Effect of Progressive Tax and Tax Arrears on Revenue Transfer of Motor Vehicle Fee in South Sumatra Province

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Abstract— The purpose of this research is to find out and analyze the Effect of Progressive Tax and Tax Arrears on the Revenue Transfer Fee of Motorized Vehicles in South Sumatra Province. In this writing the type of data used is panel data. The sample in this study was 16 Regency City UPTs during 2017-2018. The analysis technique used was Ordinary Least Squared (OLS). The results obtained and showed that the progressive tax and motor vehicle arrears have a significant effect on customs revenue. Behind the name of a motor vehicle in the period 2017-2018, it can be seen from the F-statistic value of 568,0266 which is greater than the F-table value of 0,051302 with a significance level of α = 5%. This is supported by the probability value of 0.000000 where the value is significant to alpha of 5 percent.

Keywords: Progressive Tax, Motor Vehicle Tax Arrears, Motor Vehicle Transfer Fee Duties, bleaching (write off) policy, regency-city UPTs

I. INTRODUCTION

According to Law Number 23 Year 2014 Article 1 Paragraph 6 Regarding Regional Government, regional autonomy is the right, authority and obligation of the autonomous region to regulate and manage their own government affairs and the interests of the local community in the system of the Unitary State of the Republic of Indonesia. Regional government with autonomy is a process of transition from a deconcentrated system to a decentralized system.

Considering that not all sources of financing are given to the regions, the sources of regional revenue must be explored to the maximum, where the potential source of revenue is Regional Original Revenues. Pursuant to Law Number 33 of 2004, Regional Original Revenues are aimed at regional governments by giving them the freedom to finance their own regional administration which is adjusted to the potential of each region which is an embodiment of decentralization. In improving services to the community, it is necessary for the government to play an optimal role in managing the region and the government has the right to collect taxes to finance all the needs of regional autonomy. The role of tax is also often used as a policy instrument by local governments.

The potential for an increase in the number of motorized vehicles in circulation has made the government renew the regional laws and regulations, that is, the regional government issued a South Sumatra Governor Regulation Number 31 of 2016 concerning Regional Taxes, the provisions of article 2 set forth in paragraphs (1), (3) and (7), namely second private motor vehicle ownership and so on is subject to progressive tariffs.

The implementation of progressive tax on motor vehicles is a step taken by the government to reduce the level of congestion and curb administration of ownership of motorized vehicles owned, if the taxpayer has a private four-wheeled vehicle in the same address, the greater the tax that must be paid by the taxpayer.

Fig. 1. Number of Vehicle units and Progressive Taxes(Million Rupiah) in Palembang City in 2017

Referring to Figure 1, shows progressive tax revenue fluctuations every month. In January, progressive tax receipts were Rp 752,772,550 with 702 vehicles. Then in February it increased to Rp. 765,475,575 with a total of 690 vehicles. In March it increased to Rp 777,756,375 with 846 units. Then in the following months continued to fluctuate until progressive tax revenues at the end of the year amounted to Rp 877,756,375 with 846 units of vehicles.

Another Government Policy in reducing the level of congestion is that through Regional Regulation No. 9 of 2017 concerning regional taxes in article 20 paragraph (1)
letter a, it has set the BBN-KB rate for the first handover which was initially 10 percent but in an effort to increase regional income to support the implementation regional autonomy, it is deemed necessary to raise the BBN-KB tariff for the first handover to 12.5 percent. Motorized Vehicle Transfer Fee Tax is also one of the potential regional revenue to increase regional income which will be used for development and financing in the area.

Based on the problems previously explained, the researcher intends to analyze the Effect of Progressive Tax, Number of Vehicles and Tax Arrears on the Revenue Transfer Fee of Motorized Vehicles at the Regional Revenue Agency of South Sumatra Province.

II. FORMULATION OF THE PROBLEM

1) Analyzing the magnitude of the influence of Progressive Tax and Tax Arrears on Revenue Transfer Fees for Motorized Vehicles in South Sumatra Province?

2) Analyzing the condition of Tax Arrears before and after the motor vehicle tax bleaching (write off) policy?

III. THEORETICAL AND LITERATURE REVIEW

Peacock and Wiseman state their theory is based on the idea that the government always increases spending every year which causes the government to raise taxes. While people always avoid the tax increase. The public will understand if there is an increase in taxes due to meet government spending, so the community realizes that the government needs funds to finance government activities so that they have a level of community willingness to pay taxes. This level of tax tolerance is an obstacle for the government to raise tax collection arbitrarily [6].

Motorized Vehicle Tax according to Law Number 3 of 2011 is a tax on ownership and / or control of motorized vehicles. Motorized vehicles are all wheeled vehicles and their axles used in all types of road, and are driven by technical equipment in the form of motorcycles or other equipment that functions to convert certain energy resources into power of the relevant motorized vehicles, including heavy equipment and tools - large equipment that in operation uses wheels and motors that are operated in water.

Referring to [10] concerning Regional Taxes, the provisions of article 2 namely ownership of second private motor vehicles and so on are subject to progressive tariffs. Subject to types of sedan, jeep, minibus station wagons, microbuses, buses and the like (private vehicles) for the same address.

According to [8], BBN-KB is a tax that is imposed on the change of motorized vehicle owners due to buying and selling transactions, auctions, inheritance or grants from other parties and income into business entities. BBN-KB tax subjects are individuals, agencies or government agencies that can accept delivery of motorized vehicles. According to Law Number 11 Year 2016 Tax Arrears is the principal amount that has not been paid based on a tax bill in which there is a tax principal owed, an underpayment of tax assessment letter, an underpayment of additional tax assessments, a letter of correction, an objection decision, a decision appeals and reconsideration decisions, which causes the amount of tax accrued to increase including taxes that should not be returned as required by law.

According to [3] the variables used are Motorized Vehicle Tax and Fiscal Decentralization. The research period was 2005-2013 in the Slovak Republic. The research objective is to identify the Motor Vehicle Tax rates and changes in tax revenues in addition to proposing new tax rates that are cheaper and more environmentally friendly in the governments of each region; the results of the study are gradual changes in the Motor Vehicle Tax impact on fiscal decentralization policies in the Slovak Republic.

[13] examines automotive taxation in the Era of the ASEAN Economic Community (AEC) in 2015. Various policy areas are identified where coordination by ASEAN members will strengthen the region’s position to become a leading global car manufacturer. In addition to examining the type of vehicle and the level of CO2 emissions and fuel efficiency, examples of the types of excise taxes applied in the European Union (EU), South Africa, Cyprus and Thailand are used to highlight areas that can be overcome, leading to a series of reforms that will increase opportunities to achieve this global role. In conclusion, this journal brings together the policy issues discussed and provides a standard structure for car excise and tax that can be considered by policy makers.

[5] this journal discusses the Impact of Fiscal Decentralization on Motor Vehicle Tax. This research was conducted in the Slovak Republic. Radically, from time to time the transfer of competence in setting tax rates on motorized vehicles to self-governing regions and the use of income through taxes can realistically assess its development and impact. The aim is to eliminate differences in motor vehicle tax burdens between countries and maintain the current level of tax revenue in self-government.

IV. METHOD AND DATA

The type of data used is secondary data obtained from 21 UPT Regional Revenue Agency of South Sumatra Province which consists of monthly data for 2017-2018. The data used is panel data, which is a combination of time series and cross sections.

There are three fundamental approaches used in estimating the regression model with panel data, namely: a) Pooled Least Square (Common Effect) Model. b) Fixed Effect Approach Model, and c). Random Effect Approach Model. Because there is one equation in this study, the authors use the Ordinary Least Squared (OLS) method.

The panel data regression equation in this model are:

\[ BBNKB_{kt} = \alpha + \beta_1 T_{progb} + \beta_2 TKB_{kt} + \epsilon_k \]  \hspace{1cm} (1)

Where:

- \( BBNKB_{kt} \) = transfer fees for motorized vehicles (Rupiah)
- \( T_{progb} \) = Progressive Tax (Rupiah)
- \( TKB_{kt} \) = Motor Vehicle Arrears (Rupiah)
- \( \alpha \) = A constant
- \( \beta_1, \beta_2 \) = Regression coefficient
- \( \epsilon_k \) = error term
Hypothesis:

1) Progressive Tax has a positive effect on the Revenue Transfer Fee for Motorized Vehicles in the South Sumatra Province.

2) Motor Vehicle Tax Arrears have a negative effect on the Revenue Transfer Fee of Motorized Vehicles in South Sumatra Province.

V. EMPIRICAL RESULT

Based on OLS testing, the method used to estimate the model in this multiple linear regression equation is the random effect method.

TABLE I. REGRESSION ESTIMATION RESULTS RANDOM EFFECT METHOD

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPROG?</td>
<td>28.46368</td>
<td>0.75583</td>
<td>37.65849</td>
<td>0.0000</td>
</tr>
<tr>
<td>TKB?</td>
<td>-0.120805</td>
<td>0.120508</td>
<td>-1.002463</td>
<td>0.3169</td>
</tr>
<tr>
<td>C</td>
<td>2.72E+09</td>
<td>1.90E+08</td>
<td>14.29869</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unweighted Statistics</th>
<th>Weighted Statistics</th>
<th>Source: Secondary data, processed with Eviews 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.790544</td>
<td>0.798152</td>
<td>0.789152</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.916477</td>
<td>0.913048</td>
<td>0.789152</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>1.62E+09</td>
<td>1.62E+09</td>
<td>1.62E+09</td>
</tr>
<tr>
<td>F-statistic</td>
<td>568.0266</td>
<td>568.0266</td>
<td>1.16646</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

A. Estimation results

BBNKB = 2.72 + 28.46368Tprog - 0.120805 TKB (1)

The coefficient of determination $R^2$ is used to calculate large variations of endogenous variables which can be explained by their exogenous variables. The results showed an $R^2$ value of 0.789105244 proving that 789.9105 percent of the variable name of motor vehicle transfer fees (BBNKB) as the dependent variable that can be accessed by progressive tax variables and tax arrears as independent variables. While the remaining of 210.0895 percent influenced by other variables exceeded the specified model.

The results obtained showed that the progressive tax and motor vehicle arrears have a significant effect on the receipt of motor vehicle transfer fees in the period 2017 - 2018, it can be seen from the F-statistic value of 568.0266 that is greater than the F-table value of 0.051302 with a significance level of $\alpha = 5\%$. This is supported by the probability value of 0.000000 where the value is significant to alpha of 5 percent.

From the results of the regression analysis, it is known that the regression coefficient of the progressive tax variable shows a positive value of 28.46368. The positive coefficient indicates the positive effect of progressive tax on the receipt of motorized vehicle transfer fees. This means that if the progressive tax increases by 1, then the receipt of the transfer of motor vehicle transfer fees will increase by 28.46368 assuming other factors outside the model are considered fixed (ceteris paribus). In line with the results of the t test shows that the t-value of the progressive tax is 37.65849 and this value is greater than the t-table of 1.967787 (t-count > t-table) at the level of $\alpha = 5\%$ with a probability value of 0.0000. This means that partially progressive taxes have a significant effect on the receipt of motor vehicle transfer fees.

These results are consistent with the Peacock and Wiseman Theory which states that the public will understand if there is an increase in taxes due to meet government spending, so people realize that the government needs funds to finance government activities so that they have a degree of community willingness to pay taxes [6]. The public will understand the tax increase to finance public goods, so that the public is aware of paying taxes. The statement is a description for taxpayers who pay motor vehicle tax in the regency / city of South Sumatra Province where at the time the local government in this case the Governor of South Sumatra made a policy of progressive tax enactment contained in Pergrab Number 31 of 2016 concerning progressive taxation, the people tended to receive and will continue to pay taxes. By implementing a progressive tax policy it is expected that private motor vehicle ownership can be reduced, and the use of public transportation is preferred by the community so that indirectly congestion which is one of the problems in the province of South Sumatra, especially in the city of Palembang can be controlled. The implementation of progressive tax on motor vehicle tax has an impact on society, both positive and negative impacts. The positive impact arising from the imposition of a progressive tax on motor vehicles is very influential on increasing local revenue which is useful for financing the routine tasks of local governments for infrastructure development for the welfare of society. However, besides the positive impacts, there are also negative impacts, namely that the people are increasingly burdened because the costs incurred to pay motor vehicle taxes are increasing.

While tax arrears show a negative value of -0.120805. The negative coefficient indicates the negative effect of progressive tax on the receipt of motorized vehicle transfer fees. However, the results show a level of $\alpha = 5\%$ with a probability value of 0.0000. This means that partially, tax arrears have no significant effect on the receipt of motor vehicle transfer fees.

B. Tax Arrears Conditions Before and After the Bleaching (write off) policy of 2016 Motorized Vehicle Taxes

One type of provincial tax which has the largest contribution
to local tax revenue is the motor vehicle tax. In an effort to maximize the receipt of Motor Vehicle Tax and increase public awareness in paying taxes, the Governor of South Sumatra issued Governor Regulation No. 22 of 2016 concerning tax exemption and administrative sanctions in the form of fines and interest on arrears of motor vehicle tax and fees on transfer of the name of the second motor vehicle for vehicle number police in the province and motorized vehicles outside the province who register and transfer numbers to the province of South Sumatra or often referred to as the bleaching policy.

The Bleaching (write off) policy in 2016 starting from September 1, 2016 to December 31, 2016. This bleaching policy is carried out with the aim of increasing public awareness, especially those included in the vehicle tax object in paying motor vehicle tax, so that they can revive the tax object that has been inactive and regulate vehicle ownership data administratively. In addition, this policy was issued because it pursued the target of receiving Local Revenue from the motor vehicle tax sector. The following is a graph of total arrears in Motor Vehicle Tax (PKB) from 2016 to 2018 Regency / City of South Sumatra Province.

![Total Motor Vehicle Tax Arrears](chart.png)

**Source:** Secondary data, processed with Excel, 2019

Fig. 2. Total Arrears PKB Before and After Motor Vehicle Tax Bleaching (write off)

In Figure 2 can be seen the development of Motor Vehicle Tax Arrears from 2016 to 2017. In 2016 the total PKB arrears amounted to 133,346,210,450 (rupiahs), the total arrears represent the acquisition of the entire Regency / City UPT in South Sumatra Province, where the amount higher than the previous year so that it is one of the factors causing the South Sumatra regional government to make a bleaching policy in 2016.

The bleaching policy in 2016 starting from September 1, 2016 to December 31, 2016, due to the bleaching policy implemented in the third and fourth quarters, the effect of the new bleaching was felt in early 2017, where the overall total PKB arrears in 2017 decreased by 26.85 percent, namely total PKB arrears amounting to 97,548,517,250 (rupiah). Even though the bleaching policy is only in the form of eliminating administrative sanctions, it means that taxpayers still have to pay the amount of the tax base, but the public welcomes this policy positively. This means that many people follow this bleaching policy. This can be seen from the increase in the total amount of tax revenue and decreasing the amount of tax arrears during the bleaching period. This certainly has an impact on increasing Motor Vehicle Tax revenues.

**VI. CONCLUSION**

Based on the results of research on the Effects of Progressive Taxes and Tax Arrears on Revenue Transfer Fees for Motorized Vehicles at the Regional Revenue Agency of South Sumatra Province, the following conclusions can be drawn:

1) The results obtained show that the progressive tax and arrears of motor vehicles have a significant effect on the receipt of motor vehicle transfer fees in the period 2017 - 2018, it can be seen from the F-statistic value of 568.0266 that is greater than the F-table value of 0.051302 with a significance level of \( \alpha = 5\% \). This is supported by the probability value of 0.000000 where the value is significant to alpha of 5 percent.

2) Overall the total PKB arrears in 2017 decreased by 26.85 percent, namely the total PKB arrears by 97,548,517,250 (rupiah). Even though the bleaching policy is only in the form of eliminating administrative sanctions, it means that taxpayers still have to pay the amount of the tax base, but the public welcomes this policy positively. This means that many people follow this bleaching policy. This can be seen from the increase in the total amount of tax revenue and decreasing the amount of tax arrears during the bleaching period.

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