Report on: Drichoutis & Koundouri - Estimating Risk Attitudes in Conventional

and Artefactual Lab Experiments: The Importance of the Underlying

Assumptions

MS number: 711

In their paper the authors pose the question whether estimating risk preferences

from a convenience lab sample and a general population samples yield similar

results. In their analysis they compare risk preferences estimated under

assumptions commonly used in the literature (CARRA with EU) with risk

preferences estimated under Rank Dependent Utility employing an expo-power

function.

Relevance of question:

They are not the first authors (see e.g. Andersen et al. 2010) to pose the question

of field-lab comparability in the area of risk preferences. This question is also

addressed in other experimental areas such as other regarding preferences or

auction theory (Belot et al. 2010). However, by analysing the importance of

different underlying assumptions regarding the structure of utility functions they

expand the literature in an important way.

Quality of analysis:

There are several minor and major concerns regarding the analysis used in the

paper both regarding the experimental design and the statistical analysis.

Experimental design:

The authors state that the risk elicitation task was conducted after an

auction task. Therefore results from the auction task could potentially

influence decisions made in the risk elicitation task (e.g. assuming that

subjects care for a minimum fixed amount of money they want to take

home from the experiment)

- By using different start-up fees for the two parts of their sample, results in the risk elicitation tasks could be influenced (e.g. again assuming that subjects care for a minimum fixed amount of money they want to take home from the experiment). The results presented in the paper support this point. The consumer group that was endowed with a greater initial amount also displays less risk aversion in the HL- task.

Analysis:

- Does the analysis rely only on observations that answer the HL- task in a consistent way (no multiple switching)?
- Before presenting regression results it would be helpful for the reader to get some descriptive statistics. Especially a more thorough analysis of raw choice behaviour would be interesting (E.g. are the differences of proportions presented in Figure 1 statistically significant? Is there a significant difference in mean switchpoints?) Also a within subjects comparison of the three different treatments (HL, HLx100, HLframed) would be interesting.
- **Regression Tables 3 and 5**: Using both age, education, initial endowment, ExpCharact and the consumer dummy as controls in the estimation potentially introduces high levels of colinearity into the models as those variables are most likely highly correlated (given information in Table 2). As robustness checks the results section should contain tables with less control variables (e.g. only a consumer dummy).
- The authors make the claim that using a CRRA function and EUT leads to results that indicate that general population subjects are more risk averse than student subjects. This claim is not necessary supported by **Table 3.** The effect of the consumer dummy might easily be outweighed by the age effect that goes into the other direction. A comparison of predicted values for r might be of more value to support the author's claim (Unless Table 4 contains these values and has a misleading heading). A different strategy

- might be to estimate two models (one only for the student sample and one only for the generation sample) separately.
- The authors make the claim that using a "correct" specification differences in observed risk attitudes between conventional and artefactual samples are eliminated. Even though according to their analysis this might be a valid claim, clearly raw choices made by the student sample are different from those made by the general population sample.
- As noted in the paper, there is some related literature (e.g. Harrison et al. 2007; Andersen et al. 2010). Comparing results of raw choice behaviour and estimations could serve as another robustness check.

References:

Andersen, S., G.W. Harrison, M.I. Lau, & E.E. Rutström. 2010. Preference heterogeneity in experiments: Comparing the field and laboratory. Journal of Economic Behavior and Organization 73(2):209-224.

Belot, M., R. Duch, und L. Miller. 2010. "Who should be called to the lab? A comprehensive comparison of students and non-students in classic experimental games". Discussion Papers.

Harrison, G.W., M.I. Lau, & E.E. Rutstrom. 2007. Estimating risk attitudes in Denmark: A field experiment. Scandinavian Journal of Economics 109(2):341–368.