

ABSTRAK

Inflasi merupakan kenaikan harga barang atau jasa dalam kurun waktu tertentu yang disebabkan oleh merosotnya nilai mata uang. Salah satu cara untuk menghindari inflasi adalah dengan melakukan Investasi. Salah satu jenis investasi aset finansial adalah saham. Saham sub sektor kesehatan seperti Kimia Farma (KAEF) berdasarkan pola data datanya mengandung pola data *trend* serta musiman. Begitupun metode yang digunakan yaitu *Holt-Winters Additive Seasonal Model* dengan *Multiplicative Seasonal Model* yang dapat meramalkan data yang mengandung pola data *trend* serta musiman sehingga dibandingkan metode yang memiliki tingkat *error* terkecil. Berdasarkan hasil penelitian Metode *Holt-Winters Multiplicative Seasonal Model* memiliki tingkat *Error* yang lebih kecil dibandingkan *model Holt-Winters Additive Seasonal Model* untuk memodelkan data Saham PT Kimia Farma Tbk (KAEF) tahun 2021, 2020, 2019, 2018 karena pola data menunjukkan adanya kenaikan atau penurunan jangka panjang serta fluktuasi musiman yang semakin membesar seiring bertambahnya periode waktu pengamatan. Sedangkan, metode *Holt-Winters Additive Seasonal Model* memiliki tingkat *Error* yang lebih kecil dibandingkan *model Holt-Winters Multiplicative Seasonal Model* untuk memodelkan data Saham PT Kimia Farma Tbk (KAEF) tahun 2017 Karena data menunjukkan adanya kenaikan atau penurunan jangka panjang serta fluktuasi musiman yang relatif konstan seiring bertambahnya periode waktu pengamatan.

Kata Kunci : Sistem Peramalan, Saham, *Holt Winters Eksponensial Smoothing*, *Additive Model*, *Multiplicative Model*

ABSTRACT

Inflation is an increase in the price of goods or services within a certain period caused by a decline in the value of the currency. One way to avoid inflation is to invest. One type of investment in financial assets is stocks. Stocks in the health sub-sector such as Kimia Farma (KAEF) based on data patterns contain trend and seasonal data patterns. Likewise, the method used is the Holt-Winters Additive Seasonal Model with the Multiplicative Seasonal Model which can predict data containing trend and seasonal data patterns so that it is compared to the method that has the smallest error rate. Based on the research results of the Holt-Winters Multiplicative Seasonal Model Method, it has a lower error rate than the Holt-Winters Additive Seasonal Model for modeling PT Kimia Farma Tbk (KAEF) stock data for 2021, 2020, 2019, and 2018 because the data pattern shows an increase or long-term decline and seasonal fluctuations that are getting bigger as the observation period increases. Meanwhile, the Holt-Winters Additive Seasonal Model method has a smaller error rate than the Holt-Winters Multiplicative Seasonal Model for modeling PT Kimia Farma Tbk (KAEF) stock data in 2017 because the data shows an increase or decrease in the long-term and seasonal fluctuations that are irrelevant constant with increasing observation period.

Keywords : *Forecasting Systems, Stocks, Holt Winters Eksponensial Smoothing, Additive Model, Multiplicative Model*