Impact of Community Information in Identifying High Ability Microentrepreneurs

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Fieldwork: Institute for Financial Management and Research (IFMR)

Location: Amravati, Maharashtra, India

Sample: 1,345 households in nine peri-urban neighborhoods of Amravati

AEA RCT registration number: AEARCTR-0001109

Partner organization(s): Asian Development Bank (ADB), Weiss Family Program Fund for Research in Development Economics, Private Enterprise Development in Low-Income Countries

Identifying high-potential microentrepreneurs in low-income countries remains a challenge due to lack of verifiable information. Researchers conducted a randomized evaluation to test the value of community knowledge in identifying high-potential microentrepreneurs. Community members identified by their peers as high-potential microentrepreneurs experienced greater returns on a cash grant than the average microentrepreneur. While community members sometimes strategically misreported information to benefit their family and peers, simple techniques like small monetary payments can realign incentives to encourage truthful reporting.

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In 2018, microfinance institutions distributed loans to over 139 million households in low- and middle-income countries. While traditional microcredit has had limited impacts on average, some borrowers earned high returns from investing in their businesses. As such, there is increasing recognition that identifying high-potential entrepreneurs would allow governments, lenders and NGOs to offer more personalized forms of credit tailored to their borrowers' needs and increase its impact. However, these institutions often lack concrete information with which to target resources to entrepreneurs with the highest potential to succeed. Social networks, i.e., friends, family and colleagues, may be a rich source of information. Can using community members' information about their peers help identify and target financial resources to high-potential entrepreneurs?

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Researchers conducted the study in peri-urban neighborhoods with high numbers of microentrepreneurs around the city of Amravati in Maharashtra, India. Researchers selected households to participate in the evaluation if they had at least one business with US$1,000 or less in capital and with no paid, permanent employees. On average, entrepreneurs were 40 years, had around 8 years of education, and earned INR 4,500 per month (US$2.5 per day) in profits, which accounted for half of their household income. The entrepreneurs operated across a wide range of activities, with 90 percent of participants evenly engaged across the manufacturing, retail, and service sectors.

Entrepreneurs were also familiar with other participants living closest to them in their community, whom researchers organized into groups of five. Two-thirds of respondents identified one other group member as a family member or close friend, and over half reported that they regularly discussed private family and business matters with at least one other group member.

Maharashtra, India. A tailor working on a sewing machine.

Photo credit: balajisrinivasan, Shutterstock.com

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Researchers conducted a randomized evaluation to test the impact of community information to identify high-potential entrepreneurs in India. To gather information on entrepreneurs from their peers, researchers organized participants from 1,345 households into 274 peer groups of five people each, based on geographical proximity. They then invited the groups one at a time to the local town hall to participate in a lottery for a US$100 grant. Before the lottery, participants completed a survey in private that asked information about themselves and other members in their group across a range of business outcomes like revenue and profits and household-level characteristics, such as average monthly income and total assets. The survey also asked respondents to rank themselves and their peers on a range of outcomes, in particular the predicted gains in profits if receiving the US$100 grant.

After completing the survey, researchers randomly selected a third of participants to receive the US$100 cash grant, which was intended for business investments though participants could use it however they wished.

To test if participants strategically misreported information, researchers randomly selected groups to give their ranking reports under one of the following three treatment conditions:

1. High Stakes vs. No Stakes: Participants in the high stakes treatment were informed that the peer ranked highest (on average) by group members would receive extra lottery tickets, improving their chances of winning the grant. Conversely, for participants in the no stakes treatment, their ranking had no influence on the chance of winning the lottery. This treatment condition tested whether participants changed their responses when they had the opportunity to influence the allocation of the grant.
2. Public vs. Private reporting: Participants in both the public and private treatment completed the survey in private. However, participants in the public treatment had the opportunity to observe their peers' answers after the survey. This treatment condition tested whether participants change their responses when they know their peers will observe their responses.
3. Payments for truthfulness vs. no payment for truthfulness: Half of the participants were offered a compensation based on their responses, intended to reward them for accuracy. The compensation was calibrated so that on average, those who reported what they truly believed would earn an additional INR 100 (US$1.7, and equivalent to two-thirds of their average daily wage). Those who were not randomly chosen to be compensated for the accuracy of their responses instead received a lumpsum payment to compensate them for their time, regardless of the truthfulness of their survey responses. This treatment condition tested whether monetary incentives can encourage participants to provide truthful responses.

For each of the three treatment conditions, researchers compared responses of participants who did and did not report their responses under that condition. For example, for the high stakes treatment, they compared treatment groups 1-4 to groups 5-8.

Table 1. Researchers randomly assigned groups to report under the following conditions:

Treatment Cluster	Combination of Treatment Conditions		
Treatment Group 1	High Stakes	Public Reporting	Payment for truthfulness
Treatment Group 2	High Stakes	Public Reporting	No payment
Treatment Group 3	High Stakes	Private Reporting	Payment for truthfulness
Treatment Group 4	High Stakes	Private Reporting	No payment
Treatment Group 5	No stakes	Public Reporting	Payment for truthfulness
Treatment Group 6	No stakes	Public Reporting	No payment
Treatment Group 7	No stakes	Private Reporting	Payment for truthfulness
Treatment Group 8	No stakes	Private Reporting	No payment

Researchers conducted baseline surveys with all households between December 2015 and April 2016 along with four follow-up surveys between May 2016.

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Community members were able to identify high-potential entrepreneurs among their peers. However, they misreported information in favor of friends and family when they could influence who received the grant. Simple techniques like monetary payments for truthful information proved effective at realigning incentives to encourage accuracy.

Impact of the grant on entrepreneurs' business: On average, households that were randomly selected to win the grant reported an extra INR 567 (US$9.5) in household income each month. Likewise, households receiving the grant earned an extra INR 683 (US$11.4) in total household profits each month.

Returns to the grant for average versus high-potential entrepreneurs: The increases in income and profits indicate that households on average had a return between 10-11 percent per month from the cash grant. Conversely, entrepreneurs ranked by their peers in the top third of the community had returns between 24-30 percent per month, around 3 times greater than the average entrepreneurs. This illustrates that the community members were able to identify high-potential entrepreneurs.

How high-potential entrepreneurs used the grant: High-potential entrepreneurs (ranked in the top third by their peers) used the grants to invest more in inventory and durable assets and spend less on household expenditures, when compared to lower-ranked entrepreneurs. High-potential entrepreneurs also spent more time working: they worked an additional 9.9 hours per week and an extra 4.6 days per month.

Identifying high-potential entrepreneurs via community information or observable characteristics: To understand the value of community information, researchers tested whether community information or observable characteristics—like gender of the main business owner, education, age, and household size and composition—were stronger predictors of high-potential entrepreneurs. While entrepreneurs falling in the top third of the community based on observable characteristics alone had returns of 13.6 percent per month, entrepreneurs in the top third based on observables as well as community information had returns of 38 percent. This evidence suggests that even if a policymaker had access to the wide array of observable characteristics to identify high-potential entrepreneurs, community information would remain valuable.

Misreporting of community information: Respondents tended to distort the ranking of community members in favor of their friends, family, and close peers in the presence of high stakes, i.e., when respondents were told that their reports will influence the distribution of grants. The accuracy of responses dropped on average by 30 to 34 percent when the allocation of resources was at stake.

Encouraging accurate reporting: When community members ranked their peers under "no stakes" conditions, both offering small monetary payments to reward accurate responses and public reporting of rankings doubled the accuracy of reporting. However, under the "high-stakes" condition, giving community members the opportunity to view other's ranking in public, rather than in private, had limited effects. Conversely, the monetary payments substantially improved the accuracy of reports by over 100 percent.

A low-cost way to improve lending: Researchers suggest that if lenders were to collect community information and provide incentives to respondents, the cost of lending would increase by INR 40 (US$ 0.7) per loan, an amount far less than the estimated gains for high-potential microentrepreneurs.

Overall, these results suggest that leveraging community information may be an effective way of identifying and targeting resources towards high-potential microentrepreneurs. Strategic misreporting by the community can be offset with relatively small monetary payments and publicly reporting responses.

Hussam, Reshmaan, Natalia Rigol, and Benjamin N. Roth. 2021. “Targeting High Ability Entrepreneurs Using Community Mechanism Design in the Field.” American Economic Review (forthcoming).