ABSTRACT

Decision making is an important process which people make in every situation. In making a decision, a person need to consider various aspects that could not be predicted. One important thing that needs to be considered in decision making study is the risk attitude of the decision maker toward a risky decision. Previous researches show that risk attitude of a person have an impact toward decision that will be made by that person.

This research takes extensive game with perfect information by considering the risk attitude of the players as the main topic. Extensive game is considered to be important as many games are not simply ended in a stage, e.g. chess, optimal pricing in a supply chain stages, price-war in a monopoly market, and auction. Two most well-known theories, Expected Utility Theory and Prospect Theory, in decision making are used in this research. Both theories are used in predicting the decisions that might be taken by a decision maker. Fifty eight students in Universitas Gadjah Mada with age between 18 and 22 year-old were participating in this research. This research finds that participants are having a risk-averse behavior toward gain case and risk-seeking or loss averse toward loss case. This results similar to one of the main characteristics in Prospect Theory, loss aversion.

The result of this research shows that there is no significant difference between Expected Utility Theory and Prospect Theory at significance level 0.01 and 0.05. Both theories show relatively low performance, ranging between 35.17% and 40.00%, in predicting the actions taken in game.

Keywords: Extensive Game with Perfect Information, Decision Making, Expected Utility Theory, Prospect Theory.