Analysis of the Selling Value of Tax Objects on Land and Building Tax Revenues

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Abstract. Land and Building Tax is one type of central tax, the collection and imposition of which is largely left to the Regional Government. Analysis of the Sales Value of Tax Objects (NJOP) on Land and Building Tax (PBB) Revenues, and Land and Building Acquisition Fees (BPHTB), to find out more efficient and effective ways in the matter of PBB and BPHTB revenue. Therefore, research on the increase in NJOP on PBB and BPHTB revenue is deemed necessary to obtain valid information as the basis for PBB and BPHTB revenue. This research was conducted in Cibinong Subdistrict, Bogor Regency, with a sample of 180 taxpayers in Ciriung, Cirimekar, and Pondok Rajek Villages which are included in the Cibinong District area. The results showed that the (NJOP) of the earth was strongly influenced by the location of the object and land use, and the NJOP of the building was strongly influenced by the type of building, the area of the building, the year it was built, the roof of the building and the floor, and the NJOP and the building were strongly influenced by the value of the earth per M2 land area, and building area. NJOP has an increasing effect on PBB and BPHTB.

Keywords: Land and building tax, taxpayer, tax object

1 Introduction

In the current COVID 19 pandemic, the country's economy has been experiencing a significant decline in economic growth leading to an economic crisis. Goverment performs several ways or efforts to immediately increase this economic growth. One of the ways performed is by increasing state revenue and one of the state revenues comes from tax. Undoubtedly, tax is one of the most influential factors in increasing state income at this time.

During the COVID-19 pandemic, increasing domestic tax revenue through the mobilization of tax revenue faces challenges for efforts to restore the State Budget (APBN) and fiscal sustainability through gradually reducing the budget deficit. On the other hand, to overcome the impact of a profound decline in economic growth, the State Budget (APBN) is expected to be able to play a role in generating a fiscal system for the movement of the course of economic activity in society, given that the public and private sectors that have collapsed due to the crisis cannot be expected to play a role in driving the national economy.

Beside the monetary crisis, it is further influenced by the rapid population growth in urban and suburban areas as a natural change, and the unproportional immigrants to the existing land supply. Land as a spatial element is the surface of the earth, which in its utilization includes the body of the earth and water and the space above it, which is only required for the purposes that are directly related to the use of the land [1]. Land has an essential role for human needs,

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including a place to live, industry, agriculture, trade, and to place make other living. This population growth increases with the growth in demand for land, while the land supply is highly limited, causing an elevation in the Tax Object Sales Value (NJOP) of the price of land above the fairness.

To increase state revenue, the government issued a law regulating taxation. Land and Building Tax (PBB) is a type of tax that can help both central and regional economies. Therefore, the government issued Law No. 12 of 1985 jo. Law Number 12 of 1994 which regulates Land and Building Tax (PBB) and Law Number 21 of 1997 jo. Law Number 20 of 2000 which regulates Fees for Land and Building Title Transfer Duty (BPHTB) to increase PBB and BPHTB revenue which is expected to significantly help the country's economy which is currently struggling.

In fact, many aspects have caused the PBB Revenues to be achieved. Lack of socialization to the community performed by the central and local governments in the past years has resulted in less optimal PBB revenue. With such circumstances, the government immediately promoted the socialization of the importance of paying taxes to develop the country, both through print and electronic media. The efforts made by the government are solely to increase PBB Revenues which has a crucial impact on improving the country's economy.

The increasing public awareness in paying taxes causes many taxpayers to start paying taxes, so there is a need for excellent service by the officers of the PBB Service Office in providing services to taxpayers. The knowledge and experience of officers in serving

Based on the description on the background, the problems related to the factors affecting NJOP in PBB Revenue taxpayers are getting better and can reduce business activities performed only for the benefit of the officers themselves. The excellent service and no more practice of Corruption, Collusion and Nepotism is very influential in determining NJOP on PBB revenue.

Meanwhile, the reality that occurs in our lives is that in current conditions, the era is getting more advanced. Therefore, many magnificent buildings are curretly built in areas that are considered backward. Many factors significantly influence the increase in NJOP in an area, including (1) usage, (2) access, (3) electricity, (4) drinking water (PAM), (5) telephone, (6) ownership area, (7) distance to crowds, (8) type of building. Based on these ideas, it is deemed necessary to know more efficient and effective ways in the problem of increasing the PBB revenue. Research on the NJOP increase on PBB revenue is considered necessary because it is to obtain valid information as the basis for its determination.

Taxes are contributions to the state that are owed by individuals or a body that is coercive based on law, with no get compensation directly and use it for state needs for the gretatest possible prosperity [2]. Taxes are contributions that do not get reciprocal services (counter-achievement) which is directly indicated and used for pay for general expenses [3]. Land and building tax is a tax of a nature the material and the amount of tax payable is determined by the state of the object like earth, land and building. The state of the subject does not determine the amount of tax [4].

Hesti Pratiwi, Muhaimin, Wa Ode Rayyani, in the results showed that the number of taxpayers was greatly increased but taxpayers did not have awareness and compliance with their obligations [5]. This does not have a positive impact in increasing local tax revenue so that the acquisition of percentages and targets and realization of land and building tax revenues experience instability in achieving the targets set by the government. Rendra Kurnia Wardana, Dian Masyita, V. Santi Paramita, showed that assessment sales ratio test results showed that the value of land and buildings is below from the market value [6]. Meiriska Febrianti showed that the number of taxpayers have an eefect on realization of property tax [7]. The contribution of this research is to determine the factors that affect the NJOP of the land and building that can

be reference to other reseacher and to determining the tax standard for land and building owners in an area.

Based on the description on the background, the problems related to the factors affecting NJOP in PBB Revenue can be formulated as follows: (1). What factors influence land class or land value in determining the NJOP of the land in Cibinong area?, (2). What factors influence the building class or building value in determining the NJOP of the buildings in Cibinong area? (3). What factors affect the NJOP of land and buildings in Cibinong area?

Based on the above problems, this study aims to: (1). To find out the factors that influence land class or land value in determining the NJOP of the land in Cibinong area, (2). To determine the factors that influence the building class or building value in determining the NJOP of the Cibinong area building, and (3). To determine the factors that affect the NJOP of the land and buildings in the Cibinong area.

2 Method

This research was designed as a descriptive correlational study [8]. Data analysis in this study using multiple linear regression. In this study, secondary data were collected, then searched in the field as primary data.[9] Secondary data collected includes data relating to the condition of land and building taxes. The data was obtained from the Revenue Service of Bogor Regency, the Land and Building Tax Service Office of Cibinong, the Statistical Office of Bogor Regency.

The research location is in Pondok Rajeg Village, Cibinong District, Bogor Regency, West Java Province. Secondary data collection was performed at the Land and Building Tax Service Office of Cibinong.

The population in this study were 78.621 taxpayers in Cibinong District, Bogor Regency. In this case, all tax objects have the same opportunity to be used as research samples. To determine a sample of the population of three selected villages in Cibinong District, Bogor Regency of 11.869 taxpayers, the author used a formula developed by Frank Lynch of 192 taxpayers in each village, determined using the formula from Nazir [10].

To determine the factors that affect the sale value of land and building tax objects (thousands of rupiah per M2), the model is as follows:

$$Y_1 = a + b_1 x_1 + b_2 x_2 + \ldots\ldots + b_{16} x_{16} + b_{17} x_{17} \quad (1)$$

Note :
Y_1 = sale value of land tax objects (thousands of rupiah per M^2), b_i = Constant, X_1 = Object Location, X_2 = ZNT, X_3 = Land use, X_4 = Electricity, X_5 = Building type, X_6 = Building condition, X_7 = Year built, X_8 = Building construction, X_9 = Number of floors, X_{10} = roof of the building, X_{11} = Building wall, X_{12} = Ceiling, X_{13} = Floor, X_{14} = Power class, X_{15} = AC, X_{16} = Earth's area (M^2) and X_{17} = Building Area (M^2)

3 Results and Discussion

3.1 Factors affecting the tax object sales value of land (Y1)

From the measurement results of the correlation coefficient, it can be seen that there is a significant correlation between the Location of the object (X1) and Land use (X3) and the

Selling Value of the Land Tax Object (Y1) in Cibinong District. From the coefficient of determination, it can be seen that the location of the object (X1) and the use of land (X3) together on the Selling Value of the Land Tax Object (Y2) in Cibinong District is greater when compared to the contribution of epsilon factors to the Selling Value of the Object Land Tax (Y2) in Cibinong District. With the results of measurement and multiple regression analysis in Table 1, it can be seen that in fact the contribution of the influence of the Object Location variable (X1) is 62.31 greater than the contribution of the Land Use variable (X3) of 43.08 to the Selling Value of Land Tax Objects (Y2). However, the difference in the magnitude of this contribution is very slight.

Table 1. Results of the Calculation of Regression Analysis on the Tax Object Sales Value of Land

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	-186,919.18	14,753.09		-12.67	0.00
Obejct Location (x_1)	62.31	7.75	0.52	8.04	0.00
Land Use (x_3)	43.08	7.94	0.35	5.43	0.00

a Dependent Variable: Tax Object Sales Value of Land Per M2 (Thousands)

Therefore, it can be explained that:

- Based on the regression, it turns out that the Tax Object Sales Value of Land per M^2 (Y_1) is very significantly influenced by the Object Location (X_1) and Land Use (X_3), while other factors are not significantly different in affecting the Tax Object Sales Value of Land per M^2 (Y_1). Based on the measurement of multiple regression coefficients, it can be explained that the regression equation is:
  $Y_1 = - 186,919.18 + 62.31 X_1 + 43.08 X_3$
- The results of the measurement of the correlation coefficient for the independent variable X together with the dependent variable Y show the value of R = 0.82. The results of the calculation of the coefficient of determination of the independent variable with the dependent variable Y show the value of r^2 = 66.50 % and the epsilon of 33.50 %.
- The effect of the object location (X_1) on the the Tax Object Sales Value of Land (Y_1) is very significant, indicating that every increase in the object location of one level, for example the object is located on a dirt road to a stone road or from a stone road to an asphalt road and so on, will increase the Tax Object Sales Value of Land for IDR 62,310.00 per M^2.
- The effect of Land Use (X_3) on the Tax Object Sales Value of Land (Y_1) is very significant, indicating that every increase in Land Use (X_3) of one level, for example from rice fields to dry fields or from moor to villages and so on, will increase the Tax Object Sales Value of Land of IDR 43,080.00 per M^2.

3.2. Factors affecting the tax object sales value of buildings (Y2)

Based on the results of hypothesis testing, it is proven that the Selling Value of the Building Tax Object (Y2) is very significantly influenced by the condition of the building (X6), year it was built (X7), building construction (X8), ceiling (X12), floor (X13), and class. electric power (X14). With multiple measurement results, it can be seen that it turns out that the contribution of the influence of the ceiling variable (X12) is the largest when compared to the others, while

the contribution of the year built variable (X7) to the Selling Value of the Building Tax Object (Y2) is the smallest.

Table 2. Results of the calculation of regression analysis on the Tax Object Sales Value of Buildings

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-8,579.43	1,415.78		-6.06	0.00
Bulding Condition (X_6)	52.77	7.54	0.28	6.99	0.00
Year of Construction (X_7)	4.27	.71	0.22	5.96	0.00
Building Construction (X_8)	27.90	7.76	0.12	3.59	0.00
Ceiling (X_{12})	55.18	10.81	0.18	5.10	0.00
Floor (X_{13})	26.27	4.84	0.21	5.42	0.00
Electrical Power Class (X_{14})	53.04	5.66	0.31	9.30	0.00

a Dependent Variable: Tax Object Sales Value of Buildings (Thousands/M2)

The multiple regression results in table 2 can be explained that:

- Based the regression. it turns out that the Tax Object Sales Value of Buildings (Y_2) is very significantly influenced by the building condition (X_6). year of construction (X_7). building construction (X_8). ceiling (X_{12}). floor (X_{13}). and electrical power class (X_{14}). while other factors do not significantly affect the Tax Object Sales Value of Buildings (Y_2). Based on the measurement of multiple regression coefficients. it can be explained that the regression equation is:
  $Y_2 = - 8,579.43 + 52.77\ X_6 + 4.27\ X_7 + 27.90\ X_8 + 55.18\ X_{12} + 26.27\ X_{13} + 53.04\ X_{14}$
- The results of the measurement of the correlation coefficient for the independent variable X together with the dependent variable Y show the vale of R = 0.91. The results of the calculation of the coefficient of determination of the independent variable X with the dependent variable Y show the value of r^2 = 82.70 % and epsilon of 27.30 %.
- The effect of building condition (X_6) on the Tax Object Sales Value of Buildings (Y_2) is very significant. indicating that any increase in the condition of the building of one level. for example from bad to medium or from moderate to good. will increase the Tax Object Sales Value of Buildings by IDR 52,780.00 per M^2.
- The effect of the year of construction (X_7) on Tax Object Sales Value of Buildings (Y_2) is very significant. indicating that every year of construction of 1 year or the age of the building is 1 year earlier. it will increase the Tax Object Sales Value of Buildings by IDR 4,270.00 per M^2.
- The effect of building construction (X_8) on the Tax Object Sales Value of Buildings (Y_2) is very significant. indicating that every increase of building construction of one level. for example from wood to brick or from brick to concrete. will increase the Tax Object Sales Value of Buildings by IDR 27,900.00 per M^2.
- The effect of the ceiling (X_{12}) on the Tax Object Sales Value of Buildings (Y_2) is very significant. indicating that every increase in the ceiling of one level. for example from no ceiling to plywood or from plywood to acoustic. will increase the Tax Object Sales Value of Buildings by IDR 55,180.00 per M^2.
- The effect of floor (X_{13}) on the Tax Object Sales Value of Buildings (Y_2) is very significant. indicating that every increase of floor of one level. for example from

cement to PC tiles or from PC tiles to terrazzo and so on. will increase the Tax Object Sales Value of Buildings Objects by IDR 26,270.00 per M^2.

- The effect of the electrical power class (X_{14}) on the Tax Object Sales Value of Buildings (Y_2) is very significant. incicating that every increase in the electrical power class of one level. for example from 450 VA to 900 VA or from 900 VA to 1200 VA and so on. will increase the Tax Object Sales Value of Buildings for IDR 53,050.00 per M^2.

3.3. Factors affecting the tax object sales value of land and buildings (Y)

Based on the results of hypothesis testing. it is proven that the Selling Value of Land and Building Tax Objects (Y) is very significantly influenced by the Selling Value of Land Tax Objects (Y1). Land Area (X16). and Building Area (X17). With multiple measurement results. it can be seen that in fact the contribution of the influence of the building area variable (X17) is the largest when compared to the others. while the contribution of the land area variable (X16) to the Selling Value of the Land and Building Tax Object (Y) is the smallest.

Table 3. Results of the Calculation of Regression Analysis on the Tax Object Sales Value of Land and Buildings.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-211,818.65	23,530.86		-9.00	0.00
Land Area (X_{16}).	159.58	11.54	0.54	13.82	0.00
NJOP of Land (Thousands/M^2) (Y_1)	684.67	95.71	0.25	7.15	0.00
Building Area (X_{17})	1,211.75	108.36	0.43	11.18	0.00

a Dependent Variable: NJOP of Land and Buildings (Thousands)

The multiple regression results in table 3 can be explained that:

- Based on the regression. it turns out that the Tax Object Sales Value of Land and Buildings (Y) is very significantly influenced by the Tax Object Sales Value of Land (Y_1). Land Area (X16). and Building Area (X17). while other factors are not significantly different in influencing Tax Object Sales Value of Land and Buildings (Y). Based on the measurement of multiple regression coefficients. it can be explained that the regression equation is:
  $Y_2 = -21{,}818.65 + 159.58\ X_{14} + 684.68\ Y_1 + 1{,}211.76\ X_{17}$
- The results of the calculation of the correlation coefficient for the independent variable X together with the dependent variable Y show the value of R = 0.87. The results of the measurement of the coefficient of determination of the independent variable X with the dependent variable Y show the value of $r^2 = 76.30$ % and epsilon of 23.70 %.
- The effect of the Tax Object Sales Value of Land (Y_1) on the Tax Object Sales Value of Land and Buildings (Y) is very significant. indicating that each increase in the Tax Object Sales Value of Land by one thousand rupiah per M^2 will increase the Tax Object Sales Value of Land and Buildings by IDR 159,580.00 per M^2.
- The effect of land area (X_{16}) on the Tax Object Sales Value of Land and Buildings (Y) is very significant. indicating that every increase in land area of 1 M^2 will increase the Tax Object Sales Value of Land and Buildings by IDR 684,680.00 per M^2.

- The effect of Building Area (X_{17}) on the Tax Object Sales Value of Land and Buildings (Y) is very significant. indicating that every increase in Building Area of 1 M^2 will increase the Tax Object Sales Value of Land and Buildings by IDR 1,211,760.00 per M^2.

4 Conclusion

Based on the results of research and data processing. The Tax Object Sales Value of Land per M2 is strongly influenced by the Object Location and Land Use. The Tax Object Sales Value of Buildings per M^2 is strongly influenced by the builing condition. year of construction. building construction. ceiling. floor. and electrical power class. The Tax Object Sales Value of Land and Buildings is strongly influenced by the Tax Object Sales Value of Land per M2. land area. and building area.

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