ABSTRACT

The number of investors in the capital market, especially stocks are continues to increase. One index that is commonly used in monitoring the development of stocks in Indonesia is the JCI Index. The investors need a system that can predict the movement of the JCI to help making decisions. Fuzzy Time Series is one of the forecasting methods that can be used. Fuzzy Time Series has undergone many developments. This research uses Fuzzy Time Series Markov Chain (FTS MC) and Fuzzy Time Series Saxena Easo (FTS SE). This research uses daily data from the JCI closing price from October 1, 2024 to November 8, 2024. The data is separated into training and testing set. According to the study's findings, the FTS SE approach has better accuracy rate than the FTS MC technique with sMAPE value was 1.959%, and 1,589% respectively.

Keywords: Forecasting; Fuzzy Time Series; Markov Chain; Saxena Easo; sMAPE.