Analysis of Preferences in Decision Making in a Bilateral Negotiation Context: An Experimental Approach from Game Theory

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Abstract : Decision making can be conditioned by factors such as the environments, circumstances, behavioral biases, emotions, beliefs and preferences of the participants. The objective of this paper is to analyze the effect 'amount of information' and 'number of options', on the behavior of competitors under a bilateral negotiation context. For the above, it has been designed an experiment as a classroom game where they negotiate goods, under the condition that none of the players knows exactly the real value of the asset. The game is designed under the concept of zero-sum (non-cooperative game) and focuses on the fact that agents must anticipate the strategies of their opponent to improve their chances of winning in the negotiation. The empirical results show that, contrary to the traditional view of expected utility theory, players prefer to obtain low profits and losses, when faced with a higher expectation of losses, using sub-optimal strategies not in accordance with game theory.

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Keywords : bilateral negotiation, classroom game, decision making, game theory

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