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| Journal Name: | [**Journal of Advances in Mathematics and Computer Science**](https://journaljamcs.com/index.php/JAMCS) |
| Manuscript Number: | **Ms\_JAMCS\_140029** |
| Title of the Manuscript: | **A Hidden Markov Model Approach to Daily Stock Return Dynamics of PT. Kimia Farma Tbk.** |
| Type of the Article | 1. Original Research Article |

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | **Author’s Feedback** (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.** |  |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** |  |  |
| 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. |  |  |
| Is the manuscript scientifically, correct? Please write here. |  |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** |  |  |
| Is the language/English quality of the article suitable for scholarly communications? |  |  |
| Optional/General comments | **1. should clearly indicate specifically the type of market condition that was used to infer the hidden states.**  **2. should estimate emission probabilities, which describe the likelihood of observing a specific stock return given that the market is in a particular hidden state (e.g., the probability of observing a 3% daily return given that the market is in a bull state), in addition to transition probabilities of changing from one hidden state to another.**  **3. The conclusion should be discussed in terms of the various market conditions (bull, bear, or volatile) that may have been deduced from the daily stock returns that were observed.**  **DECISION: ONLY PUBLISH AFTER THE MINOR CORRECTIONS ABOVE HAVE BE EFFECTED** | 1. A clear indication of market conditions is provided in the discussion of Figure 3. 2. The discussion of the emission probability matrix is used to explain matrix B within the discrete parameter framework. The relationship between emission probabilities and market conditions is elaborated in Figure 3. 3. The conclusion regarding market conditions has been incorporated into the final conclusion section. |

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| **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)* |  |