Mexico, Mongolia, and the Philippines), three were non-profit (two in Ethiopia and one in Morocco), and one chose to remain anonymous (in Bosnia and Herzegovina). In all seven studies, the MFI extended microcredit to randomly assigned individuals or communities who had not borrowed from it before. Four of the five studies that randomly offered microcredit across an entire community (in Ethiopia, India, Mexico, and Morocco) incorporate potential spillover or displacement effects on nearby businesses and measure the impact of microcredit expansion on the community as a whole.

Three clear trends emerged from the studies:

- 1. **Demand for many of the microcredit products was modest**. In four studies where MFIs offered microloans to a general population of eligible borrowers, take-up ranged from 13 to 31 percent.
- 2. Expanded credit access did lead some entrepreneurs to invest more in their businesses. MFIs generally target microcredit products towards entrepreneurial efforts, but borrowers' financial priorities may differ. Four studies summarized borrowers' reports on their loan use. Around 83 percent of borrowers in Ethiopia reported using microcredit for business purposes, while 9 percent spent their loans on schooling, ceremonies, or general consumption. In India, 30 percent of borrowers reported using at least part of their loans to start new businesses and 22 percent to buy stock for existing businesses. Additionally, 30 percent reported using a portion of their loans to repay existing loans, 15 percent to buy durable household goods, and 15 percent to smooth household consumption. In Bosnia and Herzegovina, 8.5 percent of clients reported spending the majority of their microloans to purchase goods. All studies except the one conducted in the Philippines showed evidence of expanded business activity.

In Bosnia and Herzegovina and Mongolia, access to microcredit expanded business ownership. In Bosnia and Herzegovina, where half of all comparison group households owned a business,

<sup>&</sup>lt;sup>1</sup> Six of these studies were published in a special issue of *American Economic Journal: Applied Economics* in January 2015. This summary is drawn from the IPA and J-PAL policy bulletin *Where Credit is Due* (2015).

those offered a loan were 6 percentage points more likely to report owning a business 14 months later. They were also 5 percentage points more likely to hold inventory. In Mongolia, microcredit's effect on business ownership varied by loan type. Individual-liability loans did not increase business ownership. However, women who were offered group-liability loans were 9 percentage points more likely to own a business relative to 39 percent in the comparison group, and less educated women were 31 percentage points more likely to own a business. Researchers hypothesize that joint liability may have dissuaded borrowers from using loans for non-investment purposes in this context.

3. Microcredit access did not lead to substantial increases in income. While microcredit helped some entrepreneurs invest, none of the seven studies found that it had a significant impact on income for the average borrower. In Morocco, borrowers' business sales and profits increased, yet they cut back on wage labor and reduced household asset sales to near-zero levels, leaving their total income unchanged. In Mexico, business sales expanded among those offered microcredit, but both profit and household income remained at previous levels. In India, total consumption among treatment households was no different from that of households in comparison neighborhoods. In Mongolia, food and total consumption increased for households in group-liability villages, but not in individual-liability villages. In Morocco, microcredit offers had no effect on total household consumption. In Ethiopia, researchers found evidence that microcredit offers may have actually resulted in increased food insecurity. On average, Ethiopian households in microcredit communities reported an additional half-month of food insecurity on top of the 1.3 months reported by households in comparison communities.

While these are not the impacts microcredit advocates had hoped for, microcredit did have some positive effects. In particular, expanded access to credit afforded households more freedom in optimizing how they earned and spent money. In Morocco borrowers invested more in their businesses, increasing both sales and profits, but decided to concurrently cut back on their casual wage labor, potentially due to its less desirable and less stable nature as a source of income. Similarly, in Bosnia and Herzegovina, microcredit access allowed borrowers to increase their self-employment. In Mexico, microcredit helped women avoid selling assets to pay off debts. In India and Mexico, households with access to microcredit decreased spending on "temptation goods"—such as alcohol, cigarettes, and gambling—to invest more in their businesses. Collectively, these results suggest that although microcredit may not be transformative in lifting people out of poverty, it can afford people more freedom in their choices (e.g., of occupation, or financing assets) and the possibility of being more self-reliant.

While the evidence appears clear that microcredit has limited potential for lifting large numbers of households out of poverty there are several potential avenues to increasing impact for the poor: 1) changes to microcredit product design, including more flexible products; 2) other financial services, especially savings; and 3) alternatives to microcredit, including graduation programs and cash grants.

#### Avenue 1: Improvements to microcredit product design

Recent evidence suggests that relatively simple tweaks to microcredit products may change their impact on poverty and financial institutions' bottom line.

- **Make credit products more flexible** Flexibility in repayment may allow borrowers to make riskier but more profitable investments, benefiting both themselves and lenders.
  - Offering grace period to clients may promote entrepreneurship and business investment. In India, clients given a two-month grace period increased short-run business investment (6%) and long-run profits but also default rates (Field, Pande, Papp, & Rigol, 2013).
  - Flexibility encourages clients to invest their loans more profitably, which ultimately reduces their financial stress. In India, clients on monthly, as compared to weekly, repayment schedules reported feeling less "worried, tense, or anxious" about repaying. They were 54% more likely to report feeling confident about repaying, and reported spending less time thinking about their loan compared to weekly clients. Relative to weekly clients, monthly clients more than doubled their business income on average, increasing their total household income by 84–88%. The study found no increase in short-run default or share of spending on temptation goods (Field, Pande, Papp, & Park, 2012).
  - Agricultural lending tailored to the farmers' seasonal cash flow may be an effective way to increase investments in agriculture and improve yields and profits. In Mali, providing farmers with loans at the beginning of the planting season, to be repaid in a lump sum at the time of harvest led to increased investment in agricultural input and value of agricultural output (Beaman, Karlan, Thuysbaert, & Udry, 2014).
- **Provide incentives and reminders for repayment** Financial incentives and SMS reminders can positively influence customer repayment behavior.
  - In Uganda, borrowers who received SMS reminders each month three days before payments were due were 8% more likely to pay all their installments on time and the average days late dropped by 2 days (nearly the same economic effect on late payments as a 25% reduction in the monthly interest rate) (Cadena & Schoar, 2011)
- Improve the accountability to repay Using product features to improve repayment can have positive impacts on both MFIs and borrowers.
  - Offering individual lending products could help deepen client outreach without negatively affecting microlender profitability. In the Philippines, removing the group liability component of loans did not lead to an increase in short- or long-run default. Individual liability did not worsen MFI profitability and actually increased the size of lending groups (Giné & Karlan, 2014).
  - In Malawi, smallholder farmers randomly chosen to have a fingerprint collected as part of a loan application improved the lender's ability to implement dynamic repayment incentives, allowing it to withhold future loans from past defaulters while rewarding good borrowers with better loan terms. Fingerprinting led to higher repayment rates for farmers with higher ex-ante default risk and had no impact for farmers with low ex-ante default risk. Fingerprinted farmers, especially the highest-risk farmers, choose smaller loans (reduction in adverse selection). Additionally, higher-risk farmers who are

fingerprinted divert fewer inputs away from the contracted crop (Giné, Goldberg, & Yang, 2012).

- Finding alternatives to the traditional joint liability requirements can increase borrowing and investment in new technologies that require substantial capital outlay. In Kenya, giving farmers the option to collateralize loans using assets purchased with the loans dramatically increased borrowing (Jack, Kremer, de Laat, & Suri, 2015).
- Add complementary services, including training In Uganda credit alone had no impact for men or women, but men who received both loans and training reported 50-60% greater profit after 6-9 months (Fiala, 2014).

Current projects, including several supported by Innovations for Poverty Action's Financial Inclusion Program, are investigating the feasibility and impact of numerous additional variations on the classic microcredit product, including digital credit, "in-kind" loans (where the lender buys a productive asset on behalf of a micro-entrepreneur instead of disbursing cash), and additional repayment flexibility within pre-defined limits (vouchers to skip payments).

## Avenue 2: Other financial services, especially savings

Savings products have had a more consistently positive impact on welfare than credit products. In Kenya access to formal savings helped women (but not men) increase their savings, which led to higher investment and consumption (Dupas & Robinson, 2013). Households who gained access to formal savings in Sri Lanka saved more by choosing to work more when their savings options improved (De Mel, McIntosh, & Woodruff, 2015). Female-headed households in Nepal given access to a no-fee savings account spent more on food, less on health and dowries and were more capable of dealing with shocks (Prina, 2015). On a cautionary note, high take-up of savings products does not necessarily translate into active use. Take-up of savings products is relatively high (around 40 to 100%), but typically fewer than half remain active users.

### Avenue 3: Alternatives to microcredit

As we have seen, microcredit has shortcomings that make it particularly unlikely to move large numbers of poor households out of poverty, especially the extreme poor: low take-up and lack of impact on household income, particularly among poor women. There is a role for other interventions to help poor households improve their living standards through direct provision of cash and assets. The Graduation Approach takes a holistic approach to helping the extreme poor develop livelihoods. Graduation programs provide a productive asset transfer (typically livestock) and training, along with consumption support, regular coaching visits, and access to savings. An evaluation of the graduation approach in six countries showed statistically significant impacts on all 10 key outcomes or indices, including consumption, food security, assets, and mental health. A year after the program ended 8 out of 10 indices still showed statistically significant gains, and in most countries, the (discounted) extra earnings exceeded the program cost (Banerjee, et al., 2015). Another evaluation of BRAC's program in Bangladesh found very similar results after four years (Bandiera, et al., 2013).

One-time cash grant programs in northern Uganda increased earnings dramatically. The WINGS program provided a \$150 grant along with business skills training and follow-up visits to ultrapoor women. Participants nearly doubled their earnings and household consumption increased by about a third

(Blattman, Green, Annan, & Jamison, 2015). The Youth Opportunities Program provided unemployed youth grants of nearly \$400 per person in return for a business plan to get vocational training and start a trade. Four years later, grant recipients' hours of work were up 20% and their earnings were about 40% greater (Blattman, Fiala, & Martinez, 2014).

Unconditional cash grants are especially promising because they can be extremely inexpensive to deliver, especially at scale. A randomized evaluation of GiveDirectly in Kenya found poor households receiving cash grants of at least \$300 USD showed improvements in assets, consumption, food security, revenue from self-employment, and psychological well-being (Haushofer & Shapiro, 2013). Given the lack of impact of cash grants on poorer women in Sri Lanka, Ghana, and Uganda it will be important to learn whether cash grants can create lasting impacts for women as well as men.

## Conclusion

A strong evidence base now shows the potential for microcredit to move large numbers of poor households out of poverty appears limited. The phenomenal growth of the microcredit industry demonstrates both the ability of the world's institutions to mobilize the resources needed to serve the poor, and the opportunities lost when those resources aren't directed to proven interventions. By the time the first randomized evaluations of microcredit were released in 2009, CGAP reported nearly USD 11 billion invested *annually* in microfinance institutions, with over half that amount coming from public investors. Presumably many of those investments were made under the premise that microcredit would help to reduce poverty. And public investment only climbed after 2009. International funding finally plateaued in 2014 at \$31 billion (CGAP, 2015).

While microcredit fails to justify such a large public investment on the basis of poverty reduction, it still has a number of positive impacts on the poor, including giving people greater freedom in choosing how they want to earn money. There is still much to learn about how to optimize credit products to produce the greatest impact while protecting the poor from risk, and how to use savings to encourage investment into income-generating activities. The evidence base for the potential of other interventions to reduce poverty is much stronger, but there is more to learn about other interventions as well. So far the Graduation Approach and cash grants have the greatest track record in improving living standards for the poor. But these programs are expensive and will require an investment far greater than the cost of delivering credit. Current research is investigating two broad sets of questions: whether cash grants can have the same long-term impact as graduation programs on the poor and most vulnerable households; and how to get the cost of graduation programs down such that they can be scaled to large numbers of the extreme poor.

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