

Review of: "Health Outcome and Economic Growth: The Case of Malaria in Nigeria"

Chukwunonso Gerald Iheoma¹

¹ Central Bank of Nigeria

Potential competing interests: No potential competing interests to declare.

Health Outcome and Economic Growth: The Case of Malaria in Nigeria

Review report

Introduction

1. Lacks objective. There is no identified objective.
2. There is no motivation for the study. That is, why should policymakers pay attention to the findings of the study? The authors are advised to situate the study within the context of development, highlighting how its findings can be useful in economic development policy formulation.
3. The whole of this section says nothing about the "case of malaria in Nigeria". While this forms an integral part of the study title, nothing is said about it in the introduction. Does the incidence of malaria come in as an indicator of health outcome or economic growth? Authors are advised to discuss their motivation for focusing on malaria in Nigeria, and how this focus contributes to achieving the research objective.

Literature review

1. The conceptual review focuses on health financing. It is not clear how health financing comes into the study. Recall that nothing is mentioned about health financing in the title, nor in the introduction. If necessary (of which this reviewer is not convinced), the major concepts to be reviewed should be the ones appearing in the title, e.g., economic growth, and health outcomes.
2. The review of Keynesian theory may suffice if the authors can link it to government spending in health. As it is, it appears too generic. It is important to discuss how expenditure in the health sector can affect growth.
3. *"Another strand of literature has sought to elucidate how changes in Nigeria's health level lead to earnings variation by focusing on health outcomes instead of health initial plans, using aggregate analysis rather than micro-level evaluations"*. These studies in Nigeria should be cited.
4. *"Scholars such as Barro (1996), Bhargava et al. (2001), Bloom et al. (2000), Bloom in Malaney (1998), and Bloom et al. (1999) have conducted studies focusing on the regression of Total Factor Productivity (TFP) on GDP per capita, GDP growth, or specific health outcome measures, while accounting for standard controls"*. The findings of these studies should be discussed.

5. The last three paragraphs are not empirical; they are more contextual. It may be better to use them as stylized facts.

Methodology

1. There is no justification for the inclusion of gross capital formation and secondary school enrolment in the model. Authors are expected to provide empirical evidence linking these variables and economic growth, thereby justifying their inclusion in the model.
2. The frequency of the data and their units of measurement should be presented. Given multiple data sources, authors should be specific about which variable is obtained from which source.
3. There is no variable representing health outcomes in the model. Health expenditure is an input, not an outcome. If the authors wish to use the incidence of malaria as an outcome, they should extensively justify that, citing authoritative sources that defined it as such.
4. The long-run model is wrongly specified. In an ARDL model, the variables of the long-run equation are not differenced. Differencing is only done in the short-run model.
5. Given the limited data points (37) for ARDL, there are high chances of losing degrees of freedom; authors may discuss how this potential challenge was addressed.
6. Nothing is said about the determination of the lag length for both models.

Analysis and Interpretation of Data

1. The method used in conducting stationarity tests should be discussed in section 3.
2. Is it required that the methods used in conducting all tests in the study be discussed in the methodology section?
3. Table 5 confirms that the optimal lag length is 1. However, in the results in Table 7, there are variables with up to 3 lags. Authors may justify this.
4. There are no discussions around the findings. No explanation is provided on the behaviour of the incidence of malaria in the short and long run. In both horizons, the variable has negative and positive signs. Authors should justify and discuss the economic implications of these contradictory results.
5. Economic reasons should be adduced for the deviation of the results of CHE from a priori expectation.
6. Overall, while results are presented and interpreted, there discussions are missing.

Conclusion and Recommendations

1. The section contains only recommendations, no conclusion. Authors should provide a succinct summary of their study.
2. The recommendations are generalized, not emanating from the study. Every recommendation should be supported by the findings of the study.