FORECASTING ANALYSIS OF EAST JAVA NON-OIL AND GAS EXPORT DATA BY USING ARIMA BOX-JENKINS METHOD

Name : Tutut Januar
NRP : 1309 030 016
Study Program : Diploma III Statistics FMIPA-ITS
Supervisor : Ir. Dwiatmono Agus, M.Ikom

Abstract

The growth of economic rate in a country is often used as a reference of success of economic development. Economic growth and export activity possess an important role in the economy of a country. One of the economic success factor in East Java is influenced by export activity, especially in non-oil and gas export sector, because the natural resources located in East Java, are mostly non-oil and gas. Non-oil and gas exports in East Java consists of three sectors, those are agriculture, mines and industry. The number of East Java non-oil and gas exports in each month has increased and decreased uncertain. This is influenced by the number of requests for exports of goods by country of destination in each sector are also uncertain. The increase and decrease the number of non-oil exports, it is necessary to anticipate the supply of goods or commodities. One of the method that can be used is ARIMA Box-Jenkins. The data used in this study are the data non-oil and gas exports in East Java in 2007 until 2011 in each sector. Based on the results of the analysis is done in each sector is obtained by non-oil and gas forecasting prediction for agricultural sector is the ARIMA (1,0,1), the forecasting model for agricultural sector ARIMA (1,1,0) and for mining sector forecasting model is obtained ARIMA (0,0,[2]).

Keywords: Non Oil and Gas Exports, ARIMA Box-Jenkins, Forecasting