Determinants of Local Revenue in West Nusa Tenggara Province

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ABSTRACT

The economic growth of a region can be seen from the contribution of increasing regional original income originating from sources of taxes, regional levies, regional property and other separated regional wealth management results, and other legitimate regional revenues. The Province of West Nusa Tenggara in the last few decades has shown a significant increase in local revenue. In this study, the impact of population, inflation, and Gross Regional Domestic Product (GRDP) on local revenue from 2010 to 2021 is explored. The Generalized Method of Moments (GMM) technique uses district or city annual data in a quantitative panel data regression model for the study. According to the findings of statistical studies, local own-source revenue is significantly positively affected by government spending, population, and gross regional product (GDP), but inflation-related price increases have a negligible impact on local revenue. The money supply determines the rate of inflation, the high rate of inflation is caused by the amount of money in circulation.

Keywords: Local Revenue1, Government Expenditure2, Population3, Inflation4, Gross Regional Domestic Product5

ABSTRAK


Kata kunci: Pendapatan Asli Daerah1, Pengeluaran Pemerintah2, Jumlah Penduduk3, Inflasi4, PDRB
INTRODUCTION

Local revenue is one of the sources derived from the region for the development of the district. Local revenue and local retribution have a functional relationship. Regional development will be able to take place and support regional needs if regional retribution increases from year to year. Low local revenue occurs because local spending is very minimal. A region is said to be developed if it has high income and the success of the region in increasing its income has implications for the region's ability to finance its regional spending needs. The economic growth of a region can be measured through the level of local revenue and the components of local revenue consist of local taxes, local levies, the results of regionally owned companies and the results of the management of other separated regional assets, other legitimate local revenues and is one of the supporting factors in fulfilling regional obligations to finance routine expenditures and regional development costs. (Kusuma, 2013).

The growth of PAD realization in NTB Province from 2010 to 2018 fluctuated with an average of around 15.75 percent. The largest growth in PAD realization occurred in 2011 where the growth in PAD realization was 43.84 percent. This shows that the value of PAD realization in 2011 was almost close to 1.50 times when compared to the realization of PAD in 2010. The amount of PAD realization in 2010 was IDR 515,340,956,846.00 and the realization of PAD in 2011 increased to IDR 741,291,174,995.00. The growth of PAD realization was the smallest in 2018 where the growth of PAD realization was -1.43 percent. This shows that the increase in PAD realization in 2018 has decreased when compared to the realization of PAD in 2017. The realization of PAD in 2018 amounted to Rp 1,660,417,707,373.00, which was smaller than the realization of PAD in 2017, which reached Rp 1,684,468,709,593.00. West Nusa Tenggara Province is divided into eight (8) regencies and two (2) cities, namely West Lombok, West Nusa Tenggara Regency and District. Central Lombok, North Lombok, East Lombok, Sumbawa, West Sumbawa, Dompu, Bima, and Mataram City, Bima City are all located on the island of Lombok.

Government spending in West Nusa Tenggara Province increased in 2017 by around 44.8% due to aspects of clean water, village-owned enterprises, family latrines, uninhabitable houses, joint business groups, sustainable food home areas, waste banks, and infrastructure, while in 2018 government spending decreased by 42.1% due to an earthquake so that all planning was delayed and added in 2019, 2020 and 2021 government spending continued to decline by 38.3%, 37.6% and 34.2% due to Covid 19 conditions. If the government has set a policy of purchasing goods and services, then government spending will reflect the costs that the government must incur to implement the policy and government spending provides an impetus to improve the standard of living of the community so that the formation of a productive society will increase government revenue through local revenue. Furthermore, local revenue is obtained from community economic activities such as tax collection, levies and so on.

The number of residents in an area has the potential to increase taxpayers so that tax revenue will also increase local revenue. (Hikmahyanti & Soelistyo, 2021).
The population in NTB Province continues to increase every year. In 2010, the population in NTB reached 4,516,062 people, while in 2018 it increased to 5,013,687 people or experienced a population increase of 497,625 people during the period 2010 - 2018. In 2018, the population was unevenly distributed, because 70.06% (3,512,689 people) lived on Lombok Island and 29.94% (1,500,998 people) lived on Sumbawa Island.

Local revenue cannot be separated from inflation. When the prices of goods and services rise due to inflation, the percentage of taxes collected by the government also rises. On the other hand, inflation can have the opposite effect. With the increase in the price of goods or services, some people will reduce their consumption, both for primary needs and for secondary and tertiary goods. (Muslim 2019). Inflation is a macroeconomic indicator that describes the increase in prices of a number of goods and services that are generally consumed by households. Inflation is the change in the Consumer Price Index (CPI) in each city and the composite index by group per month. Inflation calculation in NTB Province is conducted in two administrative areas, namely Mataram City and Bima City. At the beginning of 2021 the combined inflation of NTB Province was 0.69 percent and at the end of the year the inflation was 0.63 percent. The combined inflation of NTB Province at the beginning and end of this year was the highest throughout 2021. Meanwhile, the lowest inflation occurred in June, which was -0.32 percent. A negative inflation rate is called deflation which indicates a decrease in the price of goods and services consumed by households. It can be said that inflation in NTB Province throughout 2021 is quite manageable, both combined inflation, Mataram City, and Bima City. The highest inflation in NTB Province occurred at the beginning of the year at 0.69 percent, while the highest inflation in Indonesia occurred at the end of the year at 0.57 percent. The lowest inflation in both NTB Province and Indonesia occurred in June at -0.32 percent and -0.16 percent respectively.

Gross Regional Domestic Product (GRDP) is the entire value of products or services produced within the domestic region. GRDP is an indicator that reflects the productivity of the economy in the form of total added value generated by all economic activities. The calculation of GRDP data used refers to the basis recommended by the United Nations as stated in the 2008 System of National Account (SNA 2008). (Nyoman Budiana, 2021). GRDP at current prices in NTB Province in 2021 reached 140.15 trillion rupiah. This value increased compared to 2020 which amounted to 133.61 trillion rupiah. Meanwhile, GRDP at constant prices in NTB Province in 2021 amounted to 95.44 trillion rupiah. This change in the value of Constant ADH GRDP is then calculated into the value of economic growth.

METHODOLOGY

This study uses a quantitative approach, specifically research with a deductive paradigm that aims to test a theory against the reality of existing problems. (Sekaran, 2016). Martono defines quantitative research as identical to the nomothetic deductive paradigm, where the research focuses on certain factors that influence the
occurrence of social phenomena rather than discussing all factors in general. (Martono, 2016). The next stage of this approach will use data in the form of clear unit numbers, which can then be processed using statistical tests. The data used in this research is secondary data. Secondary data is information collected from existing sources (Sekaran and Bougie 2017). (Sekaran and Bougie 2017). Data on expenditure, population, inflation, GRDP, and local revenue. This study uses panel data from eight (8) districts and two (2) cities in West Nusa Tenggara Province, namely West Lombok Regency, Central Lombok Regency, North Lombok Regency, East Lombok Regency, Sumbawa Regency, West Sumbawa Regency, Dompu Regency, Bima Regency, and Mataram City, Bima City. The independent variables in this study are government spending, population, inflation, and GRDP. The dependent variable is local revenue realized from local taxes, the results of local levies, the results of the management of separated local assets, and other legal local revenues. The analysis technique used in this research is the Generalized Method of Moments (GMM) with the following formula:

\[
P_{\text{AD}}_{it} = \beta_1 + \lambda P_{\text{PP}}_{it-1} + \beta_2 J_{P}_{it} + \beta_3 I_{\text{NF}}_{it} + \beta_4 P_{\text{GRDP}}_{it} + \epsilon_{it}(1)
\]

Where PAD is Local Own Revenue in year t. Subscripts i and t represent the number of districts and the time period under study, respectively. Government Expenditure, Population, Inflation, GRDP and \( \epsilon_{it} \) are random variables.

RESULTS AND DISCUSSION

Table 1. Descriptive Analysis

<table>
<thead>
<tr>
<th></th>
<th>BD</th>
<th>JP</th>
<th>INF</th>
<th>PDRB</th>
<th>PAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.255.668</td>
<td>12.945</td>
<td>3.0360</td>
<td>7.0725</td>
<td>188.540</td>
</tr>
<tr>
<td>Median</td>
<td>1.114.563</td>
<td>9.6000</td>
<td>3.1000</td>
<td>5.3200</td>
<td>171.468</td>
</tr>
<tr>
<td>Maximum</td>
<td>3.120.564</td>
<td>52.450</td>
<td>9.2700</td>
<td>107.07</td>
<td>773.606</td>
</tr>
<tr>
<td>Minimum</td>
<td>477.729</td>
<td>2.5600</td>
<td>0.0300</td>
<td>0.3300</td>
<td>142.845</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>5.525.111</td>
<td>12.129</td>
<td>2.5818</td>
<td>10.661</td>
<td>190.965</td>
</tr>
<tr>
<td>Probability</td>
<td>0.000155</td>
<td>0.000000</td>
<td>0.003686</td>
<td>0.0000</td>
<td>0.00000</td>
</tr>
</tbody>
</table>

Source: Processed Data Year 2022,

Based on the statistical test results in table 1 above, this study meets the normality requirements because the amount of data used is more than 30 with the specifications of 8 regencies and 2 cities being sampled in this study with the estimation from 2010 to 2021, so the total number of observations is 120 observations and provides information that the PAD variable obtained a mean of
Rp.188.540 billion, a median of Rp.171.468 billion and a maximum of Rp.773.606 billion, a minimum of Rp.142.845 billion and a probability value of 0.00, meaning that from the data the PAD variable obtained a mean of Rp.188.540 billion, a median of IDR.171.468 billion and a maximum of IDR.773.606 billion, a minimum of IDR.142.845 billion and a probability value of 0.00, meaning that from the data processed there is a significant effect or not the same.

Furthermore, related to the independent variable, namely government spending, the mean value is Rp.1,255,668 trillion, the median is Rp.1,114,563 trillion, the maximum is Rp.3,120,564 trillion, the minimum is Rp.477,729 billion and the probability value shows a value of 0.00, meaning that as a large difference in the character of the data on government spending has a significant or unequal effect. In the population variable, the mean value is 12.9%, the median value is 9.6%, the maximum value is 52.4%, the minimum value is 2.5% and the probability value is 0.00, meaning that the population has a significant or unequal effect. While the mean value of the inflation variable is 3.03%, the median is 3.1%, the maximum is 9.2%, the minimum is 0.03%, so the probability value is 0.00, meaning that the inflation variable has a significant or unequal effect. Furthermore, the GRDP variable shows a mean value of 7.07%, a median of 5.3%, a maximum of 107.07%, a minimum value of 0.33%, then the probability value is 0.00, meaning that the GRDP variable shows a significant or unequal effect.

Table 2. Estimation of Dynamic Panel Data Regression with GMM Model

<table>
<thead>
<tr>
<th>Variables</th>
<th>Difference GMM</th>
<th>GMM System</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>PAD</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>PP</td>
<td>(0.528819)</td>
<td>(0.624317)</td>
</tr>
<tr>
<td>JP</td>
<td>0.0986</td>
<td>0.0000</td>
</tr>
<tr>
<td>INF</td>
<td>(2.21E+09)</td>
<td>(2.29E+09)</td>
</tr>
<tr>
<td>PDRB</td>
<td>0.4041</td>
<td>0.1291</td>
</tr>
<tr>
<td></td>
<td>(1.01E+10)</td>
<td>(6.70E+09)</td>
</tr>
<tr>
<td>Number of observations</td>
<td><strong>120</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>
Number of instruments | 10 | 10  
|----------------------|----|----| 
Sargan Test | 0.232043 | 0.362789  

Source: Oalahan data for 2022,

Based on the GMM test results with the variables of government expenditure, population, inflation and GRDP on local revenue, the regression equation with the GMM model above can be seen. The estimation results and discussion in Table 2 above show equations 1 and 2 as models to show the effect of independent variables and institutional quality as a whole on the dependent variable. Both estimation models presented above show that some are not significant, but the researcher chooses the differences model because the results are better. (Ullah, Akhtar, & Zafarian 2018 and Dessy & Setiawan, 2016). This is supported by research Widarjono & Anto (2020)This is supported by Widarjono & Anto’s (2020) research, which explains that the selected model is a model with a good level of significance and a large value of sargan.

A. Effect of Government Expenditure on Local Revenue

Based on the statistical test results, the probability value for the coefficient of the government expenditure variable is 0.00 (<0.05). This means that the results of data testing are in accordance with the researcher's hypothesis. Where the government expenditure variable has a significant positive effect on local revenue. Related to the hypothesis developed by the researcher above, based on the theory of government spending, it was coined by Mangkoessoebroto (2004) explains that government spending will increase aggregate spending and economic activity in providing public goods so that the flow of government revenue through local revenue also increases from local taxes and levies. In addition, the results of this study are able to contribute to previous studies such as those conducted by Sunandar (2017)The results of his research show that government expenditure has a significant positive effect on local revenue. Other research such as research conducted by Priyono (2010), shows the results that the government expenditure variable has an effect on local revenue.

Other research conducted by Virgiana (2021) that government expenditure variables have a simultaneous effect on local revenue, in line with the results of research conducted by Henriansa (2021), that government expenditure contributes to local revenue. The results of research conducted by Virgiana and Henriansa are also strengthened by the results of research conducted by Mayza (2015) The results show that government spending has a significant positive effect on local revenue. This is because this expenditure will increase aggregate spending and economic activity. The flow of government revenue through PAD increases along with the growth of economic activity.

Government spending reflects policies aimed at improving people's lives. Since the private sector is unwilling to provide goods that many people value, the government must provide public goods. Government activities will shift from facility provision to social spending, which has the potential to increase economic
activity. Local governments impose local taxes and levies in this case that increase PAD. Research Hafifatullah (2020) strengthens the results of research from Virgiana, Henriansa, Mayza that government spending contributes to local revenue. The findings above show that government expenditure contributes very effectively to the operation of government expenditure such as operational expenditure, capital expenditure, unexpected expenditure and transfer expenditure providing reciprocity to the government so that it has a major effect in increasing local revenue.

B. Effect of Population on Local Revenue

Based on the results of the statistical data processing test for the total population variable, the results show a significant positive effect on local revenue by showing a positive number and the probability value is 0.00 smaller than (<0.05) so that the results of this study are in line with the hypothesis developed that population has a significant effect on local revenue, meaning that the development of hypotheses with theory is very relevant where the theory is put forward by Hutsoit, (2017) that the income of a region can be obtained through economic activities such as taxes and levies so that the population has a positive effect on improving the economy and increasing local revenue. In addition, this study is able to confirm with previous studies such as the results of research conducted by Hamdani (2021) From the results of his research, the population variable partially affects local revenue. This is in line with the results of research conducted by Hikmahyanti & Soelistyo (2021) that population has a significant effect on local revenue.

Other studies state that population has an effect on local revenue such as the results of research conducted by Karlina (2013), in line with the results of research conducted by Ramdani (2021), that the population variable can affect local revenue. Karlina and Ramdani’s research is strengthened by Fatharani (2019) The results of his research show that the total population variable has a significant relationship to local revenue.

C. The Effect of Inflation on Local Revenue

Testing the effect of inflation on local revenue has no significant positive effect on local revenue with a number 6.70E+09 and the probability test value of 0.1291 is greater than (<0.05), meaning that the results of this study are in line with the hypothesis developed, namely inflation has no significant positive effect on local revenue. Thus, this study is in line with the hypothesis development and is not relevant to the theory put forward by Keynes (2006) This research is based on macro theory and emphasizes other aspects of inflation so as to increase local revenue. These results are able to provide confirmation to previous studies such as those conducted by Ramdani (2021), showing the results that the inflation variable does not have a positive effect on local revenue. This is clarified by Susanto (2014) that the inflation variable does not show significant results on local revenue, but complaints occur in the corporate sector because the
tax rate increases. The high production costs that companies must bear due to rising commodity prices and falling purchasing power. Inflation is also caused by excessive public consumption which leads to waste.

Other studies that support this research are Spending (2021) The results of his research show that the inflation variable has no significant effect on local revenue and research conducted by Ernita (2021) the results of his research show that the inflation variable does not have a significant effect on local revenue, the results of Spending and Ernita’s research are reinforced by Priyono & Handayani (2021) The results show simultaneously that the inflation variable has no significant effect on local revenue. This is in line with the results of research conducted by Weley (2019), that the inflation variable has no significant effect on local revenue.

D. The Effect of Gross Regional Domestic Product on Local Revenue

Based on statistical tests and the value of the GRDP variable shows significant results on local revenue with a probability value of 0.04 percent, meaning that the data test results show that it is in accordance with the hypothesis developed by the researcher. Related to the hypothesis developed by the researcher above based on the theory of GRDP by Peacock and Wisemen, argues that economic development leads to increased tax collection and increased government spending. Per capita income is calculated from ADHB and ADHK growth by shifting the various gross national incomes or gross domestic incomes in a given year by the number of products produced in that year. A constant GRDP will have a direct impact on government revenue generation, as one of the consequences is an increase in tax rates set by local governments for businesses.

This means that the hypothesis developed with the theoretical basis described above is relevant, this is in line with the results of research conducted by Priyono (2010) The results of his research show that the GRDP variable has an effect on local revenue, in line with the results of research conducted by Priyono (2010). Wahyuni (2017) that the GRDP variable has a significant effect on local revenue. This research is able to provide confirmation to previous studies such as the results of research conducted by Prana (2016), with the RET model on the GRDP variable showing significant results on local revenue and the results of Prana's research are reinforced by Muslim (2019) In his research, the results show that the GRDP variable has a positive and significant effect on local revenue. This is further emphasized by Fatharani (2019) that the GRDP variable can provide a positive contribution in increasing local revenue and regional expenditure.

CONCLUSION

a. Government expenditure has a positive effect on local revenue in West Nusa Tenggara Province in 2010-2021. This finding is in line with the theory of Mangkoesoebroto (2004) Mangkoesoebroto (2004) explains that government spending will increase aggregate spending and economic activity
in providing public goods so that the flow of government revenue through local revenue also increases from local taxes and levies. In line with the results of previous studies such as those conducted by Sunandar (2017) & Priyono (2010) in line with the results of previous studies such as those conducted by Sunandar (2017) & Priyono (2010), that government spending has a significant effect on local revenue.

b. Virgiana (2021) & Henriansa (2021) explains that government spending has a positive effect on local revenue because government spending will increase aggregate and economic activity. Along with the growth of economic activity, the flow of government through local revenue also increases.

c. Population has a positive effect on local revenue in West Nusa Tenggara Province in 2010-2021. This is in line with the theory Hutasoit (2017) according to Hutasoit (2017), the revenue of a region can be obtained through economic activities such as taxation and levies, so that population has a positive effect on improving the economy and local revenue. In line with the results of other studies such as research Hamdani (2021) & Ramdani (2021)(2021), that population has an effect on increasing local revenue. Karlin (2013) & Farharani (2019) the results of his research show that the population variable has an effect on increasing local revenue.

d. Inflation has no significant effect on local revenue in West Nusa Tenggara Province in 2010-2021. This finding is not in line with the theory of Keynes (2006) based on the macro theory, those who benefit from inflation are those who have a large increase in income from the inflation rate. According to Simanjuntak Halim (2020)(2020), inflation will increase local revenue determined by sales turnover, such as hotel and restaurant taxes. Previous studies strengthen this research such as those conducted by Susanto (2014) & Spending (2021), whose research results on the inflation variable did not show a significant effect on local revenue. Ernita (2021) & Priyono Weley (2019), reinforcing the results of research stating that inflation cannot affect local revenue.

e. Gross regional domestic product has a significant effect on local revenue in West Nusa Tenggara Province in 2010-2021. This finding is in line with the theory put forward by Peacock & Wiseman (2014), argues that economic development increases tax collection, and that increased tax revenue increases government spending. A constant GRDP will have a direct impact on government revenue generation, one consequence of which is an increase in tax rates set by local governments for entrepreneurs. Previous studies also strengthen the results of this study such as wahyuni (2017) & Prana (2016) The results of his research show that GRDP has a positive effect on local
revenue. Other research conducted by Muslim (2019) & Fataharani (2019), explaining that GRDP has a significant effect on local revenue.

REFERENCE

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