ABSTRACT

A COMPARISON OF CHEN MODEL AND MARKOV CHAIN MODEL IN FUZZY TIME SERIES METHOD FOR FORECASTING FARMER EXCHANGE RATE IN LAMPUNG

By

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The Fuzzy Time Series (FTS) method is a forecasting method that uses the concept of fuzzy sets as the basis for forecasting modeling. Some of the methods available in FTS are the FTS method of Chen model and the FTS method of Markov Chain model. This study aims to compare the results of forecasting data on farmer exchange rates in Lampung and choose which method is the best of the two methods by looking at the smallest MAE (Mean Absolute Error) and MAPE (Mean Absolute Percentage Error) values. The result of the study indicates that the FTS method of Markov Chain model is the best method compared to the FTS method of Chen model.

Keywords: Forecasting, Fuzzy Time Series, Chen Model, Markov Chain Model, MAE, MAPE.

ABSTRAK

PERBANDINGAN MODEL CHEN DAN MODEL MARKOV CHAIN PADA METODE *FUZZY TIME SERIES* UNTUK PERAMALAN NILAI TUKAR PETANI DI LAMPUNG

Oleh

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Metode *Fuzzy Time Series* (FTS) merupakan metode peramalan yang menggunakan konsep himpunan *fuzzy* sebagai dasar pemodelan peramalan. Beberapa metode yang ada di FTS adalah metode FTS model Chen dan metode FTS model Markov Chain. Penelitian ini bertujuan untuk membandingkan hasil peramalan data nilai tukar petani di Lampung dan memilih metode mana yang terbaik diantara kedua metode tersebut dengan melihat nilai MAE (*Mean Absolute Error*) dan MAPE (*Mean Absolute Percentage Error*) terkecil. Hasil dari penelitian menunjukkan bahwa metode FTS model Markov Chain merupakan metode terbaik dibanding FTS model Chen.

Kata Kunci: Peramalan, *Fuzzy Time Series*, Model Chen, Model Markov Chain, MAE, MAPE.