ABSTRACT

The price of salt in Indonesia has changed from time to time. The level of price movement in different areas for the same product can be analyzed. The relationship between prices of refined iodized salt between markets can be done using multivariate regression analysis with time series data. The multivariate regression modeling analysis that can be used is vector autoregressive (VAR). Analysis using VAR is appropriate because all variables are equal, so they can act as endogenous and exogenous variables simultaneously. Current data is not only related to previous data but also related to other variable data. This research uses secondary data on the monthly salt prices of salt-producing districts in Central Java for the period January 2016 to June 2023. The salt-producing districts are Rembang Regency, Brebes Regency, Cilacap Regency, Demak Regency, Batang Regency, Kebumen Regency, Purworejo Regency, Jepara Regency, and Pati Regency. VAR modeling was carried out by selecting the best model with the smallest AIC value, namely the AIC value at lag 5 of 124.6995. The VAR model (5) is the best model that has been obtained and can be used to forecast salt prices for several future periods. The accuracy of the model used for forecasting was tested using the Mean Absolute Percentage Error (MAPE) method and produced a value of 27.4437%, which means the model is still reasonable to use.

Keywords: Price, Refined Iodized Salt, Vector Autoregressive (VAR), Modeling, Forecasting