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

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1. **Introduction:**

Engagement with existing literature: While the introduction briefly mentions previous studies on the relationship between economic growth and health outcomes, it could benefit from a more extensive review and synthesis of existing literature. This would provide readers with a better understanding of the current state of research in the field and highlight the gap that the study aims to address.

2.Literature Review

2.1.Depth of analysis: Some sections of the literature review provide detailed explanations of theoretical frameworks, such as Wagner's Law and Keynesian Theory, while others offer brief summaries of empirical studies. To ensure consistency and depth of analysis throughout the review, each theoretical framework and empirical study should receive comparable attention and analysis.

2.2. Citation Format: The citation format used in the literature review is inconsistent, with some sources cited within parentheses and others cited in-text. Adopting a consistent citation format, such as APA or MLA style, would enhance the professionalism and credibility of the review.

3. Review of data and variables sources

3.1.Data Sources:

The study relies on secondary data obtained from the Central Bank of Nigeria (CBN) and World Bank (WB) Statistical Bulletin spanning multiple subjects from 1985 to 2021. This indicates a broad range of data sources, which is beneficial for comprehensiveness.

However, it's crucial to mention the specific datasets or reports within the CBN and WB Statistical Bulletin used in the analysis to enhance transparency and reproducibility.

3.2. Variables Sources:

The variables used in the analysis, such as Real Gross Domestic Product (RGDP), Current Health Expenditure (CHE),

Incidence of Malaria (IOM), Gross Capital Formation (GCF), and Secondary School Enrolment (SES), are relevant to the study's topic.

The theoretical foundation and rationale behind selecting these variables should be explicitly stated to provide clarity on why they are considered crucial in understanding the relationship between health outcomes and economic growth in Nigeria.

3.3.Model Specification

The study employs an Auto-Regressive Distributed Lag (ARDL) model to analyze the relationship between health outcomes (specifically, malaria incidence) and economic growth in Nigeria.

The model specification is clearly outlined, with equations provided for both the short-run and long-run models.

However, the rationale behind choosing the ARDL model over other econometric approaches should be discussed. Providing a brief justification for the suitability of the ARDL model in capturing the dynamic relationship between health outcomes and economic growth would enhance the methodology section.

Data Analysis Techniques: The methodology section describes the use of descriptive statistics, correlation analysis, unit root tests, optimal lag selection, co-integration tests using the ARDL bound approach, and presentation of ARDL model results.

These techniques are appropriate for analyzing the relationship between multiple variables over time.

It would be beneficial to briefly explain the rationale behind each data analysis technique and how it contributes to understanding the relationship between health outcomes and economic growth.

Unit root test and co-integration test: The study correctly performs unit root tests to assess the stationarity of variables and co-integration tests using the ARDL bound approach to determine the long-run relationship between variables.

However, the interpretation of the unit root and co-integration test results could be expanded to provide more insights into the stationarity of variables and the existence of long-run relationships.

4.Results:

4.1.Presentation of results:

The results section presents the findings of the ARDL model, including short-run and long-run estimates of coefficients.

The results are well-organized and clearly presented in tables, making it easy for readers to understand the relationship between variables.

However, providing more context or interpretation of the results would help readers understand the implications of the findings for the relationship between health outcomes (malaria incidence) and economic growth in Nigeria.

4.2. Interpretation of results:

The study interprets the coefficients of the ARDL model and discusses the significance of variables in influencing economic growth.

The interpretation of results could be strengthened by providing more insights into the magnitude and direction of the relationships between variables. For example, discussing the economic significance of a 1% increase in health expenditure or the impact of a change in malaria incidence on economic growth would provide valuable insights.

5.Discussion of findings: The results section briefly discusses the implications of the findings, such as the positive relationship between malaria incidence and economic growth in the short run and long run.

Expanding the discussion to include potential mechanisms or pathways through which health outcomes (malaria incidence) may affect economic growth in Nigeria would enrich the interpretation of findings.

4.2. Interpretation of results: