UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

FORECASTING CRUDE PALM OIL PRICE USING UNIVARIATE AND BOX-JENKINS TECHNIQUES

P34S19

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Report submitted in partial fulfilment of the requirement for the degree of
Bachelor of Science (Hons.) Management Mathematics
Faculty of Computer and Mathematical Sciences

DECEMBER 2019

ACKNOWLEDGEMENTS

Alhamdulillah, praises and gratitude to Allah for his Almighty and his Utmost Blessings, we were able to complete this study within the time given. With all the commitment and hard work, we were able to finish the report of the study at the appointed time.

Firstly, we would like to take this opportunity to thank to Universiti Teknologi MARA, our faculty which is the Faculty Computer and Mathematical Science and our supervisor, Madam Norliana bt Mohd Lip. Most thanks for her guidance, support and advice to complete this study. We are very grateful to her for all the commitments which are by giving information and good advice to finish this study successfully. We also want to thank all lecturers in Faculty of Computer and Mathematical Sciences (FSKM) especially to Madam Aminah Binti Abdul Malek.

Next appreciation goes to our family, especially to our beloved parents, for their endless love, prayers and encouragement. Thank you for supporting us mentally and physically while we were finishing this study.

Last but not least, we were honored to express our gratitude and special time to all our friends and seniors for giving ideas and help us to understand more about the topic in this study. For those who indirectly contributed in this study, your kindness mean a lot to us. Thank you very much.

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ABSTRACT

In Malaysia, crude palm oil price forecasts represented fundamental and valuable information to traders who are involved directly or indirectly in the fat and oil markets. It has been widely accepted that the price of oil is one of the reasons of the world economy. Therefore, reliable crude oil forecasts are important for assessing economic fluctuations and improving economic policy. In this research has used Box-Jenkins and Univariate Modelling Technique to analyse the problem of there are lack of researchers that make studies on the accuracy between the Univariate and Box-Jenkins Techniques in forecasting the future CPO price of Malaysia with the minimum error. Besides that, there are not much of studies using SARIMA method. The objective of this study is to compare the model between Single Exponential Smoothing, Double Exponential Smoothing and SARIMA model by measure the model using Mean Squared Error (MSE), Mean Absolute Percentage Error (MAPE) and Geometric Root Mean Squared Error (GRMSE), and also to forecast the future crude palm oil price using the best model. The best method in this study we can assume that Single Exponential Smoothing is the suitable method for the forecasting the CPO prices.