

**UNIVERSITI TEKNOLOGI MARA**

**Prediction of the Currency Exchange  
Rate Using Holt's Exponential  
Smoothing Model**

**Maisarah Fatini binti Zakria**

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## **STUDENT'S DECLARATION**

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



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**MAISARAH FATINI BINTI ZAKRIA**  
**2017160279**

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## ABSTRACT

The latest globalization trends resulted in increasingly interdependent economies of nations and multinational firms. This may leave companies operating internationally at the mercy of the volatility in currency exchange rates. Forecasting these exchange rates became very important in international trade and commerce, as it involves key decisions of foreign investment, forward contracts, and expanding the business to new horizons. This study describes a Holt's Exponential Smoothing Model(HESM) and its application to currency exchange rate forecasting. A study of HESM is conducted for forecasting exchange rates between the Malaysian Ringgit(MYR) and the US dollar. The data are collected from January 2018 to December 2018. The reliability of the HESM model is measured based on the values of MSE, RMSE, and MAPE. The results showed that the error values are low and it is indicated that the model used is good and reliable.

**Keywords:** Forecasting, Exchange Rate, Holt's Exponential Smoothing Model (HESM).

Introduction

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