

ABSTRACT

Indonesia is one of the leading oil and natural gas (Migas) producers in the world which has an important role in the oil and gas sector. The main problem faced by Indonesia is the gap between domestic oil and gas production and consumption, in this case the continued increase in domestic oil and gas consumption and the decline in national oil and gas production causing an increase in imports and an oil and gas trade deficit in Indonesia. Therefore, this research aims to test the reliability of the Oil and Gas (Oil and Gas) export and import forecasting model to predict the growth of the Indonesian oil and gas sector in the next period, as well as attempting to calculate the level of accuracy of forecasting errors. In this research, the approach used is quantitative research with descriptive statistical methods using Trend Projection and calculating the level of error accuracy using Mean Absolute Percentage Error (MAPE). The object of this research is the volume and value of Indonesian Oil and Gas (Migas) export and import transactions from 1996 to 2022. The data used in this research is time series data. The prediction simulation results show an increasing trend in crude oil imports, petroleum product imports, crude oil import purchase transactions, petroleum product purchase transactions, and natural gas export sales transactions, each of which provides higher results in the following period compared to the average -average of previous period. The forecasting results show that the forecasting models for crude oil imports, petroleum product imports and natural gas exports each provide good forecasting results, meaning that the projection model can be relied on.

Keywords: Forecasting, Exports, Imports, Oil and Gas (Oil and Gas), Trend Projections