The Effect of Regional Tax and Regional Retribution on Regional Expenditure in Local Governments of North Sumatera Province

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Abstract

The purpose of this research is to examine the significant impact of Regional Tax and Regional Retribution to Regional Expenditure in Regency/City at North Sumatera Province. The method used is using time series data design with 33 Regency/City consisting of 25 Regency and 8 City at North Sumatera Province as a sample. This research is done for 2012-2015 period. This research utilizes secondary data. The data are taken from Badan Pusat Statistik (BPS) of North Sumatera Province. The data which is analyzed in this research are collected through the region budget of Revenue and Expense and the realization region budget of Revenue and Expense. The data which have already collected are processed with classic assumption test before hypothesis test. Hypothesis test in this research use double regression with partially test (t test), simultaneously test (F test) and coefficient determination test (R2). The result of this research shows that partially Regional Tax and Regional Retribution have a positive significant impact to the Regional Expenditure in Regency/City at North Sumatera Province. Local Tax and Local Retribution have a positive significant impact to the Local Expenditure in Regency/City at North Sumatera Province.

Keywords: regional tax, regional retribution, and regional expenditure.

Introduction

Implementation of regional autonomy marked by the enactment of Law no. 22 of 1999 on local Government and Law no. 25 of 1999 on Fiscal Balance between the Central Government and Local Government (in its development the two regulations are updated with Law No. 32 of 2004 and Law No. 33 of 2004) into a new chapter related to the relationship between the Central Government and Local Government. Regions (districts and municipalities) are given wider authority to manage their resources.

The image of regional autonomy in regional autonomy can be seen from how big the ability of local government in terms of self-financing government activities, regional development and services to local communities. In the creation of regional autonomy as the objective of regional autonomy, local governments must adapt and strive to improve the quality of public services and improvements in various sectors that have the potential to be developed into a source of local revenue from regional taxes and regional retribution.
According to Law no. Law No. 32 of 2004 on regional government article 157, regional revenue sources consist of: (1) a source of local revenue (PAD) consisting of the results of regional taxes, the results of regional retribution, the result of separated regional wealth management, other revenue (PAD), (2) Balancing Funds, (3) Other Legal Revenue. Management of regional taxes and Levies is stipulated in Article 1 of Law no. 28 of 2009 on Regional Taxes and regional retribution and other implementing regulations including local regulations.

The ability of financing is one of the important criteria for assessing the real capability of a region in managing and managing its own household, without sufficient cost, it is impossible for a region capable of exercising its authority in administering and carrying out its duties and obligations to manage its own household. Conversely, if the financial capacity of a region is strong, then the ability of the region to cover all its obligations and responsibilities will also be stronger.

Regional taxes and regional retribution are expected to meet all regional expenditure allocations of a local government in optimizing the potential of its own region as a source of revenue, the smaller the central government or provincial government. And with the lack of central and provincial government roles to local governments in terms of local financial management. Then the principle of independence in public sector accounting that serve as one of the benchmarks of the success of the autonomous region to run regional autonomy can be said achieved.

**Formulation of the Problem:**

1. Do regional taxes affect regional expenditure on Regency / Municipality Government in North Sumatera Province.
2. Do the regional retribution affect the regional expenditure on the Regency / City Government in North Sumatra Province.
3. Do regional taxes and regional retribution affect the regional expenditure on the District / City Government in North Sumatra Province.

**Literature Review**

**Definition of Regional Expenditure**

Definition of Expenditure under PSAP No.2, Paragraph 7 (in Erlina et al, 2008) is "all expenditures from the General Treasury Account of the State / Region which reduces the balance of the Budget over the period of the relevant fiscal year which the government shall not be repaid". Meanwhile, according to the Minister of Home Affairs Regulation No. 13 of 2006 on Guidelines for Regional Financial Management as amended by Regulation of the Minister of Domestic Affairs No. 59 of 2007 and the second amendment with the Regulation of the Minister of Home Affairs No. 21 of 2011 on the second Amendment. "Regional expenditure is defined as a regional government liability recognized as a deduction of net worth."

Regional Expenditure as referred to in the Regulation of the Minister of Home Affairs Number 13 Year 2006 concerning Guidelines on Regional Financial Management Article 31 paragraph (1) states that regional expenditure is used in the framework of financing the implementation of government affairs which is the authority of the province or kabupeten / kota consisting of compulsory affairs, Options and matters handled in certain sections or fields which may be undertaken jointly between the government and local governments or between local governments determined under the laws and regulations.

**Definition of Regional Tax**

Based on Law no. 28 of 2009, the meaning of Regional Tax is the contribution of the Taxpayer to the Region which is owed by an individual or a coercive body under the
Act, by not obtaining direct rewards and being used for the purposes of the Region for the greatest possible prosperity of the people.

**Definition of Regional Retribution**
According to Law no. 28 of 2009 on Regional Tax and Regional Retribution, which is referred to as Levy of Area, hereinafter referred to as Levy is a local levy as payment for certain services or licenses specially provided and provided by the local government for the benefit of individuals or bodies.

**Hypothesis**
H1: Regional Tax has significant effect on Regional Expenditure on Regency / City Government in North Sumatera Province
H2: Regional Retribution have significant effect on regional expenditure on regency / city government in North Sumatera Province
H3: Regional Taxes and regional retribution have a significant effect on regional expenditure on District / City Government in North Sumatera Province.

**Research Methods**

**Operational Definition of Variables**
1. Variable Free (Independent Variable) Regional Tax \((X)_1\), The measurement scale used is the ratio scale. Where, the ratio scale is a measurement scale showing the actual age category, income and comparison of measured constructs. This scale uses the absolute zero point so as to overcome the flaws of changing starting points on the interval scale (Uma Sekaran, 2006). Levy Area \((X)_2\), measurement scale used retribution area in this research is scale ratio.
2. Dependent Variable In this study the dependent variable (dependent) is the total District Government Expenditures District / City in North Sumatra Province. The measurement scale used in this regional expenditure is the ratio scale.

**Population**
Population in this research is Report of realization of APBD of Regency / City Government in North Sumatera Province year 2012-2015, where in North Sumatera there are 33 Local Government.

**Data Analysis Technique**

**Descriptive Statistics**
Descriptive statistics are part of a data analysis that gives a preliminary picture of each variable used in the study. The description or descriptive data can be seen from the mean, maximum, minimum, and standard deviations of each variable in the study.

**Normality Test**
According to Ghozali (2005), the normality test aims to test whether in the regression model, the intruder or residual variable has a normal distribution.

**Heteroscedasticity Test**
Heteroscedasticity test was performed to test whether in a regression model there was a variance inequality of the residual from one observation to another. If the variance of the residual from one observation to another is fixed, it is called homoscedasticity and if the variance is different, it is called heteroscedasticity. A good regression model is that there is no heteroscedasticity.

**Test Autocorrelation**
Autocorrelation problems will arise when the data used is time series data (timeseries). "Autocorrelation will arise when after data is a function of previous
data or subsequent data has a high correlation with previous data on time coincided data and the amount of data depends on where the data occurs" (Hadi, 2006).

**Multiple Linear Regression Analysis**
Regression analysis is used to measure the strength of the relationship between two or more variables, also shows the direction of the relationship between the dependent variable with the independent variable, Ghozali (2011). To find out how big the relationship between variables X_1 (Local Tax) and X_2 (Levy Area) with variable Y (Spending Area) can be calculated by the formula: Y = α + β_1 X_1 + β_2 X_2 + ε.

**Hypothesis Testing**
Partial Test (t test) Testing aims to determine whether each independent variable influences the dependent variable significantly. For this partial test, the t-test is used Simultaneous Significant Test (F Test) This test aims to determine whether the independent variables jointly affect the dependent variable significantly. This simultaneous test uses F test, that is by comparing between significance value F with significance value used is 0,05.

**Results and Discussion**

**Normality Test**
From result of normality test with graph of histogram and normal graph Plot shows difference of result and when doing heteroskedastisitas test, result also indicate has happened heteroskedastisitas at regresi model so that done corrective action that is by transformation all research variable into natural logarithmic function (Ln). The results of data re-testing:

![Normality Test](image)

*Figure 1. Normality.
Source: Processed Data SPSS 22, 2017*

**Multicollinearity Test**
Multicollinearity test aims to test whether the regression model found a correlation between independent variables. A good regression model should not be correlated among independent variables. To detect the presence of multicollinearity can be seen through the variance inflation factor (VIF). The way used to detect the presence or absence of multicollinearity is to look at the tolerance and VIF values. If the value of variance inflation factor (VIF)> 10 and tolerance <0.10 then there is multicollinearity.
From the above test results, it can be seen that the tolerance numbers \( \text{Ln}_\text{X1}, \text{Ln}_\text{X2} > 0.10 \) and VIF <10. Tolerance value calculation results also show no independent variable has Tolerance value less than 0.10. This indicates that there is no multicollinearity among the independent variables in the study.

**Heteroscedasticity**

Based on the scatterplot graph above results show that the dots do not spread randomly either above or below the number 0 on the Y axis. It can be concluded that there is heteroskedastisitas on the regression model. Due to differences in results, corrective action is taken using one of the methods by transforming all research variables into natural logarithm (Ln) functions, then retesting the data. The results of data re-testing:

![Scatterplot chart](image-url)

**Figure 2. Scatterplot.**

*Source: Processed Data SPSS 22, 2017*

The Scatterplot chart after the transformation with Ln from the scatterplot image above, it appears that the points spread randomly above and below the number 0 on the Y axis, and do not form a specific pattern or irregular. This indicates no heteroscedasticity in the regression model so that the regression model is feasible.

**Test Autocorrelation**

The autocorrelation test aims to test whether in multiple linear regression models there is a correlation between the confounding error in period \( t \) with the intruder error in period \( t-1 \) (previous). Autocorrelation can be known through the Durbin-Watson Test (DW test).

The results of the autocorrelation test above shows the Durbin Watson (DW) statistical value of 1.752. This value will be compared with the value of the table by using the significance value of 0.05 (5%), the number of observations 132 (n) and the number of independent variables 2 (\( k = 2 \)). From the Durbin Watson table we get the upper limit value (dU) 1.7466 lower limit value (dL) 1.6851 and 4-dU = 2.2534. Therefore, the DW value is greater than dU and less than 4-dU (1.7466 <1.752 <2.328), so it can be concluded that there is no autocorrelation either positive or negative.
**Multiple Linear Regression Analysis**

In the processing of data by using linear regression, conducted several stages to find the relationship between independent variables and dependent variable, through the influence of Ln_X1 (Regional Tax) and Ln_X2 (Retribution regional) to Ln_Y (Regional Expenditure). then obtained the model of multiple regression equation as follows:

\[
\text{Ln}_Y = 18,698 + 0.279\text{Ln}_X1 + 0.094\text{Ln}_X2 + \varepsilon
\]

The regression equation can be explained as follows:

a. The constant of 18,698 indicates that if there are no variables Ln_X1 and Ln_X2 (Regional Tax and Retribution Regional), then the level of Regional Expenditure 18,698.

b. The coefficient of Ln_X1 (Regional Tax) of 0.279, indicates that the ratio of Regional Tax has a positive effect on Regional Expenditure (Y). This means that if the Regional Tax is increased it will increase the level of Regional Expenditure by 0.279.

c. The coefficient of Ln_X2 (Retribution regional) is 0.094, indicating that the ratio of Retribution regional has a positive effect on Local Expenditure (Y). This means that if the ratio of local levies boosted it will increase the Regional Expenditure by 0.094.

d. Standard error (\(\varepsilon\)) indicates the error rate of the intruder.

**Hypothesis Testing**

**Partial Test (t test)**

The value of the test t arithmetic can be seen from the p-value (sig column) on each independent variable, if p-value is smaller than the specified level of significance or t arithmetic (column t) is greater than t table, then the independent variable Partially affect the dependent variable. The method in determining t table using 5% significance level with df = n - k (k is the number of independent variables), df = n - k, df = 132 - 2 = 130, so that t table value of 1.97838.

Based on the above table, it is known the value of t arithmetic of each independent variable in partial effect on independent variables are:

a. Regional Tax ([X]_1) has a significance value of 0.000 which means this value is less than 0.05, while the value t_hitung 11.092> t_table 1.97838.

b. Based on these two values, it can be concluded that Ha is accepted (H_ (0) rejected) or explained that the variable of Regional Tax partially influential significantly to the Regional Expenditure (Y).

c. Regional Retribution ([X]_2) has a significance value of 0.002 which means this value is greater than 0.05, while the value t_hitung 3.179> t_table 1.97838.

d. Based on these two values, it can be concluded that Ha is accepted (H_(0) rejected) or explained that the variable of Regional Retribution partially influential significantly to the Regional Expenditure (Y).

**Simultaneous Test (F test)**

Based on the above table obtained F value counted 169.792 with a significance level of 0.000, much smaller than 0.05. Therefore, the regression model can be used to predict the level of regional financial independence. While F table with k - 1 = 2 - 1 = 1 and n - k = 132 - 2 = 130 on the degree of confidence 5% obtained F table of 3.07, it can be stated that F arithmetic> F table where 169.792> 3.07. In other words Ha is accepted, which states that all independent variables simultaneously and significantly affect the dependent variable, which means, Local Tax (X_1) and Regional Retribution (X_2) simultaneously affect the Regional Expenditure (Y).
Discussion

Effect of Regional Tax on Regional Expenditure
From the results of testing the variables can be concluded that the Regional Tax has a significant positive effect on Regional Expenditure. This is evident at the value $t_{hitung} \geq t_{table}$ with a significance value of 0.000 smaller than the significant limit (0.05). In the Regional Tax variable, the regression coefficient ($b_1$) is 0.279 or positive, it can be said that if the number of regional taxes increases, then the Regional Expenditure on the Regency / City Government in North Sumatera Province will increase.

The results of this study support Rolan Pakpahan (2009) research that partially and simultaneously, Regional Tax has a significant positive influence on Regional Expenditure. In addition, this study is not in line with Sandri, (2013) that simultaneously the regional Tax has no effect on Capital Expenditure, then the variable Levy also has no effect on Capital Expenditures.

Effect of Local Retribution on Regional Expenditure
From result of examination of variable of Levy Region can be concluded that levy area have a significant positive effect to regional expenditure. This is evident on the value $t_{hitung} \geq t_{table}$ with a significance value of 0.002 which means greater than the significant value 0.05. In the Regional Retribution variable, the value of regression coefficient ($b_2$) is equal to 0.94 or positive signified it can be said that if the amount of Local Retribution has increased, the Regional Expenditure on Regency / City Government in North Sumatera Province will increase.

This research is in accordance with the research Riski, (2009) that Partially and simultaneously can be concluded that Levy Region has a significant positive influence on Regional Financial Independence. This is in contrast to Pakpahan (2009) that local levies have a positive but insignificant effect on regional expenditures, and also according to Sandri (2013) that regional levy variables have no effect on capital expenditure in Bolaang Mongondow district.

Effect of Regional Taxes and Regional Retributions on Regional Expenditures
From the results of testing the variable of Regional Tax and Regional Retribution can be concluded that Regional Tax simultaneously or simultaneously influence on Regional Expenditure. This is evident at the $F_{hitung}$ value of 169.792 is greater than the $F_{table}$ of 3.07. With a significant value in this $F$ test of 0.000 < 0.05. Where the coefficient of determination of $R$ value of 0.851 indicates that the correlation or the relationship between Regional Expenditure ($Y$) with Local Tax ($X_1$) and Levy Area ($X_2$) is quite strong at 85.1%. It is said to be strong enough because the number is above 0.5 (50%).

Conclusions
Based on the analysis that has been done on the Effect of Regional Taxes and Regional Retributions on Regional Expenditure on Regency / City Government in North Sumatra Province, the following conclusions are obtained:
1. Based on the partial test (t-test) it can be concluded that the Regional Tax has a significant positive effect on Regional Expenditure on Regency / City Government in North Sumatra Province.
2. Based on the partial test (t-test), it can be concluded that Regional Retribution have a significant positive influence on regional expenditures on regency / municipal government in North Sumatra Province.
3. Based on simultaneous test (F-test) it can be concluded that regional tax and regional retribution simultaneously have a significant positive influence on regional expenditure on regency / city government in North Sumatera Province.

Suggestions and Limitations

Based on the conclusions that have been described, the authors provide some suggestions as follows:

1. Researchers are further suggested to further increase the District / City to be studied, so that will get more samples and more accurate results. In addition to adding samples, further research is suggested to take samples of districts outside of North Sumatra Province. This is intended to be able to compare whether the results of this study apply to the District / City outside the Province of North Sumatra.

2. Researchers are further suggested that more use of independent variables in the study.

3. The use of more complete data and longer period of research period so as to be able to generalize the results of the research, while still paying attention to the development of the Regency / City in North Sumatra Province.

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