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THE EFFECT OF DIRECT AND INDIRECT NON-OIL AND GAS TAXES ON DOMESTIC REVENUE IN TIMOR LESTE

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Abstract:
This study aims to determine the effect of direct and indirect non-oil taxes on domestic revenues. Secondary data are obtained from the tax office or the East Timor Revenue Service (ETRS). To determine the effect of direct and indirect non-oil and gas taxes on domestic revenues in Timor Leste, multiple regressions are used. Testing the Multiple Regression Hypothesis using the t test. The results obtained are that the non-oil and gas tax variable directly and has no positive effect on the state revenue variable. The results of the study show that direct and indirect non-oil and gas taxes together have an effect on the state revenue variable. From the regression equation, the results obtained from the effect of direct non-oil taxes on domestic revenues are $ 2,667. Meanwhile, the indirect non-oil and gas tax on domestic revenues was $ 1,525.

Keywords:
Non-oil and gas tax, state revenue, Timor Leste

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INTRODUCTION

During the Portuguese colonial rule, people aged 17 years and over were required to pay taxes to the Portuguese colonial government, the taxes paid by the East Timorese people were not used to carry out development, but with the aim of financing Portuguese soldiers and indigenous soldiers recruited. to strengthen their power in Timor Leste. During the Indonesian occupation period, the people of Timor Leste who had permanent income were obliged to pay taxes to the Indonesian government with the aim of helping the government increase (Saputra et al., 2020; Sujana et al., 2020) the State Revenue and Expenditure Budget in carrying out national development of all sectors (Molnar, 2009).

There are two tax sectors regulated in the Timor Leste tax law, namely oil and gas tax and non-oil and gas tax. Oil and gas tax is a tax collected from oil and gas income in the territory of Timor Leste (Timor Gap) (Cotton, 2007). Non-oil and gas taxes are taxes that are not derived from oil and gas. There are two types of non-oil and gas taxes seen from the way they are collected, namely direct taxes and indirect taxes, both types of taxes are part of state revenue (Scheiner, 2015). Between the two tax sectors, non-oil and gas tax is one of the important tax sectors for state revenue. The non-oil and gas sector is divided into two, namely direct non-oil and gas taxes and indirect non-oil and gas taxes (Blunt, 2009). Direct non-oil sector is composed of: income tax, service tax, withholding tax, wages tax. Meanwhile, indirect non- oil and gas taxes consist of: import tax, export tax, sales tax, purchase tax / excise tax . Direct non-oil and gas taxes and indirect taxes can provide a very significant contribution to domestic income (Nygaard-Christensen, 2016). If the Timor Leste government is able to manage direct and indirect non-oil taxes properly, this will greatly assist the government in reducing foreign debt (Tilley et al., 2019).

Income tax is an official levy addressed to people whose income or income is received and earned in the tax year for the benefit of the state and society in the life of the nation and state as an obligation that must be carried out (Viaene & Zilcha, 2013) . Meanwhile, according to the meaning of the taxation law in Timor Leste, income tax is any increase in economic capacity received or accumulated by a taxpayer with the exception of salaries or wages with respect to wages tax (Busso et al., 2017). There are two ways of paying income tax in Timor Leste, namely: (1) Minimum tax or often referred to as installment tax. System, there are two categories: (a) Installment per month for large companies that have a gross income of over one million US dollars , (b) Installment thirds of the month for a small company that has a gross income of less than one million US dollars. (2) Annual tax, this tax payable is calculated at the time of filing the STP for the year at the end of the year after deducting the tax credit and expenses recognized as operating expenses in one tax year.

Services Tax or taxable services. Taxable services or services tax is any service activity based on an engagement or legal action that provides goods or facilities or facilities or rights available for use, including services performed to produce goods due to orders which are taxed by law. Meanwhile, according to the meaning of the taxation regulations of Timor Leste, service tax is a tax imposed on an individual or business

entity engaged in the service sector on the gross sales earned for a month (Dewi et al., 2019; Mironiuc et al., 2013; Sawani et al., 2016).

Wage Income Tax is a tax levied against an individual who resides in the country and who does not reside outside the country . Type of income tax in East Timor was known by the name of tax wage levied against an individual who earn remain in East Timor. There are two categories in the calculation of wages tax, namely: (1) Resindent wages tax, namely taxes imposed on individuals who have permanent residence in Timor Leste or foreigners who have lived in Timor Leste for more than 182 days. (2) Non-resident wages tax is a tax imposed on an individual who does not have permanent residence in Timor Leste and who has not lived in Timor Leste for 182 days. (Regulation No. 18 Year 2000 Article 28 and Government Regulation No. 5 Year 2002) .

Withholding tax is a tax collection system in which the amount of tax owed is calculated and deducted by the third party (Figueroa B. et al., 2010; Jensen, 2005; Priliandani & Saputra, 2019). According to the Timor Leste tax system, this withholding tax must be deducted by the person making the payment and paid for the resident taxpayer, or who can be paid for foreign tax who has a permanent establishment in Timor Leste. (Regulation No. 18/2000) . The types of income that are categorized as withholding taxes are: dividend tax, interest tax, royalty tax, rental tax, lottery prize tax, construction tax, construction consultant tax, air and sea transportation tax, tax on petroleum, tax on mining. Of the ten types of tax sources mentioned above, three of them have not yet been applied in the East Timor country, namely: dividend tax, royalty tax and lottery tax (Sawani et al., 2016; Tang et al., 2017).

METHOD

This study uses a quantitative research design d ith use the data secondary. Secondary data is data obtained through literature study, which means that the materials needed are obtained from literary books, lecture notes, and readings related to the issues discussed in thesis writing and data obtained from the office. taxation or East Timor Revenue Service (ETRS) concerned. To determine the effect of direct and indirect non-oil taxes on Timor Leste's domestic revenues, multiple regressions are used, the general equation is as follows:

$$\mathbf{Y = a + bX1 + cX2 +.... + KX_k}$$

Because it is known that the variable consists of 3 variables, namely 2 independent variables and 1 dependent variable, the equation becomes:

$$\mathbf{Y = a + bX_1 + cX_2}$$

Where: Y = Domestic revenue

a = Constant

b = coefficient of X_1, which is the amount of increase in Y if X_1 increases one unit, while other factors remain

c = coefficient of X_2, which is the amount of increase in Y if X_2 increases one unit, while other factors remain

X_1 = direct non oil and gas tax

X_2 = indirect non-oil and gas tax

T test

This hypothesis testing is used to determine whether there is an effect of the independent variable on the dependent variable. Testing the Multiple Regression Hypothesis using the t test, with the following formula:

$$t = \frac{b - B}{Sb}$$

Where : b = regression coefficient

B = Slope of hypothesis

Sb = standard error of the slope

The t test statistic will have a t distribution, with n-2 degrees of freedom. The decision making rules are as follows:

Ho: b = 0 (there is no effect between direct and indirect non-oil and gas taxes and domestic revenues)

Ha: b ≠ 0 (there is an effect between direct and indirect non-oil taxes and domestic revenues)

If the value of $t_{count} > t_{table}$, then Ho is rejected, conversely, if $t_{count} < t_{table}$ then Ho is accepted.

Multiple Correlation Analysis

This method is used to determine the overall relationship between the independent variable (X_1 , X_2) and the dependent variable (variable Y) simultaneously. This multiple correlation analysis uses the following formula:

$$R_Y 1,2,.....k = \frac{b_1 \sum x_1 y + b_2 \sum x_2 y + ... + b_k \sum x_k y}{\sum y^2}$$

Where:

$$\sum x_1 y = \sum X_1 Y - \frac{(\sum X_1)(\sum Y)}{n}$$

$$\sum x_2 y = \sum X_2 Y - \frac{(\sum X_2)(\sum Y)}{n}$$

$$\sum x_k y = \sum X_k Y - \frac{(\sum X_k)(\sum Y)}{n}$$

$$\sum y^2 = \sum Y^2 - \frac{(\sum Y)^2}{n}$$

F test

Hypothesis testing is done through the F-test. The significance of the F-test serves to test the independent variable (independent) as a whole against the dependent variable (dependent). The multiple correlation hypothesis testing uses the following formula:

$$Fo = \frac{R^2(N-m-1)}{m(1-R^2)}$$

Where: R^2 = Coefficient correlation
m = number of independent variables.
N = Number of samples.
With df (n - k; k + 1) with alpha 5%. If $F_0 \leq$ F table, then there is no relationship between each independent variable and the dependent variable. If $F_0 \geq$ F table, there is a relationship between each independent variable and the dependent variable.

Test terminated coefficient (R^2)

To determine the percentage of influence of all independent variables on the value of the dependent variable, as follows:

$$R^2 = \frac{SSR}{SST}$$

Wherein : R^2 = coefficient of determination
SSR = Sum of Square Regression
SST = Sum of Square Total

RESULTS AND DISCUSSION

Multiple regression analysis is used to determine the effect of direct and indirect non-oil taxes on domestic revenues. Multiple Regression Equation using the following formula:

$$\mathbf{Y = a + b_1 X_1 + b_2 X_2 + ... + b_k X_k}$$

Where :
Y : Domestic Revenue
a : Constants
b_1 : Regression Coefficient X_1
b_2 : Regression Coefficient X_2
X_1 : direct non oil and gas tax
X_2 : indirect non-oil and gas tax

From the results of data processing, the results of the multiple linear regression equation are as follows:

Y = -591673,9 + 2,667 X1 + 1,525 X2

From the multiple linear regression equation above, it can be interpreted as follows:

1) A constant of -591673.9 states that if there were no direct and indirect non-oil taxes, the domestic revenue would be - $ 591673.9 . This translates to a decrease in domestic revenues of $ 591673.9 .
2) Each 1% increase in direct non-oil and gas tax will increase domestic revenues by $ 2,667, where the indirect non-oil and gas tax variable is assumed to be 0.
3) Each 1% increase in indirect non-oil and gas tax will increase domestic revenues by $ 1,525, where the direct non-oil and gas tax variable is considered 0.

From the results of calculations using the SPSS tool, it can be concluded that direct and indirect non-oil and gas taxes have a positive effect. This can be seen from the positive sign (+) in each variable.

T-Test test

The t-test is done with the t distribution statistic

Table 1. T-test

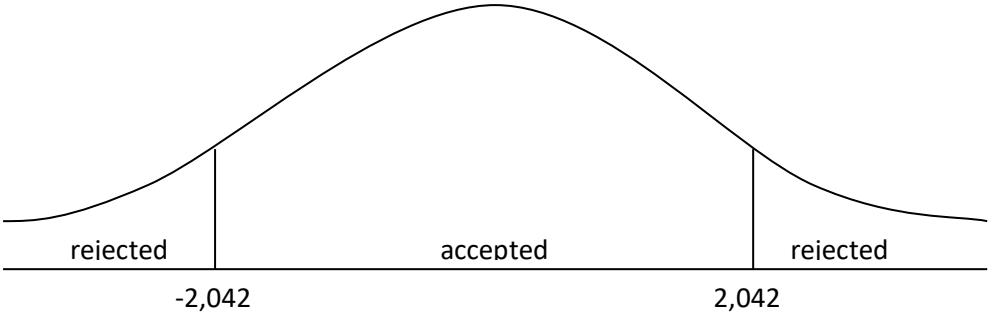
Variable	t-count	Significance
Constant	-1,246	0.221
Direct non-oil and gas tax	3,173	0.003
Indirect non-oil and gas tax	5,722	0,000

The test steps are as follows: The t test for the effect of direct non-oil and gas taxes on domestic revenues. Determine the value hypothesis and alternative hypothesis

Ho: $b_1 = 0$ (there is no direct non-oil and gas tax effect on domestic revenue)

Ho: $b_1 \neq 0$ (there is a direct non-oil and gas tax effect on domestic revenue)

Determine test criteria (1) The test carried out is a 2-way test. (2) The numerator's degrees of freedom = k = 3. (3) Degrees of freedom (dk) = N - k– 1 = 36 - 3 - 1 = 32. (4) Significance level (α) = 5% , T (table) = 2,042.



Decision criteria: t> 2.042 or t count <-2,042maka H_o rejected. And -2.042 <t <2.042 then H_o accepted. Conclusion: Because t = 3.171> t table = 2.042 then H_o rejected, and by looking at the significance level of 0,003 which is smaller than 0.005 (0.003 <0.005), it could be concluded that there is the tax effect of non-oil direct to domestic revenue, which means the The existence of direct non-oil and gas tax revenues in a country (Timor Leste) will significantly increase domestic revenues.

The t test for the effect of indirect non-oil and gas taxes on domestic revenues. Determine the value hypothesis and alternative hypothesis

Ho: $b_1 = 0$ (there is no indirect non-oil and gas tax effect on domestic revenue)

Ho: $b_1 \neq 0$ (there is an indirect non-oil and gas tax effect on domestic revenue)

Determine test criteria, The test carried out is a 2-way test. The numerator's degrees of freedom = k = 3. Degrees of freedom (dk) = N - k– 1 = 36 - 3 - 1 = 32. Significance level (α) = 5% , T (table) = 2,042. Because t = 5.711 > t table = 2.042 then H_o rejected, and by looking at the significance level of 0.000, which is smaller than 0.005 (0.000 <0.005), it could be concluded that there is influence of non-oil tax indirectly on domestic revenue, which means with the non-oil tax revenues are not directly in a country significantly will increase domestic revenues.

F-Test Test

The F test is used to determine whether all variables together have an influence on the dependent variable.

Table 2. Test F-count

	F-count	Significance
Regression	26,183	0,000

The test steps are as follows:

a. Determine hypotheses and hypothesis alternatives.

1) H_o : no influence of independent variables together to dependent variable

2) H_a : there is an effect of independent variables together on the dependent variable

b. Determine test criteria

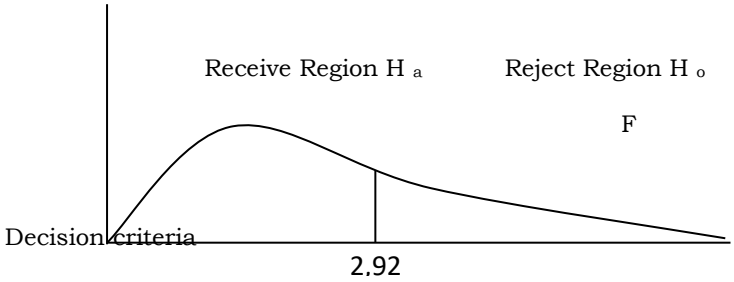
1) The test is carried out one side

2) The level of significance (α) = 5%, then F (table)

3) The numerator degrees of freedom = k = 3

4) Degrees of freedom of the denominator = n - k - 1 = 36 - 3 - 1 = 32

5) F table: f (5%, 3, 32) = 2.92



- F count ≥ 2.92, then $H_{o\ is}$ rejected
- F count ≤ 2.92, then $H_{o\ is}$ accepted

c. F count

F value calculated from the print out = 26.183

d. Conclusion

Since F arithmetic = 26.183> F table 3 , 32 then H_o rejected, this means non-oil tax directly and indirectly jointly affect domestic revenues. The significance result of 0.000 shows a very significant effect because it is far below the 0.005 number.

Test Determinant coefficient (R^2)

This test is used to determine the percentage of all independent variables on the value of the dependent variable.

Table 3. Test Determinant coefficient (R^2)

Model	R	R square	Adjusted R Square	Std. Error of estimate
1	0.783	0.613	0.590	676226,834

The value of the determinant coefficient (R^2) of 0.613 indicates that 61.3% of domestic revenues can be explained by the non-oil tax directly and indirectly. While the rest (100% -61.3% = 38.7%) is explained by other causes. The standard error of estimate is to show the figure of $ 676 226 , 834 . This figure is far below the standard deviation of $ 1,056,091 , 697683 which was obtained from the print out of SPSS on the descriptive statistics table. Because it is smaller than the standard deviation of domestic revenue, the regression model is better at acting as a predictor of domestic revenue than the average domestic revenue itself.

Multiple Correlation Testing

The test using multiple correlation is intended to determine the relationship between direct and indirect non-oil and gas taxes on domestic revenues.

Table 4. Correlation of Direct and Indirect Non-Oil and Gas Taxes on Domestic Revenues

		PEND_NEG	PJK_LSG	PJK_TDK_LSG
Pearson Correlation	PEND_NEG	1,000	.480	.704
	PJK_LSG	.480	1,000	.204
	PJK_TDK_LSG	.704	.204	1,000
Sig. (1-tailed)	PEND_NEG	.	.002	.000
	PJK_LSG	.002	.	.117
	PJK_TDK_LSG	.000	.117	.
N	PEND_NEG	36	36	36
	PJK_LSG	36	36	36
	PJK_TDK_LSG	36	36	36

Based on this table , the following analysis results are obtained:

1) The correlation coefficient of direct non-oil and gas taxes on domestic revenues is 0.480, and indirect non-oil and gas taxes on domestic revenues are 0.704.
2) The correlation coefficient (R) of direct non-oil and gas taxes on domestic revenues is below 0.5, which is 0.480. This indicates a fairly weak but positive relationship.
3) The correlation coefficient (R) of indirect non-oil and gas taxes on domestic revenues is above 0.5 , which is 0.704. This indicates a strong and positive relationship.
4) The level of significance of the two dependent variables on the independent is far below 0.005. The significance level of direct non-oil and gas taxes on domestic revenues is 0.002, and the significance level of indirect non-oil and gas taxes on domestic revenues is 0.000. This shows that the two dependent variables do have a significant relationship with domestic revenues. However, the highest level of significance is the indirect non-oil and gas tax variable on domestic revenues.
5) The strongest relationship between the two independent variables against the dependent variable is the relationship between indirect non-oil and gas taxes on domestic revenues.

CONCLUSIONS

Based on the results of the research that the author has done, in the final part of this study the authors draw conclusions from the problems studied regarding "The effect of direct and indirect non-oil taxes on domestic revenues" as follows:

1) From the analysis, it is found that the direct and indirect non-oil and gas tax variables have a positive effect on the state revenue variable.
2) From the analysis of the correlation result the relationship between direct and non-oil tax revenues are not so powerful country in the amount of 0.480, this is because the relationship under 0 , 5 . Meanwhile,

the relationship between indirect non-oil and gas taxes on state revenues is quite close, amounting to 0.704.

3) From the research results, it is found that the direct and indirect non-oil and gas tax variables jointly affect the state revenue variable.
4) The research results show that if direct and indirect non-oil taxes are 0 or state revenue in the non-oil and gas sector does not exist, then domestic revenues will decrease by $ 591673 , 9 . This means that the government will seek a loan to cover the cost of existing
5) From the regression equation, the result shows that the direct non-oil and gas tax effect on domestic revenues is $ 2,667. Meanwhile, the indirect non-oil and gas tax on domestic revenues was $ 1,525.

Starting from the conclusions that the author has presented, the author would like to provide some suggestions which are likely to be useful for the tax agency of Timor Leste. The suggestions that the author wants to convey are as follows:

1) The results show that non-oil and gas taxes have a significant and positive relationship and influence on domestic revenues. Therefore, the domestic government should pay more attention to non-oil and gas taxes.
2) Because it has a significant influence on domestic revenues, the government must have a good controlling system for its management.
3) Since direct and indirect taxes have a significant effect on domestic revenues, other types of taxes that are not discussed in this study and which have not been applied in Timor Leste should be applied for a better future for Timor Leste.

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