

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

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Potential competing interests: No potential competing interests to declare.

The author uses advanced econometric techniques to study the role of Sectoral GDP and Tax Revenue: a Panel Data Analysis. Many scientists have lamented the risks involved with the reliance on agriculture production, and the significance of the same to the economy. The study explored the area of agriculture and its benefits to the economies of the world in general. The topic is competitive, relevant and it is a validation of scientific hypotheses which have been advanced for a long time. Indeed, the results are relevant not just to scientific inquiry but also to policy making. The author does a substantial literature review, and with minor exceptions, suitably situates their study in this literature. The originality of the work lies in the locational context.

As a side comment, I find the whole domain of Sectoral GDP and Tax Revenue studies a bit saturated and in need of fresh perspectives. There are several issues with the topic, however, which will need to be addressed before it could be considered acceptable.

Taking into all the theoretical considerations, they must be the main hypotheses of the research.

1. Panel data deals with omitted variable bias due to heterogeneity in the data. It does this by controlling for variables that we cannot observe, are not available, and/or cannot be measured but are correlated with the predictors. So I think that the mentioned methodology needs more clarification by specifying variables that do not change over time but vary across entities and Variables that change over time but not across entities.
2. Some drawbacks when working with panel data are data collection issues (i.e. sampling design, coverage), non-response in the case of micro panels or cross-country dependency in the case of macro panels (i.e. correlation between countries). In this study, it is said that GRDP is not available for the regional tax office level. So how this problem has been addressed?
3. The researchers analyzed the relationship between sectoral GRDP and tax revenue in Indonesia from 2016 to 2020. I think that the sample period is too small to draw a conclusion.
4. Correlation means there is a statistical association between variables. Causation means that a change in one variable causes a change in another variable. In this research, the author has come across the phrase "correlation but doesn't imply causation." Correlation and causation are two related ideas, but understanding their differences will help you critically evaluate sources and interpret scientific research. A high correlation between independent variables is called multicollinearity, and can skew regression results.

5. Three sectors correlated negatively with tax revenue (transportation, agriculture, and information). This is the main point for the reflection of this research. The study is required to understand how taxes impact economic development in various contexts and to find the most effective tax policies for fostering economic growth and development. The majority of agricultural exports are taxed on an ad valorem basis, although specific rates are applied by some countries. It is better to analyses a type of tax applied in the mentioned provinces.

6. There must be extensive literature review and a type of leadership analysed in this country.

Thank you.