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

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Potential competing interests: No potential competing interests to declare.

1. Introduction

The article investigates the relationship between sectoral Gross Domestic Product (GDP) and tax revenue in Indonesia during 2016 to 2020. The authors emphasize the importance of understanding how different sectors contribute to overall tax revenue, considering the diverse nature of the Indonesian economy. The introduction effectively sets the stage by highlighting the varying impacts of sectors like agriculture, mining, and industry on tax revenue. It also mentions findings from previous studies, emphasizing the need for a focused analysis in the context of Indonesia's developing economy.

2. Data and Model

The researchers utilize a dataset from 34 provinces in Indonesia, employing a panel data analysis approach to explore the correlation between sectoral GDP and tax revenue. The article provides a clear explanation of the model used, considering factors such as fixed effects and the exclusion of certain economic variables for homogeneity. The rigorous testing undertaken to address issues like autocorrelation and heteroskedasticity adds credibility to the chosen methodology.

3. Analysis

The main results, presented in Table 1, reveal the coefficients and standard errors of the Ordinary Least Squares (OLS) and Fixed Effect (FE) models. The comparison between the two models highlights the potential bias in the OLS results, demonstrating the importance of employing a more appropriate FE model. The article effectively communicates the nuanced impact of different sectors on tax revenue, providing insights that go beyond a simple correlation analysis.

The inclusion of a sector-wise breakdown (Table 2) further enriches the analysis. The article identifies the five dominant sectors contributing to tax revenue and explores their individual impacts. The visual representation in Figure 1 enhances the reader's understanding of the coefficients' significance and confidence intervals.

4. Robustness Check

The researchers conduct a robustness check by expanding the analysis to each region, providing additional layers of insight. The article identifies variations in sectoral contributions across regions, offering a more detailed understanding of the relationship between GDP and tax revenue. The inclusion of a GRDP growth analysis adds depth to the investigation, examining how changes in GDP influence tax revenue over time.

5. Conclusion

The conclusion summarizes the key findings, emphasizing the close correlation between sectorial GDP and tax revenue. The limitations, such as using tax payment instead of tax due, are acknowledged, maintaining transparency about the study's constraints. The policy implications highlighted for the government and tax authorities provide a practical takeaway from the research.

6. Recommendations

- Consider providing a brief overview of the current state of Indonesia's economy for readers unfamiliar with the context.
- Include visual aids or charts to illustrate key findings, enhancing reader engagement.
- In order to confirm finding in long-run, it is recommended to increase the data set in terms of numbers of years.
- Explain the reasons behind the negative correlations observed in certain sectors.
- Consider incorporating effect of change in sectoral tax contribution to total GDP.

Overall, the article presents a comprehensive analysis of the relationship between sectoral GDP and tax revenue in Indonesia during 2016 to 2020, contributing valuable insights for policymakers and researchers alike.