

*Disentangle Ambiguity Aversion and Probabilistic Risk Aversion in the Lab*

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Abstract

We propose a theoretical model and a related experimental analysis in order to capture and disentangle different motivations for the lower willingness to pay to participate in a lottery when probabilities of the events are unknown. Our theoretical model combines Rank-Dependent Expected Utility Theory (henceforth RDEU) with Choquet Expected Utility (henceforth CEU). RDEU in decision under risk captures the distortion of known probabilities through the probability weighting function. CEU with probabilistic risk aversion under uncertainty captures the distortion of unknown probabilities through an event weighting function, which we interpret as the composition of the probability weighting function and the subjective probability on the event. The results of a pilot study do not corroborate the null hypothesis that the decision maker “weighs” probabilities in the same way both under risk and under uncertainty. This could be due to a complementarity between probabilistic risk aversion and ambiguity aversion, that we are currently analyzing through additional experimental sessions.