## ABSTRACT

Shuttle transportation within the province (AJDP) is a type of public transport roadways that are created to meet the needs of public transport for people with high mobility in a province. Increasing on people interest in AJDP transport is a magnet for entrepreneurs to invest in this industry. But then size of the many industrial companies of AJDP route of Purwokerto-Semarang, it turns out there are two companies that are more dominant in terms of the ownership of assets in the form of vehicles, namely Sumber Alam and Cipaganti. Both of these companies used different strategy on service, that is door to door by Cipaganti Sumber Alam provide point to point service.

This research aims to identify and analyse models of duopoly that describe the behavior patterns of the companies within an industry, identify and analyse models of duopoly that produce optimum payoff for the companies, as well as analysing optimum competition strategy on a shuttle transport company Cipaganti and Sumber Alam with a game theory approach

This analysis uses descriptive qualitative and quantitative analysis with game theory approach as well as the methods of optimization. This research uses a simulation of that market is dominated by duopolis.

The results of this research show the structure of the market competition between duopolis tend to be on the model of duopoly Cournot model compared to the Chamberlin model. The model which optimizing the payoff is Cournot model. Both players didn't have dominant strategies and optimum payoff were obtained by two companies with distinguished service strategies between the two. Nash equilibrium occurs at the beginning of combination strategy, while Sumber Alam as the shuttle and Cipaganti as travel.

*Key words : Shuttle transportation within the province, Cournot, Chamberlin, Game Theory.*