

# Review of: "Sectoral GDP and Tax Revenue: a Panel Data Analysis"

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Potential competing interests: No potential competing interests to declare.

## Abstract Review:

- The abstract lacks details on the methodology employed for the analysis.
- The abstract should explicitly state the unique contribution of this study to the existing literature.
- Instead of using qualitative terms like "positively correlated" and "negatively correlated," consider incorporating quantitative measures of correlation strength.

## Introduction Review:

- The introduction could benefit from a clearer statement of the specific objectives of the study. Explicitly state what the researchers aim to achieve by analyzing the relationship between sectoral GDP and tax revenue in Indonesia.
- Include a brief roadmap of the paper in the introduction.
- While the introduction mentions previous studies, it would be more effective to synthesize these findings and highlight the gaps or contradictions in the existing literature that the current study aims to address.
- Provide a more robust rationale for the focus on Indonesia.

## Data and Model Section Review:

- While it is mentioned that the unit of analysis is either province or regional tax office, a more detailed explanation of the choice between these units would be beneficial. Discuss the rationale behind choosing these units and acknowledge any limitations associated with this decision.
- Clearly articulate the challenges and implications of not having GRDP data available at the regional tax office level.
- Provide a more detailed explanation of the model, particularly the role of fixed effects ( $\Lambda$ ) and the nature of the error term ( $\epsilon$ ).
- Explain in more detail the rationale behind excluding other economic variables such as inflation, tax rate, and central bank rate.
- Provide more information on the specific tests conducted to address issues of autocorrelation, cross-sectional dependence, and heteroskedasticity.

## Analysis Section Review:

- The comparison between OLS and Fixed Effects (FE) models is insightful, but the explanation could be more detailed.

Discuss why OLS might lead to overestimation and how the FE model corrects this.

- The interpretation of coefficients is critical. Discuss why certain sectors have a more substantial impact on tax revenue compared to others.
- When discussing the improvement in results after considering time FE and id FE, provide more clarity on how these adjustments addressed the issues of heteroskedasticity, autocorrelation, and cross-sectional dependence.
- Consider providing more context and analysis of why certain sectors, such as trade and agriculture, show different results than expected.
- Provide a brief discussion of what Figure 1 illustrates and how the coefficient plot with a 95% CI enhances the understanding of the results.
- Explore potential reasons for these negative correlations and consider proposing hypotheses that could be tested in future research.
- Explain how the contributions align with or challenge the initial hypotheses or expectations.
- Provide a more detailed discussion of why certain sectors show different correlations at the regional level compared to the national level.
- Provide a clear interpretation of how changes in GRDP influence tax revenue for different sectors.

#### **Conclusion Section Review:**

- The opening statement, "Sectoral GDP and tax revenue are closely correlated because the sectoral economy has a distinct feature that may influence particular tax revenue," is somewhat vague.
- The conclusion could benefit from further elaboration. Discuss potential reasons or hypotheses behind these negative influences, providing a bridge to future research or policy considerations.
- Expand on the implications of using tax payment instead of tax due. Discuss how this choice may affect the interpretation of results and the generalizability of the findings.
- Provide more guidance on how the government can strategically improve economic sectors contributing to tax revenue and address those contributing less.
- Conclude with a forward-looking statement, expressing the potential impact of the study's findings on future research, policy decisions, or the understanding of sectoral contributions to tax revenue.

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