## CHAPTER 5 CONCLUSION

In conclusion, ARIMA has the lowest MAE, MAPE, MSE and RMSE values. Meanwhile, ANN has the second lowest value of MSE, RMSE, MAE, and MAPE. On the other hand, Random Forest machine learning model has the highest MSE, RMSE, MAE, and MAPE values which can be seen through Figure 4.7, Figure 4.8, Figure 4.9, Figure 4.10, and Table 4.5. Based on the result, ARIMA model performs better compared to Random Forest and ANN. It is because ARIMA model predict the future value based on the past value. Therefore, ARIMA is the better choice to be used for predicting coal stocks price. The future research can input coal price to equip the model because the coal's commodity price can affect coal stocks performance.

