Forecasting Malaysia's Trading in Global Market Using Autoregressive Model

Muhammad Nor Hidayat Mohd Jalani[1], Mohamad Najib Mohamad Fadzil[2]
[1]*mnorhidayat23@gmail.com*
[2]*mohamadnajib@uitm.edu.my*

ABSTRACT

International trade is one of the sectors that contributes to Malaysia's economic growth and development. According to the Economic Complexity Index (ECI), Malaysia ranked 21st among the world's largest exporters in 2019 and 25th among the world's largest importers. The Department of Statistics Malaysia (DOSM) has recorded the Malaysia Trade Statistics as an initiative to provide information on Malaysia trading statistics involving Malaysia's export and import data. Based on Malaysia's external trade performance, total import and export trade has been increasing year after year. The purpose of this research is to present forecasting principles, methods, and strategies based on data from Malaysia's foreign trade. Forecasting the value of imports, exports, balances, and total trade value can assist Malaysia in setting new objectives and goals to increase the value of Malaysia's international trade in the future. Hence, this study investigates the relationship between import, export, total import, balance and total trade to the growth of Malaysia's economic growth and to forecast the Malaysia Trading in Global Market by using the Autoregressive models that includes Vector Autoregression (VAR) Model and Autoregression Integrated Moving Average to be compared. The forecasting analysis shows that both the ARIMA and VAR techniques are effective predictive models with nearly identical performance.

Keywords: International trade, Forecasting, Export, Import, ARIMA, Vector Autoregression, VAR, Autoregressive model