Eliciting Minimum Acceptable Probabilities

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Very preliminary—please do not cite

December 2, 2020

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1 Introduction

Trial Title: Eliciting Minimum Acceptable Probabilities

Country (At least one): UK/US? Representative sample: min 300 participants, extra fee, takes 2–4 days (https://researcher-help.prolific.co/hc/en-gb/articles/360019236753-Representative-Samples-on-Prolific) or only individuals with higher education? (given complexity of task?)

Status

Keyword (At least one)

Abstract

This study (i) tests an underlying assumption of the Minimum Acceptable Probability (MAP) elicitation procedure introduced by Bohnet and Zeckhauser (2004) and (ii) checks whether the strategy method yields similar results to the direct elicitation method in an individual decision, which represents a pared-down version of the setting in Bohnet and Zeckhauser (2004). This MAP elicitation procedure is similar to a Becker-DeGroot-Marschak (BDM) procedure. In BDM, a price drawn from a uniform distribution is compared to a cutoff price stated by the participant to determine the participant's payoff. In the MAP procedure, a probability is drawn to the same effect from an unspecified distribution, about which participants may have varying subjective beliefs. In Bohnet and Zeckhauser (2004), this distribution is generated by the actions of a pool of potential human opponents in a strategic interaction. In this study, for simplicity, participants make an individual decision, in which they face a randomly generated "artificial" distribution.

The assumption which we test is necessary for the MAP elicitation to be

incentive-compatible: subjects' answers are not sensitive to the distribution from which they believe the payoff-relevant probability is drawn. However, even within expected utility, if participants have higher order risk aversion (for instance they are prudent, so they are averse to increases in downside risk—that is, they are averse to changes in a prospect's skewness) this might not be the case.

We use a between-subject design and vary treatments along two dimensions: (i) the distribution from which the payoff-relevant probability is drawn. A probability distribution function will be shown to the participants (here we may want to also include treatments with ambiguity about this distribution), and (ii) whether we ask participants for their MAP (which uses the strategy method, and which is a cutoff value for being willing to take a gamble rather than accept a sure payoff) or whether we ask them whether, given the distribution of chances in the gamble, they are willing to take the gamble (direct elicitation method, DM).

Trial Start Date

Intervention Start Date

Intervention End Date

Trial End Date

Outcomes (End Points)

Experimental Design (Public)

Hypothesis. Participants like right-skew and dislike left-skew regardless of the elicitation method (MAP or DM). For treatments eliciting MAP, this means they will have a lower MAP when he payoff-relevant probability is drawn from a distribution with a right-skew than from a distribution with a left-skew, ceteris paribus.

Was the treatment clustered?

Planned Number of Clusters

Planned Number of Observations

Was IRB approval obtained (only for “In Development” and “On-going” trials)? If so, also IRB Name IRB Approval Date IRB Approval Number

References

Bohnet, I. and Zeckhauser, R. (2004). Trust, risk and betrayal. *Journal of Economic Behavior & Organization*, 55(4):467–484.