

ABSTRACT

The banking sector in Indonesia plays an essential role in maintaining economic stability. One key aspect in assessing a bank's financial health is the solvency ratio, which reflects the company's ability to meet long-term obligations. The main indicators used are Debt Ratio (DR), Debt to Equity Ratio (DER), and Long Term Debt to Equity Ratio (LTDER). This study aims to analyze the correlation among these ratios and to forecast their movements using the Vector Autoregressive (VAR) method on PT Bank Mandiri Tbk. The data consist of monthly observations from January 2013 to September 2024, totaling 141 records, divided into 80% (112 data) for training and 20% (29 data) for testing. The results show that the best model is VAR(2), selected based on the optimal lag with the smallest Akaike Information Criterion. The interrelationship among the three solvency ratios illustrates the company's financial condition and its ability to manage long-term debt. The accuracy of the VAR(2) model is indicated by the Mean Absolute Percentage Error (MAPE), with values of 055% for forecasting the Debt Ratio, 4,39% for the Debt to Equity Ratio, and 12,88% for the Long Term Debt to Equity Ratio. VAR(2) model is effective in explaining and forecasting the company's solvency ratios.

Keywords: Solvency Ratio, Forecasting, Mean Absolute Percentage Error (MAPE), Vector Autoregressive (VAR)