

Analysis of Motor Vehicle Tax and Name Reversal Duty Contributions on Locally Generated Revenue of Regencies and City in Central Sulawesi Province in 2014-2018 Period



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ABSTRACT: This study aimed to investigate the contribution and influence of Motor Vehicle Tax and Name Reversal Duty on Locally Generated Revenue in Central Sulawesi using a quantitative descriptive method. In addition, relevant data were collected through literature review, fieldwork, as well as interviews, and analyzed using contribution and Panel Data Regression method. The results showed that the contributions of Motor Vehicle Tax and Motor Vehicle Name Reversal Duty from 2015 to 2018 decreased and did not have a significant effect on Locally Generated Revenue.

KEYWORDS: Central Sulawesi; Locally Generated Revenue; Motor Vehicle Tax; Motor Vehicle Name Reversal Duty.

JEL Classification: E62, H21, H24

I. INTRODUCTION

Economic growth is the process of increasing production capacity and national income. National economic growth, which often transcends to regions, is pursued by developing countries to enhance the living standards of the people and achieve community welfare. Meanwhile, purchasing power is the benchmark to assess the ability of a community to meet its basic needs.

National development, as outlined in the 1945 Law, requires a substantial budget, with the government often serving as a regulator and maker for regions, provinces, cities, and regencies to independently finance economic activities. Efficient fund management is also essential for each region to stay focused and on target.

According to (Mahmudi, 2010), the comparison between local government revenue and business sector is relatively predictable and stable because it is governed by binding regional laws and regulations. To enhance accountability and flexibility in the Regional Income and Expenditure Budget (APBD), potential sources of regional revenue should be fully explored within the framework of applicable laws and regulations. This includes local tax and regional levies, which have long been key components of Locally Generated Revenue (LGR).

Law Number 28 of 2009, concerning Motor Vehicle Tax (MVT), is imposed on the ownership or control of motor vehicles. This includes all wheeled vehicles and their couplings used on various types of roads, powered by engines or other equipment that convert energy resources into motion. This comprises heavy and large equipment not permanently attached to motor, as well as waterborne vehicles. The application of this tax is governed by local regulations within the respective province.

The technical implementation of the imposition and collection of MVT in each province is governed by operational laws and Decree of the Governor, serving as a guideline for enforcing regional regulations. Transportation facilities are crucial for daily activities and play a significant role in the economy. MVT is one of the primary sources of revenue for Central Sulawesi Province. The number of MVT realization targets for Central Sulawesi Province between 2014 and 2018, indicating an increase from 2014 to 2015, an insignificant decrease in the following year, and a subsequent increase to 2018. Meanwhile, Motor Vehicle Name Reversal Duty (MVNRD) failed to reach its target over the same period. A consistent increase in the realization of LGR for Central Sulawesi Province from 2014 to 2018. These data indicated an increase in both MVT and local revenue realization, whereas MVNRD consistently fell short of its target. This did not necessarily imply that the development efforts by the Regional Government had been fully achieved or maximized. To assess the extent MVT relationship contributed to regional revenue, it was crucial to recognize that MVT was just one component of the local revenue for Central Sulawesi Province, specifically from tax.

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There was a consistent increase in LGR between 2014 and 2018, which even exceeded the predetermined target. This indicated the effective performance of local governments in optimizing revenue sourced from LGR, with MVT showing a consistent increase.

The following study questions were formulated based on the description above: (i) What is contribution of MVT and MVNRD to LGR of districts and cities in Central Sulawesi Province from 2014 to 2018? (ii) Does MVT have a significant effect on LGR in the districts and cities of Central Sulawesi Province? This study aimed to (i) analyze contributions of MVT to LGR of districts and cities in Central Sulawesi Province from 2014 to 2018; (ii) assess the effect of MVT on the growth of LGR.

II. LITERATURE REVIEW

This study was based on the theoretical framework of LGR, MVT, and MVNRD.

2.1. Theoretical Foundation

LGR refers to all income or revenue collected within a local territory, governed by regulations in accordance with applicable laws, and used for local purposes. According to Article 6 of Law Number 33 of 2004, the primary source of local finance is LGR. This fund is specifically derived from Regional Tax, Levies, Enterprises (BUMD), Wealth Management Source, and the outcomes of collaboration with third parties.

MVT is a tax imposed on the ownership or control of motor vehicle, including two-wheeled or larger vehicle and their associated equipment. These vehicles are used on all types of roads and powered by engines that convert energy resources into motion power. MVT is applicable to various contexts, including airports, seaports, plantations, forestry, agriculture, mining, industry, trade, sports, and recreation facilities. Taxpayer or tax subjects can be individuals or entities that own motor vehicle. In the case of corporations, tax obligation is represented by the management or legal representative.

According to Article 1 paragraph (13) of the Regional Tax and Regional Levies Law, motorized vehicle comprise all wheeled vehicle and their couplings used on land roads and powered by engineering equipment in the form of motor that convert energy resources into motion power. This includes heavy equipment and large machinery that operates on wheels and motor, even when not permanently attached to water-operated motor vehicle.

According to Law Number 28 of 2009, Motor Vehicle Name Reversal Duty (MVNRD/BBNKB) is tax levied on the transfer of vehicle ownership rights resulting from two-party agreements, unilateral actions, or circumstances such as buying and selling, exchanging, grants, inheritances, or inclusion in business entities. This transfer of ownership status from the seller to the buyer occurs at the local samsat office, where the initial vehicle registration took place. After the completion of name transfer, Motor Vehicle Owner Book (MVOB/BPKB) and Vehicle Registration Certificate (VRC/STNK) will contain name and address of the new owner, while the information of the previous owner is erased.

2.2. Framework of Thought and Hypothesis

Transportation facilities are crucial for daily activities and play an undeniable role in supporting the economy. In Central Sulawesi Province, one potential source of revenue for the provincial government is MVT. With the annual increase in MVT, there had also been a corresponding rise in LGR from 2014 to 2018. LGR comprises income derived from local levies, the management of regional wealth, and other sources. This revenue aims to provide regions with flexibility in sourcing funds as part of regional autonomy, reflecting the principles of decentralization (Minister of Home Affairs, 2014). Local tax is a mandatory contribution to the region, collected from private individuals or entities for public goods such as roads, bridges, road field openings, and other infrastructures, based on applicable laws. The government sets MVT, tax prepaid and renewed annually, specifically on all 2-wheeled vehicle operating on both land and waterways. While the government sets yearly targets for collection, the realization often falls short, resulting in a gap between the target and the actual MVT. The study hypotheses are as follows:

1. MVT variable has a positive and significant effect on Regional Original Revenue;
2. Name Reversal Duty variable has a positive and significant impact on LGR.

III. STUDY METHODS

3.1. Study Type and Study Variables

This study used a quantitative analytical method, and was categorized as descriptive based on its purpose and nature (Sugiono, 2008). Descriptive studies offered historical or relevant aspects of a phenomenon from the perspective of individuals, organizations, and more.

1. LGR was the dependent variable.
2. MVT and MVNRD were the independent variables.
- 3.

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3.2. Methods of Analysis

Data were analyzed using Contribution as well as Panel Data Regression Methods, while the hypotheses were tested using Eviews 10 software.

A. Analysis of MVT Contribution and MVNRD

The term 'contribution,' in the context of this study, referred to the income generated by MVT or MVNRD for LGR in Central Sulawesi Province.

$$\text{Contribution} = \frac{\text{Tax Realization}}{\text{Locally Revenue Realization}} \times 100\%$$

B. Panel Data Analysis

Panel or longitudinal data, comprising individual data observed over period of time, were subjected to regression analysis using various methods, namely Ordinary Least Square (OLS), Fixed Effects Model (FEM) and Random Effect Model (REM). These methods were subsequently evaluated through three estimation tests, namely Lagrange Multiplier (LM), Chow, and Hausman. The regression analysis focused on MVT and MVNRD panel data as follows:

$$\text{PAD} = C + b_1\text{PKB} + b_2\text{BBN} + m \quad (1)$$

B.1. Common Effect Model (CEM)

The Common Effect model was the simplest because it combined time series and cross-sectional data. As a result, OLS or least squares method was used to estimate panel data models.

This assumption is far from the actual reality because companies differed significantly in terms of characteristics and territoriality. The equation for this method can be formulated as follows:

$$Y_{it} = \alpha + \beta_j X_{it}^j + \varepsilon_{it}. \quad (2)$$

Note:

Y_{it} : i-th individual bound variable at t-th time

X_{it}^j : The i-th individual j-th independent variable at the t-th time

i : N number of cross-section units

j : Unit time series as much as t

ε_{it} : i-th individual error component at t-th time

α : Intercept

β_j : Parameter for the j-th variable

B.2. Fixed Effect Model (FEM)

FEM was used to address the limitations of panel data analysis. The implementation of this model was unrealistic since it produced intercepts and slopes in panel data that remained constant across both individuals (cross-section) and periods (time series). FEM was designed for estimating panel data by introducing dummy variables. This model assumed the existence of varying effects among individuals, which could be accounted for through variations in intercepts. It also treated each individual as an unknown parameter and was estimated using dummy variables, as shown below (Silalahi, 2015):

$$Y_{it} = \alpha + \beta_j X_{it}^j + \sum_{i=1}^n \alpha_i D_i + \varepsilon_{it} \quad (3)$$

Information:

Y_{it} : i-th individual bound variable at t-th time

X_{it}^j : The i-th individual j-th independent variable at the t-th time

D_i : Dummy variable

ε_{it} : i-th individual error component at t-th time

α : Intercept

β_j : Parameter for the j-th variable

B.3. Random Effect Model (REM)

Differences in individual characteristics and time were accounted for by incorporating errors into REM. There were two components contributing to the formation of errors, namely individual-specific, and time-specific. Therefore, this method required breaking down errors into both components, while considering their combined effects. The random effect equation was formulated as follows:

$$Y_{it} = \alpha + \beta_j X_{it}^j + \varepsilon_{it}; \varepsilon_{it} = u_i + v_t + w_{it} \quad (4)$$

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Information:

u_i : Cross-section error component

v_t : Time series component

w_{it} : Compound error component.

B.4. The Goodness of Fit Test Model

Chow, Hausman, and Lagrange Multiplier Tests were used to assess the suitability and effectiveness of the three estimation methods for panel data modeling. The Chow test was used to determine the most suitable method between CEM and FEM. Chow statistics followed an F-statistics distribution with degrees of freedom (N-1, NT-N-K). H_1 is accepted when the calculated Chow statistic (F-statistical) > F table, indicating the preference of FEM, and vice versa. The Hausman test, often conducted through Eviews commands available in the panel directory, was used to determine the most suitable method between FEM and REM (Winarno, 2009). Lagrange Multiplier was used to determine the most suitable between REM and CEM. The significance test for REM was developed by Breusch-Pagan, and was based on residual values obtained from OLS. The statistical value of Lagrange Multiplier was calculated using the following formula (Silalahi, 2015):

B.5. Classical Assumption Testing

OLS is a simple and best unbiased linear estimator. This model is specifically designed for linear regression, as well as to minimize deviations between calculated results and actual conditions. The multicollinearity test assesses whether there is a correlation between independent variables in a regression model. One characteristic of multicollinearity is a high coefficient of determination (R^2) above 0.8, with only a few independent variables significantly affecting the dependent variable as indicated by the t-test (Widarjono, 2015).

Autocorrelation, often identified using the Durbin-Watson test (D-W test), aims to detect correlations among time series or spatial observations in a linear regression model. Heteroscedasticity occurs when the observed errors or residuals in a model do not have constant variance across observations, resulting in inefficient parameter estimates.

Several tests, including the Glejser, were conducted in this study to detect heteroscedasticity. The Glejser Test began with the simulation of absolute residuals and the identification of heteroscedasticity. Heteroscedasticity occurs when the p-value for each independent variable is less than 0.05, while a greater value indicates the absence of heteroscedasticity (Ekananda, 2016).

The normality test was used to determine whether the data followed a normal distribution, while the *Jarque-Bera test (J-B test)* was used to assess normality. The Fisher test (F-test) determined whether the independent variable significantly influenced the dependent variable. The testing hypotheses are as follows:

1. H_0 is accepted when the F-statistic < the critical F-table value, indicating that an independent variable is not a significant explanatory factor for the dependent variable.
2. H_1 is accepted when the F-statistic > the critical F-table value, indicating that an independent variable significantly explains the dependent variable.

1. Partial Test (Studentized-Test)

T-test was conducted to determine the effect of independent variables on the dependent. The hypotheses are as follows:

1. First hypothesis:

$H_0: \beta_0=0$, MVT does not have a significant effect on LGR.

$H_a: \beta_1>0$, MVT has a positive and significant effect on LGR.

2. Second hypothesis:

$H_0: \beta_2=0$, MVNRD does not have a significant effect on LGR.

$H_a: \beta_2>0$, MVNRD has a positive and significant effect on LGR.

3.3. Variable Operational Definition

1. LGR

LGR is a source of regional revenue that originates from various local potentials, managed at the discretion of Central Government. The Central Statistics Agency recorded a Trillion Thousand Rupiah of LGR between 2014 and 2018. Therefore, it was essential to maintain LGR since it was a key indicator of regional economic stability. The revenue can be calculated as follows: LGR = Local Tax + Local Levies + Profit Income from Local Companies + Other Income.

2. MVT

MVT is tax levied on the ownership or control of motor vehicles. The Central Statistics Agency recorded a Billion Thousand Rupiah of MVT between 2014 and 2018, thereby serving as a key indicator of regional economic stability. Specifically, there was a positive and significant effect of export level and MVT on LGR (Minister of Home Affairs, 2009).

3. MVNRD

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MVNRD is vehicle tax levied on the transfer of motor vehicle ownership rights due to two-party agreements, unilateral actions, circumstances arising from buying, selling, exchanging, inheritance, grants, or inclusion in business entities. The Central Statistics Agency recorded a Trillion Thousand Rupiah of MVNTD between 2014 and 2018, thereby serving as a key indicator of regional economic stability. Specifically, there was a positive correlation between this variable and LGR.

IV. STUDY RESULTS AND DISCUSSION

4.1. Data Analysis Results

MVT, as one of the components contributing to LGR, experienced a decrease in 9 regencies and city in Central Sulawesi Province from 2014 to 2017, and a subsequent increase between 2017 and 2018. Banggai Laut Regencies experienced an MVT contribution of 3.39% in 2014, and a subsequent increase to 17.06% in 2015 due to the rise in LGR from Rp58,421,810.00 in 2014 to Rp12,290,011,000,00 in 2015, resulting in a significant difference of Rp46,313,799,000,00. There was a relatively stable change and consistent increase between 2015 and 2018. Morowali Regencies experienced an MVT contribution of 11.88% in 2016, and a subsequent decrease to 5.44% in 2017 due to the rise in LGR from Rp72,794,497,000 in 2016 to Rp190,571,540,000 in 2017, resulting in a significant difference of Rp172,828,906,000. There was a relatively stable increase between 2017 and 2018. The total increase in LGR was influenced by other sectors, including the Levy Sector and the Non-Tax Revenue Sector, with MVT being one of the major contributors. The increase in MVT from Rp8,645,007,200,00 in 2016 to Rp10,364,595,300,00 in 2017 was not significantly large, with only a difference of Rp1,719,588,100,00. This trend was driven by an increase in the number of Motor vehicle, totaling 19,475 in 2016 and 21,489 in 2017, while contribution from Banggai, Poso, Toli-Toli, Buol, Parigi Moutong, Tojo Una-Una, and Palu Province were relatively stable. Contribution of Vehicle Tax in increasing LGR was influenced by the number of taxpayers each year. MVNRD was another component that contributed to the increase in LGR, although there was a significant decrease from 2014 to 2018 in 13 regencies and cities in Central Sulawesi Province. Banggai Regencies recorded an MVT contribution of 12.72% in 2015, and a subsequent increase to 67.40% in 2016 due to the rise in LGR from Rp58,421,810,000 in 2015 to Rp12,011,000 in 2016, resulting in a significant difference of Rp46,313,799,000. There was a consistent increase at Banggai Laut between 2016 and 2018, and other areas in Central Sulawesi Province between 2015-2018.

The panel data regression model was estimated using CEM or Pooled Least Square (PLS), FEM, and REM. The best model among these three was determined through several tests, including the Chow Test applicable to PLS and FEM, and Hausman applicable to FEM and REM. Below are the regression results from the PLS, FEM, and REM models.

The results of the panel data regression using PLS indicated that MVT and MVNRD did not have a significant positive effect on LGR at a significance level (α) of 5%. The regression results using FEM also showed that VMT and MVNTD had no significant positive effect on LGR at a significance level (α) of 5%. The results of REM regression analysis were similar to those of the previous models.

Multicollinearity testing revealed that the correlation value between X_1 and X_2 was less than 70% (< 0.7), suggesting the absence of multicollinearity issues. Moreover, the Glejser Test showed that the two independent variables X_1 , and X_2 (MVNRD), had probability values greater than (α) 5% ($\text{prob} > 0.05$), indicating the absence of heteroscedasticity.

The regression analysis of both variables is presented as follows:

Regression model estimation:

$$\text{LGR} = C + \beta_1\text{PKB} + \beta_2\text{BBN} + \mu \quad (5)$$

Regression Model:

$$\text{LGR} = 8,31 + 0.571963 - 1,461236 + e \\ (1,792058) * (0,390944) (-1,153988)$$

Note:

***, **, * = significant (α) 1%, 5 or 10%.

Y = LGR

X_1 = MVT

X_2 = MVNTD

Effects Specification

R-squared (R^2) = 0.067048

Adjusted R-square = 0,022622

Durbin-Watson stat = 1,141272

F-Statistic = 1,509204

Prob (F-Statistic) = 0,232832

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The coefficient of determination (R^2) value described the ability of the regression model to explain the dependent variable, while the value outside the coefficient of determination ($1-R^2$) was attributed to factors not considered in the model. LGR (Y) recorded an R^2 value of 0.067048, indicating the effect of the independent variables by 6.70%. The remaining 93.30% was explained by variables not contained in this model and other external factors. Based on the coefficient of determination value, the independent variables significantly affected the dependent variable in this analysis, indicating that the model was suitable for addressing the study objectives.

Based on the F-test results, the Probability F-Statistic was 1.509204 point which was greater than the alpha (α) value of 5% (0.05). This indicated that the independent variables, when considered as a whole, had an insignificant effect on the dependent variable. VMT had t-statistics $<$ t-table, with a value of 2.01808 and a probability value of 0.6978, which was greater than $\alpha=5\%$. This indicated the acceptance of H_0 and rejection of H_a , as well as the insignificant impact of the variable on LGR. This was in line with hypothesis (1), suggesting that the independent variable had a positive but insignificant effect on the dependent variable. MVNTD had an insignificant effect on LGR, with a t-statistic value of 1.153988, which was less than the critical t-table value of 2.01808, and a p-value of 0.2550, exceeding the threshold of 5%. This indicated the acceptance of H_0 and the rejection of H_a , as well as the insignificant effect of MVNTD on Regional Original Revenue, in line with hypothesis (2).

4.2. Discussions

4.2.1 MVT Contribution

MVT as an essential component of LGR contributed significantly to revenue generation in Central Sulawesi, accounting for 20.81% in 2014, 20.10% in 2015, 18.82% in 2016, 14.05% in 2017, and 19.92% in 2018. The total contribution of MVT to the growth of LGR in 8 Regencies and 1 Cities in Central Sulawesi over the past 5 years had reached 18%. The increase in the number of motor vehicles from 2014 to 2015, the decrease in 2016, and the subsequent increase between 2016 and 2018. The quantity of motor vehicles had a significant impact on the growth of MVT, indicating that the number of taxpayers increased with revenue. This also contributed to the expansion of the tax sector and an increase in LGR. To boost tax compliance and awareness among the public, Central Sulawesi Government enacted Regulation Number 4 of 2020. This regulation addressed the Reduction of Principal Tax Arrears, the Removal of Administrative Sanctions in the form of MVT fines, and the Reduction of the Principal of the Second Motor Vehicle Name Reversal Duty, among other provisions. Article 2 point B aimed to enhance taxpayer awareness and compliance in fulfilling their obligations to pay MVT on time. The influence of MVT on the increase in LGR was closely linked to the number of motor vehicle owners who made timely tax payments, as supported by (Mughtar, Abdullah, & Susilowati, 2017). The average contribution of MVT in North Barito Regencies for the last five years was 7.96%, wherein 7.22% was accounted for in 2012, 8.65% in 2013, 10.22% in 2014, 5.03% in 2015, and 8.72% in 2016. Moreover, MVT in North Barito Regencies remained relatively stable over the years, despite annual fluctuations. The relatively small contribution of MVT to LGR could be attributed to the lack of public awareness in paying this tax.

4.2.2 MVNRD Contribution

Contribution of MVNRD was a key component in increasing LGR. However, for Central Sulawesi, this revenue had not been as optimal as MVT between 2014 and 2018, with a record of 38.66% in 2014, 33.50% in 2015, 22.15% in 2016, 16.30% in 2017, and 10.67% in 2018. The total contribution of MVNRD in 8 Regencies and 1 City in Central Sulawesi over the last 5 years reached 1,167,034,206,931 trillion Rupiah or 19%. An increase in the number of MVNRD objects from 2014 to 2016, and the subsequent decrease between 2017 and 2018. This was in line with (Agustina, 2015), stating that MVNRD did not have a significant effect on the LGR of South Kalimantan Province from 2003 to 2012. This could be attributed to the quite high number of motorized vehicles. The contributions of MVNRD to LGR was relatively small due to the transactions of buying and selling motorcycles. Moreover, several residents preferred to buy new vehicles, resulting in a significant increase in the number of vehicles compared to the number of used vehicles purchases or name reversal.

4.2.3 MVT Regression The Regression Analysis of MVT showed a significance value of 0.6978, which was greater than $\alpha=0.05$, indicating an insignificant effect on LGR. The regression coefficient β was 0.571963, with a positive value indicating that any increase in MVT had a weak effect. Table 4.1 shows the amount of motor vehicles registered for MVT from 2014 to 2018.

Table 4.1
MVT Objects

Districts/ City	MVT Object (Unit)					Average
	2014	2015	2016	2017	2018	

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Banggai Laut	6476	7258	7482	8659	8785	7732
Banggai	4985	48603	51018	52823	53670	42220
Morowali	1868	1928	19475	21489	23104	13573
Poso	23641	25987	31686	32007	30840	28832
Toli-Toli	28318	382425	29470	30491	33438	100828
Buol	1276	1362	1480	1167	12092	3475
Parigi Moutong	18521	38230	47148	46193	48687	39756
Tojo Una-Una	1683	17265	17409	17787	17783	14385
Palu	11481	12378	12570	132476	162212	66223
Total Number	98249	535436	217738	343092	390611	317024

Source: Regional Revenue Agency of Central Sulawesi Year 2019 (Data processed)

Table 4.1 shows the increase in the number of MVT objects in 8 districts and 1 city in Central Sulawesi Province from 2014 to 2015, a subsequent decrease in 2016, and an increase to 2018. On average, Toli-Toli Regencies had the highest number of MVT objects, totaling 100,828, followed by Palu Cities with 66,223, while Buol recorded the lowest with only 3,475.

1.4 Motor Vehicle Name Reversal Duty Regression

The results of the Regression Analysis indicated that MVNRD obtained a significance of 0.2550, which was greater than $\alpha=0.05$, indicating an insignificant effect on LGR. The regression coefficient β was 1.461236, with a positive value indicating that any increase in MVNRD had a weak effect.

Table. 4.2 MVNRD Object

Districts/City	MVNTD (Unit)					Average
	2014	2015	2016	2017	2018	
Banggai Laut	2135	2340	2435	2579	2699	2438
Banggai	9843	9572	9559	9099	9623	9539
Morowali	5482	6182	6452	7453	8355	6785
Poso	3872	4781	4377	4526	5400	4591
Toli-Toli	4213	3718	2908	3066	3399	3461
Buol	2414	2581	1887	1855	2066	2161
Parigi Moutong	7612	7138	6120	5900	7708	6896
Tojo Una-Una	1728	3534	2427	2542	2464	2539
Palu	3149	2871	29785	27821	32020	19129
Total Number	40448	42717	65950	64841	73734	57539

Source: Regional Revenue Agency of Central Sulawesi in 2019 (Data processed)

Table 4.2 shows the increase in the number of MVNRD objects in 8 districts and 1 city in Central Sulawesi Province between 2014 and 2018. On average, Palu had the highest number of MVNRD objects, totaling 19,129, followed by Banggai with 9,539, while Buol recorded the lowest with only 2,161.

The result was in line with (Agustina, 2015), stating that MVNRD did not have a significant effect on LGR of South Kalimantan Province in 2003-2012. This could be attributed to the quite high number of motorized vehicles. The contribution of MVNRD to LGR was relatively small due to the transactions of buying and selling motorcycles among residents, resulting in a significant increase in name transfers.

The Local Government had also not been optimal in the collection of MVNRD. According to (Mardiasmo, 2009). "A budget is a statement of estimated performance to be achieved over a certain period expressed in financial measures." (Tanjung, 2006) also described a budget as "a guideline for actions to be implemented by companies or organizations, following a plan of revenue, expenditure, transfer and financing, measured in monetary units, arranged systematically for a specific period".

V. CONCLUSION AND RECOMMENDATION

5.1. Conclusions

In conclusion, the results of the panel data regression using contribution and PLS Method aimed to determine the influence of MVT and MVNRD on LGR in 9 Regencies / City in Central Sulawesi Province over five years (2011-2015). The following conclusions were drawn:

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1. Contribution of MVT and MVNRD to Central Sulawesi Revenue over the last 5 years decreased, specifically between 2014 and 2018. This indicated the suboptimal role of government in implementing tax collection policies.
2. MVT and MVNRD had an insignificant effect, indicating that MVT had a weak influence on LGR.

5.2. Recommendations

The following recommendations were provided based on the results:

1. The Local Revenue Agency and MVT section were recommended to maintain the policies implemented for the prosperity of all residents in regencies and cities of Central Sulawesi Province.
2. The Samsat Offices in Central Sulawesi should improve public services and conduct more frequent socialization about the importance of tax payments for mutual welfare.
3. The Samsat Offices were also required to take firm action against taxpayers who did not pay tax by imposing sanctions in the form of fines.
4. This study should be used as a reference for future study endeavors.

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REFERENCES

- 1) Agustina, R. (2015). the Analysis of Motor Vehicle Tax and Motor Vehicle Name Reversal Duty on Locally-Generated Revenue in South Kalimantan in 2003-2012 Period. *Economic and Business*, 8(1), 83-99.
- 2) Ekananda. (2016). *Econometric Analysis of Data Panel*. Yogyakarta: Mitra Wacana Media.
- 3) Mahmudi. (2010). *Regional Financial Management*. Jakarta: Erlangga.
- 4) Mardiasmo. (2009). *Accounting for Public Sector*. Yogyakarta: Andi Offset.
- 5) Minister of Home Affairs. (2009). *Law Number 28 of 2009 Concerning Local Tax and Local Retribution*. Jakarta: Minister of Home Affairs.
- 6) Minister of Home Affairs. (2014). *Law Number 23 Year 2014 Concerning Local Governmental*. Jakarta: Minister of Home Affairs.
- 7) Muchtar, M., Abdullah, M., & Susilowati, D. (2017). the Analysis of Motor Vehicle Contribution on Locally-Generated Revenue in Barito Regency. *Journal of Economics*, 1, 385-399.
- 8) Silalahi, U. (2015). *Method of Social Quantitative Research*. Jakarta: CV. Alfabeta.
- 9) Sugiono. (2008). *Statistic for Research*. Jakarta: CV. Alfabeta.
- 10) Tanjung, A. (2006). *Accounting of Regional Finance: Concept and Application*. Jakarta: CV. Alfabeta.
- 11) Widarjono, A. (2015). *Applied Statistics*. Yogyakarta: UPP STIM YKPN.



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