Testing the Elicitation Procedure of the Minimum Acceptable Probability

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Abstract

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1 Introduction

Imagine a lottery and a sure payment. You know how much you receive if you win or lose the lottery, but you don't know the chances of each outcome. Now imagine you have to write a contract specifying how good the lottery minimally has to be for you to prefer the lottery over the sure payment. Would the requirement you set in the contract be independent of how likely you think more (less) favorable lotteries are? As an example: would you set the same requirement in two situations, one in which favorable lotteries are more likely, and the other in which unfavorable lotteries are more likely?

From a theoretical point of view, things are clear. If you are a rational expected utility maximizer, the requirement should be the same in both situations. If you're not and the context influences your decisions, it is not so clear which way things will go. Will you require a better or a lesser chance to take the lottery in a world of better opportunities?

This note reports the findings of an online experiment designed to test whether a more favorable underlying distribution of the chances of the lottery influences the threshold people require. Our interest in this question was sparked by previous work on betrayal aversion. Betrayal aversion has been identified as one of the factors influencing the decision to trust. It is defined as an anticipatory disutility from expecting one's trust to be betrayed. Betrayal aversion has been identified as the premium required to trust someone relative to accepting an equiprobable lottery with equal payoff consequences for an uninvolved other.

Most older papers on the subject of betrayal aversion find a positive strategic premium. Some papers however do not. **?** propose that the original BZ design

might have miss-classified the premium as betrayal aversion. They argue that, should participants not be rational expected utility maximizers, the premium could be attributed to "ambiguity attitudes, complexity, different beliefs, and dynamic optimization".

In this note, we examine the effect of one of these potential confounds: different underlying distributions of the lottery's winning chances.