

## TO THE NONLINEAR COURNOT DUOPOLY

**Korolyov O.L.**

The article examines the applicability of game theory to solve economic problems. In particular, we consider the class of continuous games on the example of the linear model of Cournot duopoly. We consider methods for finding an equilibrium solution Cournot duopoly. Discusses the possibility of switching to non-linear Cournot duopoly model as a more adequate representation of the real situation.

Duopoly first considered by the French economist Cournot back in the thirties of the last century. Cournot approach is based on the hypothesis that their economic decision each firm takes on the assumption of a constant volume production of its competitor. In other words, duopolist believes that the competitor does not respond to its release. To better understand how this happens, consider an example. We first note that the duopoly firm focused on that part of the market demand, which does not provide the offer of another company. Therefore it is very important for the company to properly assess the population's demand for its products and production volume of a competitor.

**Key words:** game theory, continuous play in the economy, the Cournot duopoly.