

Center for Equitable Growth Small Grant Proposal

Project title: “Insurance Game and Take-up: learning from experience”

Principal investigator: Changcheng Song, Ph.D. Candidate, University of California, Berkeley

As a stylized fact, poor households in rural area are vulnerable to losses from negative weather shocks. They engage in costly ex ante risk-mitigation strategies to reduce fluctuations in income and consumption, such as avoiding high risk and high return agricultural activities, high levels of precautionary saving and insufficient investment in production, etc. The negative shock and foregone profitable opportunities can lead to persistent poverty. An efficient way of shielding farmers from risk and reduce poverty is to provide them with formal insurance products. Insuring the weather shocks should have incentive for poor household to increase their investment in production and catch the profit opportunities. This will not only help to boost growth since investment is one key factor for growth but also help to reduce the inequality between poor and rich.

However, in many cases, such insurance product exists, but their use is not widespread. For example, Gine, Townsend and Vickery (2009) find relatively low take-up (4.6%) of a standard rainfall insurance policy among farmers in rural India in 2004. This suggests a puzzle: why don't more households participate when formal insurance markets are available? How to improve the adoption rate of microinsurance? Studying this question is crucial because the increased demand of individuals is a prerequisite for scaling up microinsurance products to reach and help more poor people.

There are some explanations about the puzzle. In the above study of Gine, Townsend and Vickery, when they ask farmers why they did not buy, one of the most popular reasons is “do not understand the product”. This result not only suggests that financial education might be important to help spreading good insurance product, but also leads to a question: what methods of financial education should be effective?

This project attempts to find out ways to improve microinsurance take-up by studying determinants of an agricultural insurance product provided to rural households in rural area in China. We tried a new method of financial education about microinsurance: playing simulated insurance game. We use a randomized field experiment to test whether this new method of financial education works effectively. Our research question is “Does learning from simulated insurance games affect the real field outcomes, such as take-up rate of rice insurance?” We will analyze whether the intervention increases the actual take-up of microinsurance. Our research design will also help us identify what is the mechanism of the treatment effect by analyzing household decisions during the game. We could estimate whether the actual take-up is influenced by the different hypothetical experience during the game, such as the number of hypothetical disasters, the order of the disasters, etc. Moreover, the project will also explore what other factors will influence the treatment effect, such as gender, age, education, past real life experience of disaster. According to the results of this project, we hope to provide some guidelines to the government on how to increase the agricultural insurance take-up.

The project will contribute to advancing knowledge in areas of interest to the Center for Equitable Growth. In particular, hedging the weather shocks for poor household through insurance has both implication for growth and equity because it will increase household investment in production and help the poor to catch more profitable opportunities.