



RESEARCH BRIEF: RISK PERCEPTION Decision Making, Poverty and Vulnerability: An Interdisciplinary Approach to Policy

The word “risk” is derived from the early Italian word “risicare” which means “to dare”. In this sense risk is related to a decision that we make, rather than simply a fate which we experience. All activity, opportunity and hazard involves risk, which is composed of a probability and a potential outcome (positive or negative). Decisions about how to feed a family, what to plant, where to work -- all may be perceived as risky, as they imply uncertain future outcomes.

An individual’s preferences in decision making are defined by both their personal characteristics and the dimensions of the particular risk. Risk is perceived and behaviour is shaped by inherent risk aversion, gender, wealth, residential location, experience, worldview and position. Specifically we explore risk perception among the poor in Vietnam in contrast with the populations commonly studied, which are largely American/European and relatively wealthy.

Three individual characteristics lie at the heart of risk perception research – *affect, risk aversion, and worldview*. If a risky activity evokes feelings of dread (or induces a negative *affect*) or feelings of elation (or induces a positive *affect*) then one will perceive it as more risky or less risky respectively (Slovic et al., 2002). Humans prefer certainty to uncertainty or ambiguity and may not risk even modest stakes if they can instead opt for a sure outcome. Regarding *worldview*, people who hold an egalitarian preference for the distribution of wealth and power in society have a higher perceived risk for a wide range of hazards. People who prefer a hierarchical social structure in which experts and authorities are in control have much lower risk perceptions (Slovic, 1999). In field research in Vietnam, Tanaka, Camerer and Nguyen find that in the north people are less loss averse and also less altruistic privately toward the poor than in the south. This finding has historical roots: public institutions are stronger in the north, while private institutions and norms of fairness remain more active in the south (Tanaka et al., 2008).

- Samples**
- I. Vietnam**, Bac Can Province (40 poor farmers and 47 policy makers).
 - II. Vietnam**, Nam Dinh Province, Loc Hoa Commune (113 suburban residents),
Truong Thi Ward (107 urban residents)
Xuan Thanh Commune (189 rural residents)
 - III. China**, Bamai Village, Baojing County, Hunan (72 poor farmers)
 - IV. Thailand**, Ban Khok Salung Village, Lopburi Province (57 poor farmers).

1. Which best describes your attitude toward the future?

- a) Very pessimistic
- b) Somewhat pessimistic
- c) Somewhat optimistic
- d) Very optimistic

Findings:

- The poor are more optimistic than others (*I, II, III, IV*)
- Rural dwellers are more optimistic than urban dwellers (*II*)
- Men are a little more optimistic than women (*I, II*)
- Poor rural farmers are more optimistic than policy makers (*I*)

2. Which of the following statements best describes your attitude toward risk?

- a. One should be extremely careful about making changes in life
- b. Caution is more important than risk-taking in order to be successful
- c. Risk taking is more important than caution in order to be successful
- d. You will never achieve anything in life unless you act boldly and take risks

Findings:

- Poor farmers in Vietnam answer more cautiously than all other groups we surveyed, including poor farmers in China and Thailand (*I,II,III,IV*)
- Policy makers are less likely to answer cautiously than farmers (*I*)
- Men and women answer similarly (*I,II*)
- Urban dwellers answer slightly more cautiously than rural dwellers, and suburban dwellers are the least cautious, but these differences are small (*II*)

3. We will throw a coin. Please choose between the following.

- a. Regardless of heads or tails you will receive 30,000 VND.
- b. If heads shows you will receive 75,000 VND, if tails you will receive nothing.

Findings:

- In almost all groups surveyed, a majority were risk averse (*I,II,III,IV*)
- Only among policy makers in Vietnam did a majority opt for risk taking (*I*)
- The poor were more risk averse relative to the wealthy (*I*)
- Rural dwellers were more risk taking than urban and suburban dwellers (*II*)
- Women were more risk averse than men (*I,II*)

Policy implications

Risk perception among the target impoverished population in Vietnam differs from risk perception in other populations according to the characteristics of the individuals. Specifically, we find that the poor, males, rural dwellers and farmers are more optimistic than their counterparts. And we find that poor farmers express the most caution – in stark contrast with their stated optimism. Finally, we find risk aversion to be strong in all groups, similar to those surveyed in other locations and cultures, with the interesting exception that a majority of policy makers in Vietnam express a risk taking stance. Program designs that both recognize and appeal to the inherent optimism, while acknowledging the preference for caution, certainty and loss aversion, could encourage the target population to engage in new activities and opportunities designed to be beneficial to their lives and livelihoods. For example, optimism may mute the incentive to participate in a training program to diversify livelihoods in the face of climate change because an individual perceives that the future will turn out alright. Thus a program focus on improving livelihoods regardless of the future state of the world, and containing insurance provisions to mitigate downside risk, might yield improved participation rates.

Slovic, P., Finucane, M., Peters, E., & MacGregor, D. G. (2002). The affect heuristic. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 397-420). New York: Cambridge University Press.

Slovic, P. (1999). Trust, Emotion, Sex, Politics, and Science: Surveying the Risk-Assessment Battlefield. *Risk Analysis*, Vol. 19, No. 4, pp. 689-701.

Tanaka, T., Camerer, C., Nguyen, Q. Risk and Time Preferences: Experimental and Household Data from Vietnam. (Revised and resubmitted to the *American Economic Review*).