

Forecasting Exchange Rate between Thai Baht and the US Dollar Using Time Series Analysis

Authors : Kunya Bowornchokchai

Abstract : The objective of this research is to forecast the monthly exchange rate between Thai baht and the US dollar and to compare two forecasting methods. The methods are Box-Jenkins's method and Holt's method. Results show that the Box-Jenkins's method is the most suitable method for the monthly Exchange Rate between Thai Baht and the US Dollar. The suitable forecasting model is ARIMA (1,1,0) without constant and the forecasting equation is
$$Y_t = Y_{t-1} + 0.3691 (Y_{t-1} - Y_{t-2})$$
 When Y_t is the time series data at time t , respectively.

Keywords : Box-Jenkins method, Holt's method, mean absolute percentage error (MAPE), exchange rate

Conference Title : ICAMSC 2014 : International Conference on Applied Mathematics and Scientific Computing

Conference Location : London, United Kingdom

Conference Dates : July 27-28, 2014