Referee report on MS 2022-1262, "The Microfinance Disappointment: An Explanation based on Risk Aversion"

SUMMARY

This paper aims on providing a new explanation for the low take-up of microfinance among poor households. Using a theoretical model combined with an online experiment, the paper shows that if the loan investment is used to increase the probability of success of a project, poor risk-averse individuals will choose to avoid any investment. The policy implication is that microfinance programs should be combined with risk-reduction policies to facilitate take-up and investments.

COMMENTS

1. The conclusions of this paper depend on several assumptions. Specifically, one key assumption is that the probability of investment success is not exogenous, instead more investments increase the chance of success. I'm not sure if this is true in reality. For example, poor households might work on agricultural related projects, which can be influenced by random weather or price shocks. Some other business projects could be affected by exogenous supply chain shocks, unexpected policy reforms, etc. Another assumption is that poor people believe the production function has an "S-shape", where the marginal return is only high at higher levels of investment. This is suggested in some existing literature but there is no evidence showing the study sample also hold such beliefs.

2. The main result of the paper is that risk aversion affects poor households' investment decisions and take-up of microcredit. However, risk aversion can be correlated with many other factors. For example, existing studies have shown that business owners with lower levels of educations or without any previous business experience are less likely to succeed. Risk aversion can be correlated with both level of education and previous experience of operating business. There's no exogenous variation in risks in the experimental design, so it's not clear whether the impact on decision making is truly driven by risk aversion or something else.

   If the goal of the paper is to test whether risks affect people's investment decisions, then a better design could involve variations in the levels of risks. Some papers have already done this - for example, Gine and Yang (2009) looks at the impact of bundling credit with insurance on credit product take-up and investment; in Karlan et al (2014), the authors also studied the interaction effect of credit and insurance on agricultural investments.

3. In the final step of the experiment, participants are told that the first decision (the risk experiment) was only selected with 10% probability (for a small sample this experiment

is not incentivized), while the other three decisions were selected with 30% probability each. Do participants know this before playing the experiment? If yes, that might influence whether they took the risk experiment seriously as it won't influence the outcome much.

4. In table 1, the authors claim that risk averse individuals are significantly more likely to invest 0, 120, and 150, but from the statistics in the table I don't think the coefficients on 120 and 150 are statistically significant.

5. In the step-by-step game, a majority of the risk-averse individuals invested more in the probability of winning. What's the result on participants who are not risk averse?

References:

Xavier Gine and Dean Yang (2009). "Insurance, credit, and technology adoption: Field experiment evidence from Malawi", Journal of Development Economics.

Dean Karlan, Robert Osei, Isaac Osei-Akoto, and Christopher Udry (2014). "Agricultural decisions after relaxing credit and risk constraints", Quarterly Journal of Economics.