Dear Editor and Reviewers,

We would like to express our gratitude for the great efforts that you and the anonymous referees have put in this paper. We found the suggestions are constructive. We have strived to address all the issues as thoroughly as possible. The main changes are summarized as follows:

1. We have given deliberate explanations for finance theories involved in our paper, including modern portfolio theory, the efficient market hypothesis and behavioral finance. We have also given strong reference to support the background of stock market behavior on our research problem. We have read the articles recommended in the comments and cited them. We have cited past literature to support sentences like “Such moments, together with other factors, i.e., economic condition ..........jointly determines the stock prices”.
2. We have given our practical implications of our research in the conclusion section as you suggested.

We hope our revision meets your satisfaction, and we look forward to your favorable response shortly.

Regards,

Authors

Reviewer 1

Q1: Page 2 – Recent work – Financial theories such as behavioral science needs deliberate explanation. Strong reference to literature to support the background of stock market behavior with the research problem may be included. As a suggestion one may take support of the efficient market hypothesis for the model.

Answer: we have added further explanation of behavioral finance and the efficient market hypothesis (See the first two paragraph of Section 2).

For the reference of stock market behavior, we added that the stock market is affected by investors’ emotions [1,2,3,4] and these emotions (sentiment) are measurable through social media[5,6,7] (The third paragraph of Section 2). The relationship of sentiment and stock index is analyzed by different methods. The methods are thoroughly summarized in Section 2.1-Section 2.3.

Comment 2:

Introduction – Paragraph 1 – The given sentence in the paragraph (Such moments, together with other factors, i.e., economic condition ..........jointly determines the stock prices) may be supported through citation from past literature.

Comment 3:

The major practical implications of the given research are missing. A paragraph may be included stating the relevance of the study.

Reference

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