Review Form 3

Journal Name:	**Asian Journal of Probability and Statistics**
Manuscript Number:	**Ms_AJPAS_128332**
Title of the Manuscript:	**An Exploration of Exchange Rate in Nigeria using ARIMA Approach**
Type of the Article	

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PART 1: **Comments**

	Reviewer's comment	**Author's Feedback** *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	**This manuscript contributes significantly to the scientific community by providing a comprehensive analysis of exchange rate fluctuations in Nigeria using the Box-Jenkins ARIMA approach. Ultimately, this study's contributions have far-reaching implications for Nigeria's economic development and stability, making it a valuable addition to the existing literature on exchange rate modeling and forecasting.**	
Is the title of the article suitable? (If not please suggest an alternative title)	**Yes**	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	**An abstract is a concise summary of a research work. This should include the study background, purpose, focus, methodology, results, and conclusion. Thus, revisit the abstract.**	
Is the manuscript scientifically, correct? Please write here.	Yes	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	-This study adopts the Box-Jenkins ARIMA modelling technique. It is important to cite and properly reference the original work by the proponents of this methodology to give proper credit and ensure academic rigor. **-**The manuscript adopts the AIC and BIC model selection criteria in its analysis. The authors should ensure that they cite and reference the relevant works where these criteria were first introduced and discussed to acknowledge the original contributors to this approach. **-**The R Statistical software used in this analysis is freely available, thanks to the efforts of the R Core Team. The authors should acknowledge their contribution by citing and referencing the official R documentation or relevant publications by the R Core Team.	
Is the language/English quality of the article suitable for scholarly communications?	Yes	
Optional/General comments	1. Please carefully review the manuscript for any grammatical errors to ensure clarity and precision in the writing. **2.** Under section 3.1, the letter "p" should be in lowercase, as it refers to the non-seasonal autoregressive parameter. Please correct this for consistency with standard notation. **3.** Please choose one style for figure labeling and maintain consistency throughout the manuscript (e.g., either "Fig. 1" or "Figure 1," but not both). Kindly consult the Journal Template for formatting guidelines. **4.** According to Table 2, Figures 7 & 8, the series became stationary after first differencing. However, the final model (ARIMA (4,2,2)) has a differencing order of 2 instead of 1. Please revise the final model to reflect the correct differencing order, and update the equation of the best model in section 4.0 accordingly. **5.** For all identified models in Table 3, please provide the estimates, standard errors, Z-values, and p-values. These are essential for evaluating the significance and reliability of the model parameters. **6.** AIC alone may not be sufficient for model selection. Please also calculate the Bayesian Information Criterion (BIC) and include it in Table 3 as an additional model selection criterion. **7.** Are the parameters in Table 4 statistically significant? Please provide the p-value for each parameter of the ARIMA (4,2,2) model to support your conclusions. **8.** How efficient is your final model? I recommend conducting model diagnostics such as residual plots, Ljung-Box tests, and other relevant tests to evaluate the fit and adequacy of the ARIMA (4,2,2) model.	

PART 2:

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

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