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Attitudes towards Flooding Risks in Vietnam: Implications for Insurance

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Abstract

The poor of the world are increasingly exposed to weather shocks, which destroy their very livelihood, destroy their health and claim many lives, making a regular life impossible. Index-based insurance is introduced in Vietnam to provide safeguards against external shocks that can affect the poor's income, wealth, and very livelihood. By insuring specific crops, it is circumscribed and affordable, while at the same time sheltering the insured from the potential loss of their harvest, thus smoothing out income fluctuations. However, insurance take-up has been exceedingly low, even though the policies were generally subsidized and offered below actuarially fair levels.

In this research we attempt to find out whether a farmer is unwilling to buy insurance against an adverse event because a) he estimates the probability correctly, but behaves in a risk seeking way towards this event; b) he acts in a risk neutral or even risk averse way, but underestimates the probability of the adverse event taking place; or c) a combination of the two, such that either the underestimation of the probabilities or the willingness to bet are so strong as to dominate the relation.

To measure risk and uncertainty attitudes, we look at farmers' betting on certain types of uncertainty over others, in the specific context of flooding in the Vietnamese Mekong delta. In addition, we disentangle the separate effect of subjective probabilities of flooding and the willingness to bet on them, or source preference.

We find that while our respondents do generally exhibit a source preference for betting on water levels, this does not seem to drive potential low insurance uptake. The low insurance uptake seems rather to be driven by subjective probabilities attributed to high water, with the probability of flooding being systematically underestimated.

We bring direct evidence on why micro-insurance take-up may be low in some cases. This may in turn help to develop better communication and sales strategies for such risk management instruments. We add to the decision making literature by bringing evidence on the validity of the source function argument from an applied real world context. We add to the debate in behavioral economics more in general, by linking preferences and beliefs of subjects to their real world behavior.