

CONSTRUCTION OF AUDITOR PROFESSION ETHICS IN THE ERA OF DIGITAL DISRUPTION: A PHENOMENOLOGICAL STUDY OF PUBLIC ACCOUNTING FIRM IN SURABAYA

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Abstract

This study aims to analyze the influence of direct taxes, indirect taxes, and oil and gas revenues on state revenues in Timor-Leste. This study uses a quantitative approach with secondary data in the form of time series data for the period 2010–2020 obtained from the Ministry of Finance of Timor-Leste and Petroleum Fund reports. The analytical method used is multiple linear regression with the Ordinary Least Squares (OLS) approach, as well as classical assumption tests including normality, multicollinearity, heteroscedasticity, and autocorrelation tests. The results show that direct taxes, indirect taxes, and oil and gas revenues have a positive and significant effect on state revenues. The coefficient of determination (R^2) value of 0.997 indicates that the three independent variables are able to explain 99.7% of the variation in state revenues. This finding indicates that the structure of Timor-Leste's state revenues is still heavily influenced by the oil and gas sector, although domestic taxes are also starting to show an increasingly important contribution. This study implies that diversification of state revenue sources is necessary to improve fiscal stability and reduce dependence on the oil and gas sector.

Keywords: *Direct Taxes, Indirect Taxes, Oil and Gas Revenues, State Revenues, Timor-Leste.*

INTRODUCTION

Taxes are a key source of state revenue and play a crucial role in supporting economic development, maintaining fiscal stability, and improving public welfare. From a public finance perspective, taxes serve not only as a government financing instrument but also as a tool to regulate economic activity, create a more equitable distribution of income, and maintain macroeconomic stability. The OECD (2021) states that a strong tax system will enhance a country's capacity to provide public services and support sustainable development. Therefore, the effectiveness of the tax system is a crucial factor in determining a country's fiscal sustainability (Barreto, 2020).

In the context of Timor-Leste, the state revenue structure remains heavily dependent on the oil and gas sector. Since independence in 2002, oil and gas revenues have been the primary source of state revenue, averaging over 80% of total revenue in several budget periods. This high dependence on this sector reflects a resource-dependent economy that faces high risks from fluctuations in global oil prices and declining natural resource production. This is in line with Resource Dependence Theory, which explains that dependence on a single primary resource can increase fiscal vulnerability and limit government policy space (Sahombu, 2025).

Based on Timor-Leste's 2010-2020 state budget data, state revenues exhibited a pattern of sharp fluctuations. Significant increases occurred at the beginning of the period, followed by declines in subsequent years. These fluctuations indicate that state revenues are still heavily influenced by the performance of the oil and gas sector. When oil and gas revenues increase, total state revenues also increase, and conversely, when oil and gas revenues decline, state revenues also experience a significant contraction (Setiawan et al., 2025). This situation indicates that domestic tax contributions are still unable to serve as a primary support for fiscal stability.

Conceptually, taxes are divided into two main components: direct taxes and indirect taxes. Direct taxes, such as individual and corporate income taxes, are characterized by non-transferability and reflect the taxpayer's economic capacity (ability to pay principle). Meanwhile, indirect taxes, such as consumption taxes, import duties, and excise taxes, are levied on transactions of goods and services and are more flexible in collection, but are heavily influenced by public consumption levels (Wolak-Tuzimek & Tuzimek, 2021). Oil and gas revenues remain the most dominant component of Timor-Leste's state revenue structure, contributing significantly to the state budget. However, heavy reliance on this sector poses long-term fiscal risks due to its non-renewable nature and its significant impact on global commodity price volatility (Ketmoen et al., 2024).

Previous empirical studies have generally focused only on taxes in aggregate or on the oil and gas sector separately, thus failing to provide a comprehensive picture of the structure of state revenue. Furthermore, research integrating direct taxes, indirect taxes, and oil and gas revenues into a single analytical model is still very limited, particularly in the context of a developing country like Timor-Leste. This indicates a research gap in the previous literature, which has not comprehensively analyzed the determinants of state revenue from various sources simultaneously.

This research offers novelty by integrating three main components of state revenue: direct taxes, indirect taxes, and oil and gas revenues into a single empirical model. Furthermore, it utilizes the latest time series data, thus hopefully providing a more up-to-date picture of the dynamics of state revenue structure.

Theoretically, this research is based on Public Finance Theory, which explains the government's role in allocation, distribution, and stabilization through state revenue (Musgrave & Musgrave, 1989), and Fiscal Policy Theory, which emphasizes the importance of state revenue structure in maintaining macroeconomic stability and fiscal sustainability (Fitriani et al., 2026). Both theories provide the basis for optimizing state revenue sources as a crucial factor in strengthening the country's fiscal capacity.

Based on this description, this study aims to analyze the impact of direct taxes, indirect taxes, and oil and gas revenues on state revenues in Timor-Leste. The results are expected to provide theoretical contributions to the public finance literature and serve as a basis for fiscal policy considerations in efforts to increase state revenue independence.

RESEARCH METHOD

This method explains the research design, data sources, research variables, data collection techniques, and data analysis techniques. This study uses a quantitative approach to analyze the impact of direct taxes, indirect taxes, and oil and gas revenues on state revenues in Timor-Leste. The data used are secondary data in the form of annual time series

data for the period 2010-2020 obtained from official publications of the Timor-Leste Ministry of Finance and the Petroleum Fund Report.

The research design used was multiple linear regression with the Ordinary Least Squares (OLS) method. This model was used to test the influence of independent variables—direct taxes, indirect taxes, and oil and gas revenues on the dependent variable, state revenue, both partially and simultaneously.

The variables in this study are measured using a ratio scale in United States Dollars (USD). Direct taxes include personal income tax, corporate income tax, and investment tax. Indirect taxes include Value Added Tax (VAT), excise taxes, and import duties. Oil and gas revenues include royalties, profit oil, oil and gas taxes, and revenues from the Petroleum Fund. State revenues are defined as the total of all government revenues in a fiscal year.

The data collection technique used documentation, namely collecting data from official government reports such as the Timor-Leste State Budget (APBN), state revenue tables, and Petroleum Fund reports. The data obtained was then classified into time series data and compiled into tables for statistical analysis.

The data analysis technique used descriptive and inferential statistical analysis. Inferential analysis was conducted using multiple linear regression to examine the effect of independent variables on the dependent variable. Prior to hypothesis testing, classical assumption tests were conducted, including a normality test, a multicollinearity test using the Variance Inflation Factor (VIF), a heteroscedasticity test using the Glejser test, and an autocorrelation test using the Durbin-Watson test.

Hypothesis testing was carried out using the t-test to test partial effects, the F-test for simultaneous effects, and the coefficient of determination (R^2) to measure the model's ability to explain variations in the dependent variable.

The regression model used in this study is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Information:

Y = State Revenue

X_1 = Direct Tax

X_2 = Indirect Tax

X_3 = Oil and Gas Revenue

β_0 = Constant

β_1 – β_3 = Regression coefficient

ε = error term

RESULTS AND DISCUSSION

RESEARCH RESULT

Description of Direct Tax

Direct taxes in Timor-Leste tended to increase year after year between 2010 and 2020. Direct taxes are state revenues charged directly to taxpayers and cannot be transferred to other parties, primarily originating from individual and corporate income taxes.

In general, direct tax revenues showed an upward trend in line with economic growth, rising public incomes, and government expansion of the tax base. At the beginning of the

period, direct tax revenues were relatively low, but they continued to increase consistently through 2020. This indicates that Timor-Leste's tax system is beginning to strengthen in terms of administration and taxpayer compliance.

The most significant increase occurred in the period after 2013, indicating improvements in the oversight system and the effectiveness of tax collection. Meanwhile, in 2020, despite economic pressures due to the COVID-19 pandemic, direct tax revenue remained stable, indicating that direct taxes are relatively more stable than other revenue sources.

Description of Indirect Taxes

Indirect taxes in Timor-Leste showed a fairly consistent increase throughout the study period. Indirect taxes are taxes levied on the consumption of goods and services, such as import taxes, import duties, and other consumption taxes, the burden of which can be shifted to consumers.

Indirect tax revenue is heavily influenced by public consumption levels, import volumes, and international trade activity. In the context of Timor-Leste, which remains heavily reliant on imported goods, indirect taxes are a dominant source of revenue in the country's fiscal structure.

In general, indirect tax revenues showed a steady increase, despite some fluctuations in certain periods influenced by global economic conditions and changes in trade activity. Nevertheless, at the end of the study period, indirect taxes continued to contribute strongly to state revenues, indicating that public consumption remains a key driver of fiscal revenue.

Description of Oil and Gas Revenue

Oil and gas revenues were Timor-Leste's largest source of income during the study period. These revenues come from the oil and gas sector, which is managed through international cooperation and the Petroleum Fund.

In general, oil and gas revenues exhibit a highly volatile pattern. At the beginning of the period, oil and gas revenues experienced significant increases due to stable global oil prices and continued high production. However, in the subsequent period, there was a significant decline, primarily due to falling global oil prices, decreased production, and limited oil reserves.

These sharp fluctuations demonstrate Timor-Leste's continued high dependence on the oil and gas sector, significantly impacting state revenues, which are heavily influenced by global energy market dynamics. However, in some years, oil and gas revenues have rebounded due to improving global oil prices, although not to the peak levels seen in the initial period.

Descriptive Statistics of Variables

The results of the descriptive statistical analysis indicate that the three research variables have distinct data characteristics. Direct and indirect taxes tend to have relatively more stable fluctuations compared to oil and gas revenues, which exhibit very high variation.

The standard deviation of oil and gas revenues is much larger than that of direct and indirect taxes, indicating a high degree of volatility in the oil and gas sector. This is due to its dependence on global oil prices and unstable production volumes.

Meanwhile, direct and indirect taxes show a more stable pattern because they are more influenced by domestic economic activities such as consumption, public income, and business activities which tend to be more consistent over time.

Research Results and Hypothesis Testing

Normality Test

The Kolmogorov-Smirnov test results showed a significance value >0.05 , thus concluding that the residual data were normally distributed. This indicates that the regression model meets the assumption of normality and is suitable for further analysis.

Classical Assumption Test

a. Multicollinearity Test

The test results show that all independent variables have a Tolerance value > 0.10 and a VIF < 10 , thus concluding that there is no multicollinearity in the research model. This means there is no strong correlation between the independent variables that could interfere with the regression estimation results.

b. Heteroscedasticity Test

The test results show that all variables have a significance value > 0.05 , thus concluding that heteroscedasticity does not occur. Thus, the regression model has homogeneous residual variance.

c. Autocorrelation Test

The Durbin-Watson value of 1.976, which is close to 2, indicates no autocorrelation in the regression model. This means the residuals are independent between observations.

Multiple Linear Regression Analysis

Based on the results of multiple linear regression analysis, the following equation was obtained:

$$Y = -2,990 + 0,421X_1 + 0,250X_2 + 0,209X_3 + e$$

These results show that all independent variables have a positive relationship with state revenue.

A negative constant indicates that without any contribution from the independent variable, state revenue will decrease.

Direct taxes have a positive impact on state revenue, which means that an increase in direct taxes will increase state revenue.

Indirect taxes also have a positive effect, showing that public consumption plays an important role in state revenue.

Oil and gas revenues have the largest positive influence compared to other variables, indicating the dominance of the oil and gas sector in Timor-Leste's fiscal structure.

Hypothesis (Partial)

The partial test results show that:

Direct taxes have a positive and significant impact on state revenues

Indirect taxes have a positive and significant impact on state revenues
Oil and gas revenues have a positive and significant impact on state revenues
Thus, all hypotheses in this study are accepted.

Coefficient of Determination (R^2)

The R Square value of 0.997 indicates that the variables Direct Tax, Indirect Tax, and Oil and Gas Revenue are able to explain variations in State Revenue by 99.7%, while the remaining 0.3% is explained by other variables outside the research model.

DISCUSSION

The Impact of Direct Taxes on State Revenue

The results of the study indicate that direct taxes have a positive and significant impact on state revenue in Timor-Leste, indicating that increasing direct taxes can strengthen the state's fiscal capacity through direct contributions from the economic activities of the community and businesses. Direct taxes reflect the economic capacity of taxpayers, so the higher the level of income and economic activity, the greater the tax revenue received by the government. Theoretically, this is in accordance with Public Finance Theory, which states that taxes are the main instrument of state financing based on the principle of ability to pay, where direct taxes are a relatively stable source in the state revenue structure. In the context of Timor-Leste, these findings indicate a strengthening of the tax system through expanding the tax base, increasing taxpayer compliance, and improving fiscal administration, making direct taxes an increasingly important and more stable source of revenue compared to fluctuating sources such as oil and gas.

The Impact of Indirect Taxes on State Revenue

The results of the study indicate that indirect taxes have a positive and significant impact on state revenue in Timor-Leste, indicating that increased public consumption and trade in goods and services contribute significantly to increasing state revenue. Indirect taxes are consumption-based, making them more stable because they are linked to daily economic activity, particularly in developing countries like Timor-Leste, which is still dominated by household consumption and imports. Theoretically, this finding aligns with Fiscal Policy Theory, which states that consumption taxes have a broad base and are therefore capable of providing relatively stable revenue across a range of economic conditions. Therefore, indirect taxes are an important instrument in maintaining the country's fiscal stability, particularly when revenue from other sectors fluctuates, and demonstrate that strengthening domestic trade and consumption activities directly contributes to increasing state revenue.

The Impact of Oil and Gas Revenue on State Revenue

The results of the study indicate that oil and gas revenues have a positive and significant impact on state revenues in Timor-Leste, confirming that the oil and gas sector remains the primary and most dominant source of state revenue. The contribution of oil and gas to state revenues is substantial, but fluctuates due to the influence of world oil prices, production volumes, and global energy market conditions, making state revenues highly sensitive to external changes. Theoretically, this is in accordance with Public Finance Theory and Fiscal Policy Theory, which explain that natural resources can provide significant

revenues for the state, but carry the risk of high volatility and are unsustainable if not managed properly. In the context of Timor-Leste, these results indicate a high dependence on the oil and gas sector. Therefore, despite its significant contribution to state revenues, a fiscal diversification strategy is needed to reduce this dependence and maintain long-term state revenue stability.

CONCLUSION

Based on the results of this study, it can be concluded that direct taxes, indirect taxes, and oil and gas revenues have a positive and significant influence on state revenues in Timor-Leste, indicating that these three revenue sources play an important role in maintaining the country's fiscal stability. Direct taxes contribute by increasing economic activity and expanding the tax base, reflecting the economic capacity of taxpayers, while indirect taxes play an important role because they are relatively stable consumption-based and reflect trade activities and the daily needs of the community. Meanwhile, oil and gas revenues remain the dominant source of state revenues, although they fluctuate greatly due to dependence on world oil prices and global energy market conditions. Overall, the results of this study confirm that Timor-Leste's state revenue structure is still heavily influenced by the oil and gas sector, but domestic taxes are beginning to play an increasingly important role in supporting fiscal independence. Therefore, a strategy is needed to strengthen the tax system and diversify revenue sources to reduce dependence on oil and gas and maintain the country's fiscal sustainability in the long term.

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