

Review of: "Causality Analysis for Non-Communicable Diseases, Obesity, and Health Expenditure: Toda Yamamoto Approach"

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Potential competing interests: No potential competing interests to declare.

Comments: "Causality Analysis for Non-Communicable Diseases, Obesity, and Health Expenditure: Toda Yamamoto Approach" In this work, the authors use Toda-Yamamoto econometric model to find the casual relationship between health and expenditure variables. Overall, I believe the article is interesting, although there is space for improvement. The paper can be considered as major revision; the authors need to handle the below suggestions: 1) The most important is that novelty should be clarified in this work. Please add one paragraph in the introduction. 2) Authors should explain why they selected Toda-Yamamoto econometric approach to find relationship between those variables? 3) How we can test the reliability of used data in this study? 4) In introduction authors focused on application but in result section focus was most on interpretation of method description. Authors are suggested to balance both parts. 5) Authors used ADF test to test the stationary of data, they are suggested to include the ACF and PACF to assess this pattern more clearly. 6) Is there any assumption of Toda-Yamamoto econometric approach? If yes, has author tested that assumption on study data? 7) What is the motivation behind using the Toda-Yamamoto econometric approach in this study? 8) Authors used Toda-Yamamoto econometric approach analysis. My concern is how we can measure the reliability of this method? Is there any diagnostic test or model selection criteria? It should be addressed in methods and validation of results. 9) Please also provide the Toda-Yamamoto econometric codes/procedure that used for this study analysis. It can be presented as supplementary or appendix file. 10) Authors need to explain more about the Toda-Yamamoto econometric method to replicate the study result for readers. 11) What is difference between Toda-Yamamoto econometric model and Cointegration approach? Is both same? 12) Authors are suggested to apply sensitivity analysis to confirm the results. 13) I feel authors should include an other alternative method to compare the findings 14) It is unclear what was the data structure and how study variables were measured? 15) How authors tested the validity of predicted model? It is suggested authors perform a sensitivity analysis to confirm the predicted results. Or comparing the estimates by some other prediction methods.