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The Influence of Socio-Economic Characteristics and Social Networks on Smallholders’ Risk Preferences in Vietnam

THEA NIELSEN, ALWIN KEIL, MANFRED ZELLER

University of Hohenheim, Institute of Agricultural Economics and Social Sciences in the Tropics and Subtropics, Germany

Abstract

Risk is an integral part of decision making, especially in smallholder agriculture in developing countries. Nevertheless, influencing factors of risk preferences are poorly understood. This study contributes to closing knowledge gaps on how socio-economic characteristics, various indicators of social capital including social networks, and shock-induced losses influence risk preferences and how these influences may differ across five different methods to elicit risk preferences. We analyse influencing factors of smallholders’ risk preferences in a random sample of 300 households which is representative of Yen Chau district, Son La Province, an upland area of northwestern Vietnam. The five methods are a non-hypothetical lottery called the multiple price list technique and four hypothetical methods. Ordinary Least Squares (OLS), tobit, and probit regression models identify influencing factors of risk preferences separately for each elicitation method. To the best of our knowledge, there exists no study which has explicitly tested for an influence of various indicators of social capital on risk preferences or which has collected risk preferences using such a wide range of techniques within-sample.

We find that most respondents are risk averse, with a high percentage being classified as very risk averse. In most OLS and tobit models, female gender, older age, lower education, lower network-based trust with extended family members, larger household impacts of idiosyncratic shocks, and poorer connections to local authorities are statistically significant in increasing risk aversion. Nevertheless, the low explanatory power of the models is a clear sign that unobservable or hard-to-observe factors, such as genetics and prior experiences, are likely to be of greater importance in determining risk preferences. The result that most respondents are (very) risk averse indicates that they may be unwilling to make investments that could increase households’ productive capacity because of the associated (perceived) risks. Thus, policymakers and extension agents should recommend that smallholders invest step-wise in new income-earning activities or technologies. We also recommend that safety nets, such as agricultural insurance, should be targeted to the most risk averse individuals to help smallholders better adapt to natural disasters and other risks.

Keywords: Lottery choice task decision, risk preferences, social networks, Vietnam