

Abstrack

Final project aims to determine the relationship between the interest rate of Bank Indonesia at the exchange rate of the rupiah against the US dollar. The model used in the form of first order dynamics system model that is similar to the population competition model. System dynamics model parameters calculated berdasarkan historical data and selected parameters of the model that comes closest to the data. This parameter value is obtained by using a genetic algorithm and Runge Kutta. Results from this model can capture the trend in the medium term. The prediction results 2014 to 2016 of this model, the interest rate of Bank Indonesia rose while the rupiah against the US dollar has decreased.

Key word : genetic algoritm ,US Dollar,Interest Rate,dynamic system model