

Advertising Tax, Underground Water Tax, Swallow's Nest Tax during The Pandemic and The Influence on ROI Cianjur Regency

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ABSTRACT

The economic crisis that hit Indonesia due to the Covid-19 pandemic had a huge impact in several regions, one of which was Cianjur Regency. It is difficult for the government and the community to run the wheels of the economy, causing a decrease in local revenue. One of the sources of Regional Original Income (ROI) which has an important role is regional taxes. Based on previous studies, this research focused on 3 types of taxes, namely Advertising Tax, Underground Water Tax, and Swallow's Nest Tax. The purpose of this study was to find out how much influence these three taxes had on Cianjur Regency Regional Original Revenue during the Covid-19 pandemic. The method used in this research is descriptive method and verification method. The results showed that the Advertising Tax, Underground Water Tax, and Swallow's Nest Tax experienced an increase in tax revenue during the Covid-19 Pandemic and had an effect on the ROI of Cianjur Regency.

Keywords : Advertisement Tax, Underground Water Tax, Swallow's Nest Tax, Regional Original Revenue

INTRODUCTION

The Covid-19 pandemic became an extraordinary shock that hampered the world economy because of government instructions to limit social activities (1) . The central government is responsible for handling the crisis nationally, while the provincial, city and district governments are responsible for implementing measures to reduce daily social activities, this ensures to maintain health. Restrictions on community activities in the regions have an impact on slowing down and even stopping the community's economy, this will also have an impact on local government finances resulting in significant deficits on the expenditure and income sides. The economic crisis that hit Indonesia due to the Covid-19 pandemic has had an impact on cities and regencies, one of which is Cianjur Regency.

Based on data from BPS West Java Province, Cianjur Regency was only able to rank 16th out of a total of 27 Regencies/Cities in West

Java in terms of Regional Original Income (ROI) during the 2019-2022 period. ROI is income derived from local revenue sources and managed by the local government. ROI is obtained from regional tax sector revenue, regional levies, results of regionally owned companies, results of separated regional wealth management, and other legitimate regional original income (2) .

One of the sources of Regional Original Income (ROI) which has an important role is regional taxes. Regional taxes are obligatory contributions given by individuals or entities to regional governments without direct compensation, which are carried out based on applicable regional laws and regulations to be used later in administering government and regional development .

Based on Law Number 28 of 2009 article 2, the types of regional taxes are divided into two parts, namely: Provincial Taxes and

Regency/City Taxes. Provincial taxes include: Motor Vehicle Tax (PKB), Motorized Vehicle Transfer Fee (BBNKB) , Motorized Vehicle Fuel Tax, Surface Water Tax (PAP) and Cigarette Tax. While Regency/Municipal Tax includes: Hotel Tax, Restaurant Tax, Entertainment Tax, Advertising Tax, Street Lighting Tax, Tax on Extraction of Minerals Group C, Parking Tax, Groundwater Tax, Swallow's Nest Tax, Rural and Urban Land and Building Tax, and Land and Building Rights Acquisition Fees (3) .

Cianjur Regency is an industrial city, where trade and services are increasing day by day. There is an increase in the industrial, trade and service sectors, so that platforms for product marketing are increasingly needed, not only through print media, electronic media is also increasingly needed. The birth of both print and electronic media is used as a big capital for users of the trade sector, one of which is most in demand is marketing through advertisement media. Advertising media is considered a profitable and very effective marketing alternative, advertisements are considered capable of attracting potential consumers because advertisements can be accessed by all parties. This makes the Advertising Tax one that must be considered by the government of Cianjur Regency. Advertising tax is a tax on the implementation of billboards, while what is meant by billboards are objects, tools, actions or media in various forms and patterns for commercial purposes introducing, advocating, promoting or to attract public attention to goods, services,

people or entities that can be seen, read, heard, felt, and or enjoyed by the public (4) .

Apart from the Advertising Tax, Underground Water Tax is also a very potential source of local revenue for the Cianjur Regency government. Although the ranking of contributions in local taxes is not very significant, the potential needs to be increased. Groundwater Tax is a tax on taking and/or utilizing groundwater for use by individuals or entities. Groundwater is water that is contained in the layers of soil or rock beneath the surface of the soil (5) . It is also stated that the object of Underground Water Tax is the taking and/or utilization of ground water. Groundwater objects are exempt from taking and/or using groundwater for basic household needs, irrigation for agriculture and people's fisheries, and worship.

Cianjur Regency is also one of the swallow nest producing areas in Indonesia. Geographical conditions that support the cultivation of swallow's nests make this tax only available in a few areas. The swallow's nest which has become an exotic food causes the selling price of the product to be fantastic. Therefore, the Swallow's Nest Tax is a regional tax that is no less important in increasing Cianjur regency's own-source revenue. Swallow's Nest Tax is a tax on every activity of taking and/or exploiting swallow's nests, both in their natural habitat and outside their natural habitat (6) .

Based on this background, this study aims to determine the effect of the three types of

regional taxes on the ROI of Cianjur Regency. In previous studies, there were differences in the results of research both partially and simultaneously, as follows: Advertisement tax has an effect on ROI (7–11), Groundwater tax has an effect on ROI (12–14), Swallow's Nest Tax has an effect simultaneously on ROI (15), while in other studies the following results were obtained: Advertising Tax had no effect on ROI (16,17), Groundwater Tax had no effect on ROI (18), and Swallow's Nest Tax simultaneously had no effect on ROI (19).

METHOD

This study uses a descriptive verification method, using quantitative data. The place of research was conducted at the Cianjur Regency Regional Revenue Agency. The population in this study is 72 observation data for Cianjur district Original Revenue in 2020 and 2021. The observation data consists of:

Population (Observation data)
= Tax currency x month x year (2020 & 2021)
= 3 x 12 x 2
= 72 Observation Data.

The sampling technique used in this study is *non-probability sampling*, where the entire population will be taken as a sample in 3 regional tax sectors of the Cianjur district with reports on the realization of local revenue receipts during the 2017-2021 period during the Covid-19 pandemic.

The type and source of data for this research is secondary data in the form of data on the realization and budget of the tax sector and

Local Own Revenue in the Regional Revenue Agency of Cianjur Regency for 2017-2021.

Descriptive analysis in this study uses descriptive statistics. Descriptive statistics are statistics that are used to analyze data by describing or describing the data that has been collected as it is without intending to make general conclusions or generalizations (20).

Furthermore, the classical assumption test is carried out which is the initial stage before carrying out multiple linear regression analysis. This test is carried out to provide certainty so that the regression coefficients are unbiased and consistent and have accuracy in estimation (21). This classic assumption test is performed to state normality, multicollinearity, heteroscedasticity and autocorrelation.

The research data analysis model is a multiple linear regression analysis model. This analysis is used to determine the relationship between Local Own Revenue and the independent variables (Advertisement Tax, Underground Water Tax and Swallow's Nest Tax). The regression model is formulated as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots [1]$$

Information:

Y = Regional Own Revenue

α = Constant

$\beta_1, \beta_2, \beta_3$ = Regression coefficients

X₁ = Advertising Tax

X₂ = Underground Water Tax

X₃ = Swallow's Nest Tax

ε = Error term

Hypothesis testing is carried out by conducting a Simultaneous Test (F Statistical

Test), Individual Significant Test (T statistical test), and Determination Coefficient Test (R^2).

RESULTS AND DISCUSSION

Result

Table 1: Descriptive Analysis Results

Descriptive Statistics					
	N	Minimum	Maximum	Means	std. Deviation
Advertisement tax	24	187658988	1122578922	739880943.00	256774768,485
Underground Water Tax	24	103322334	1288764323	741685465,67	357948712,944
Swallow's Nest Tax	24	2580768	97658879	14271147,63	18132665,880
Locally-generated revenue	24	11889376446	86256506124	38821863115,29	14651376206,782
Valid N (listwise)	24				

Descriptive statistics can be explained that there are 3 (three) variables studied consisting of advertising tax, underground water tax, swallow nest tax and Cianjur Regency

Original Regional Income with the total number of observation data being 72 which is the result of 3 variables X 24 month

Table 2: Normality Test Results

Unstandardized Residuals		
N		24
Normal Parameters ^{a,b}	Means	,0000072
	std. Deviation	14259464044,83067700
Most Extreme Differences	absolute	,140
	Positive	,140
	Negative	-,117
Kolmogorov-Smirnov Z		,688
asympt. Sig. (2-tailed)		,732

a. Test distribution is Normal.

b. Calculated from data.

Based on the table it is known that the Asymp. Sig. (2-tailed) is 0.732 > 0.05, it can be

concluded that the research data is normally distributed.

Table 3: Multicollinearity Test Results

Model		Collinearity Statistics	
		tolerance	VIF
(Constant)			
1	Advertisement tax	.901	1,110
	Underground Water Tax	.948	1,055
	Swallow's Nest Tax	.946	1,057

Based on Table 3, the multicollinearity test results show that all research variables are free

from multicollinearity problems. This can be proven by looking at VIF, each exogenous

variable must be less than 10. Of all the research variables, advertisement tax (X1), underground water tax (X2), swallow's nest tax (X₃) and local revenue (Y) shows that VIF value < 10 and Tolerance value > 0.10. So it

can be concluded that all research variables are free from multicollinearity problems. A summary of the results of testing the classical assumptions in this study can be seen in Table (4).

Table 4: Summary of Classical Assumption Test Results

Classic assumption test	Statistics	Mark		Test results
Normality	Kolmogorov-Smirnov	0.732 > 0.05		Normal
Multicollinearity	Collinearity Statistics	tolerance	VIF	There is no Multicollinearity Problem
		.901 > 0.10	1,110 < 10	
		.948 > 0.10	1,055 < 10	
		.946 > 0.10	1,057 < 10	

Table 5: Heteroscedasticity Test Results

	Model	Sig
	(Constant)	
1	Advertisement tax	,237
	Underground Water Tax	,780
	Swallow's Nest Tax	,615

Based on Table 5, the results of the heteroscedasticity test show that all research variables are free from heteroscedasticity problems. This can be proven by the results of the significance of each exogenous variable which must be greater than 0.05. Of all the research variables on advertisement tax (X1), underground water tax (X2) and swallow's

nest tax (X₃) it can be seen that the sig value is > 0.05. So it can be concluded that all research variables are free from heteroscedasticity problems, meaning that all variables indicate that there is an inequality of residual variance from one observation to another or homoscedasticity.

Table 6: Autocorrelation Test Results

Summary Model ^b					
Model	R	R Square	Adjusted R Square	std. Error of the Estimate	Durbin-Watson
1	,230 ^a	.053	.089	15291571602,445	2,289
a. Predictors: (Constant), Swallow's Nest Tax, Underground Water Tax, Advertising Tax					
b. Dependent Variable: Regional Original Income					

Based on the 6 autocorrelation test results, it shows that the Durbin Watson value:

- 1) Durbin watson score 2.289
- 2) Number of independent variables 3 (k=3)

- | | |
|-------------------------------------|---------------------------------|
| 3) Number of samples 2 (n=24) | 6) $= 1.1010$ and $du = 1.6565$ |
| 4) 5% error rate | 7) $4-du = 4 - 1.6565 = 2.3435$ |
| 5) Values in table durbin watson dl | 8) $4-dl = 4- 1.1010 = 2.899$ |

Table 7: Results of Multiple Linear Regression Analysis

		Coefficients ^a			T	Sig.
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	std. Error	Betas		
1	(Constant)	31509035654,081	14139207786,242		2,228	,037
	Advertisement tax	12,091	13,084	,212	,924	,366
	Underground Water Tax	2,431	9,149	.059	,266	,793
	Swallow's Nest Tax	11,898	180,795	,015	.066	,948

a. Dependent Variable: Regional Original Income

Hypothesis testing

Table 8: Significant Test Results F

Model	Sum of Squares	df	MeanSquare	F	Sig.
Regression	260601727857463720000,000	3	86867242619154580000,000	2,371	,004 ^b
1 residual	4676643241453834000000,000	20	233832162072691700000,000		
Total	4937244969311298000000,000	23			

a. Dependent Variable: Regional Original Income

b. Predictors: (Constant), Swallow's Nest Tax, Underground Water Tax, Advertising Tax

Based on Table 8, information can be obtained in this study that the significance value of F is $2.371 > \text{table } 2.064$ with a significance level of $0.04 < 0.05$, so H1 is accepted. underground water and swallow's nest tax has a positive and significant effect on local revenue.

Table 9: Analysis of Individual Significance Test (t test)

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	Q	Sig.
		B	std. Error	Betas		
1	(Constant)	31509035654,081	14139207786,242		2,228	,037
	Advertisement tax	12,091	13,084	,212	,924	,003
	Underground Water Tax	2,431	9,149	,059	,266	,004
	Swallow's Nest Tax	11,898	18,795	,015	,066	,002

a. Dependent Variable: Regional Original Income

Based on Table 9 it can be explained as follows:

1. The advertisement tax variable has a Significance value (Sig) of 0.003.

Because the value (Sig) < probability value 0.05. (0.003 < 0.05). Thus, H3 is accepted, so it can be concluded that partially advertisement tax has a significant effect with the direction of a

- positive relationship to Regional Original Income.
2. The underground water tax variable has a Significance (Sig) value of 0.004. Because the value (Sig) < probability value 0.05. (0.004 < 0.05). Thus, H4 is accepted, so it can be concluded that partially groundwater tax has a significant effect with the direction of a positive relationship to Regional Original Income.
 3. The swallow's nest tax variable has a Significance (Sig) value of 0.002. Because the value (Sig) < probability value 0.05. (0.002 < 0.05). Thus, H5 is accepted, so it can be concluded that partially, swallow's nest tax has a significant effect with the direction of a positive relationship to Regional Original Income.

**Table 10: Results of the Coefficient of Determination Test
Summary models**

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.230 ^a	.053	.089	15291571602,445

a. Predictors: (Constant), Swallow's Nest Tax, Underground Water Tax, Advertising Tax

Based on Table 10, it is known that the magnitude of the coefficient of determination or R-squared is 0.053 or 53.%, this shows that the Regional Original Income (ROI) variable can be influenced by the variable billboard tax, underground water tax and swallow's nest tax by 53% while the remaining is 47% is influenced by other variables that are not thorough in this study.

Discussion

The Effect of Advertising Tax, Underground Water Tax and Swallow's Nest Tax on Local Revenue of Cianjur Regency

The results showed that billboard tax, underground water tax and swallow's nest tax on Cianjur regency's original regional income

during the Covid 19 pandemic were positive and significant as evidenced by the F value of $2.608 > t_{table} 2.042$ with a significance level of $0.03 < 0.05$ then simultaneously the variables of billboard tax, underground water tax and swallow's nest tax simultaneously influence regional original income. Thus, the higher the billboard tax, underground water tax and swallow's nest tax, the higher the regional original income will be. to be achieved. The results of the test for the coefficient of determination jointly obtained an adjusted R² value of 0.672, which means that local revenue can be explained by the variables advertising tax, underground water tax and swallow's nest tax by 67.2%, while the remaining 32.8% is explained by variables other than the model studied. Therefore, in

testing this hypothesis, H_a is accepted. Thus it can be concluded that billboard tax (X_1), underground water tax (X_2) and swallow's nest tax (X_3) have an effect on local revenue (Y) and have a positive and significant relationship.

The Effect of Advertising Tax on Cianjur District Original Revenue

Based on the calculation results, the t count value is $4.045 > t_{table} 2.042$ with a significance of $0.00 < 0.05$, then H_a is accepted. This means that the coefficient of the advertising tax variable (X_1) on local revenue (Y) is significant. It can be concluded that the advertisement tax (X_1) has an effect on local revenue (Y) and has a positive relationship. Meanwhile, the standardized beta value for advertisement tax is 0.580 with a significance value of 0.000. Then, the coefficient of determination (R^2) in this study is used to see the magnitude of the influence of the independent variables in the analyzed model. It can be seen that the results of the calculation of the coefficient of determination (R^2) is 0.337. This means that in this research model, the advertising tax variable affects local revenue by 33.7% and the remaining 66.3% is influenced by other variables outside of this study.

The Effect of Underground Water Tax on Cianjur District Original Revenue

Based on the calculation results, the t count value is $2.695 > t_{table} 2.042$ with a significance of $0.00 < 0.05$, then H_a is accepted. This means that the coefficient of

groundwater tax variable (X_2) on local revenue (Y) is significant. It can be concluded that groundwater tax (X_2) has an effect on local revenue (Y) and has a positive relationship while the standardized beta value for groundwater is 0.587 with a significance value of 0.000. Then, the coefficient of determination (R^2) in this study is used to see the magnitude of the influence of the independent variables in the analyzed model. It can be seen that the results of the calculation of the coefficient of determination (R^2) is 0.345. This means that in this research model, the underground water tax variable affects local revenue by 34.5% and the remaining 65.5% is influenced by other variables outside of this study.

The Influence of Swallow's Nest Tax on Cianjur Regency Local Revenue

Based on the calculation results, the t count value is $2.235 > t_{table} 2.042$ with a significance of $0.00 < 0.05$, then H_a is accepted. This means that the variable coefficient of swallow's nest tax (X_3) on local revenue (Y) is significant. It can be concluded that the swiftlet's nest tax (X_3) has an effect on local revenue (Y) and has a positive relationship while the standardized beta value for swallow's nest is 0.125 with a significance value of 0.000. Then, the coefficient of determination (R^2) in this study is used to see the magnitude of the influence of the independent variables in the analyzed model. It can be seen that the result of calculating the coefficient of determination (R^2) is 0.011.

This means that in this research model, the swiftlet's nest tax variable affects local revenue by 11% and the remaining 89% is influenced by other variables outside of this study.

CONCLUSION

Based on the research that has been done, it can be concluded that the conditions of the Advertising Tax, Underground Water Tax, and Swallow's Nest Tax from observational data during the Covid-19 pandemic can be measured by calculating the change in tax revenue. The results of the processing of observational data, the average Billboard Tax, Tax experienced a change in the increase in Cianjur Regency Regional Original Revenue from before.

In this research model, the variables Billboard Tax, Underground Water Tax, and Swallow's Nest Tax have an effect on Regional Original Income, meaning that the higher the Advertising Tax, Underground Water Tax, and Swallow's Nest Tax, the higher the achievement of Regional Original Revenue.

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