

Review of: "Government expenditure and economic growth: evidence from the critical sectors in an emerging economy"

Milena Lopreite¹

1 University of Calabria

Potential competing interests: No potential competing interests to declare.

The subject of the article is interesting but I have strong doubts about the appropriateness of the methodology. If the series are annual I think that is not sufficient the usage of the VECM model because it does not work well for problem of overfitting/overparametrization. For this reason I suggest to use BVAR models and totally re make the analysis. For further details please consider the following publication:

-Brancaccio, E., Giammetti R, Lopreite M, Puliga M (2019) "Monetary Policy, Crisis and Capital Centralisation in Corporate Ownership and Control Networks: a B-Var Analysis". *Structural Change and Economic Dynamics* Volume 51, December, pages 55-66. ISSN: 0954-349X (online 1873-6017). DOI: 10.1016/j.strueco.2019.08.005

-Lopreite, M, Mauro, M (2017), "The effects of population ageing on health care expenditure: A Bayesian VAR analysis using data from Italy". *Health Policy*. vol 121, Issue 6 pp. 663-674, ISSN 0168-8510. DOI: 10.1016/j.healthpol.2017.03.015

-Lopreite, M, Zhu Z (2020). "The Effects of Ageing Population on Health Expenditure and Economic Growth in China: A Bayesian-VAR Approach". Social Science and Medicine, Volume 265, pages 1-12, ISSN: 0277-9536 Available online

11 November 2020. (online 1873-6017). DOI: 10.1016/j.socscimed.2020.113513

Below several suggestions that improves the legibility and the interpretation of the data, and the reported statements:

1)Introduction: Please add the following references:

Lopreite, M, Mauro, M (2017), "The effects of population ageing on health care expenditure: A Bayesian VAR analysis using data from Italy". *Health Policy*. vol 121, Issue 6 pp. 663-674, ISSN 0168-8510. DOI: 10.1016/j.healthpol.2017.03.015

Lopreite, M, Zhu Z (2020). "The Effects of Ageing Population on Health Expenditure and Economic Growth in China: A Bayesian-VAR Approach". Social Science and Medicine, Volume 265, pages 1-12, ISSN: 0277-9536 Available online

11 November 2020. (online 1873-6017). DOI: <u>10.1016/j.socscimed.2020.113513</u>

2) Introduction: The authors affirm that: "Presently in Nigeria, internal security is in shamble, youth restiveness, hostage taking, armed robbery and kidnapping are the order of the day. Safety of lives and properties of citizens is in a precarious situation in the light of increasing expenditure on critical sectors of the economy. Basic social and community services such as education, health, extension services in agriculture, pension/gratuity, and public debt servicing among others are



in very poor state yet the budgeted expenditure on them keep on increasing every year. In the education sector strikes are the order of the day in almost all government-owned tertiary institutions today". Please add the references.

- 3) Introduction: The authors affirm that: "Based on the economic situation in Nigeria we hypothesize that government expenditure on education, health, agriculture, pensions and gratuities, and public debt servicing has no significant impact on economic growth in Nigeria". Please motivate adding references and explain better in the manuscript Nigeria economic situation.
- 4) Introduction: Please explain better the contribution of the paper with respect to the existing literature.
- 5) Literature review:Please motivate the following sentence: "This study concentrates on education, health, agriculture, pensions and gratuities, and public debt servicing because of their critical role in every nation".
- 6)Theoretical review: Please add the relative references when the authors discuss about the differences between Keynes and Wagner.
- 7) I suggest to re-organize in a unique paragraph "theoretical review" and "conceptual review".
- 8) Empirical review. Please summarize the works cited in this paragrah.
- 9) Data:Please correct the sentence as follows: The log difference of real GDP is a proxy of economic growth.
- 10)Methods: I suggest to use jointly with ADF, KPSS and PP test. Please add the value of this test in the Table 6. Moreover, insert as note below the table the calue of the statistical test at 1,5,20 % level of significance.
- 11) Methods: Please resume the part of methods and include it in the decision rule.[1]
- 12) Decision Rule: VAR does not mean "Value at risk" but "Vector autoregressive model"
- 13) Please Remake the format of the Table it is not professional.
- 14) Please add the test of structural parameters stability.
- 15) Please add the test of error autocorrelation, normality and heteroskedasticity
- 16) In what way have you tested the short run and long causality in VECM?
- 17) Please discuss the section "Conclusion" in terms of "Policy implications"
- 18) Please discuss the limitations of the study.
- 19) Sometimes it is difficult to distinguish between statements reporting authors' opinion and those referring to other authors. Please check the manuscript to be sure to have included all the necessary references.
- 20) A linguistic review is strongly suggested.

