

## ABSTRACT

Stocks are one of the most popular investment instruments due to their ability to provide attractive benefits. One widely recognized company with a strong position both domestically and globally is PT Indofood Sukses Makmur Tbk, which is also included in the IDX30 index. Investors require forecasting methods as a basis for making informed decisions in response to stock price fluctuations. This study aims to model ARIMA and Fuzzy Time Series (FTS) Saxena Easo, and to determine the best method based on the lowest RMSE value. The data used is sample data of daily closing stock prices from March 2023 to October 2024. The dataset is divided into 377 training data points and 19 testing data points. For the ARIMA method, the model that satisfies all assumptions and yields the lowest RMSE value is ARIMA (1,1,0), with an RMSE value of 78.2319. The FTS Saxena Easo, which uses fuzzy logic, produces an RMSE of 46.8767. The results show that the RMSE value of the FTS Saxena Easo is lower than ARIMA (1,1,0), so FTS Saxena Easo is chosen as the best method. Forecasting using FTS Saxena Easo produces a Mean Absolute Percentage Error (MAPE) of 0.4745%. Since the MAPE value is less than or equal to 10%, FTS Saxena Easo is considered very good for forecasting the closing price of PT Indofood Sukses Makmur Tbk.

**Keywords:** Stock, Indofood, ARIMA, Fuzzy Time Series Saxena Easo, RMSE, MAPE