The Effects of Investment, Government Expenditures and Labor Productivity on Local Government Financial Performance

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Abstract:-
This study aims to analyze and explain the effect of investment, government expenditure, and the effect of labor productivity on the financial performance of district/city governments in the Luwu Raya region of South Sulawesi Province. The data used in this study are secondary data in the form of panel data in the form of time series data from 2010 to 2017 and cross section data from 4 districts/cities in Luwu Raya. Testing the hypothesis in this study was carried out using the method of multiple linear regression analysis (multiple regression analysis) with the help of Eviews 9 software which aims to test the effect of the relationship between one variable to another variable. The results showed that: (1) investment has a significant positive effect on regional financial performance, (2) government expenditure does not affect the financial performance of local governments, and (3) labor productivity has a significant positive effect on the financial performance of local governments.

Keywords: investment, government spending, labor productivity, local government financial performance.

Introduction:-
The phenomena that occur related to the financial performance of district/city governments in South Sulawesi, especially in the Luwu Raya region, show that four districts/cities in the Luwu Raya region received a poor predicate in the presentation of accountability of local government financial reports (Kemenpan and RB, 2019). In addition, the phenomenon that occurs is related to the level of regional independence in the Greater Luwu region, based on data from the Ministry of Finance Ministry of Finance (2018) showing the low performance of regional governments and high regional dependence on transfers from the central government. The high regional dependence on transfer funds from the center is shown through the minimal proportion of local revenue. This can be seen from the data of the Ministry of Finance of the Republic of Indonesia DJPK in the last three years, where the ability of Regional Original Revenue (PAD) in purchasing regional needs in the Greater Luwu region is still below 30 percent, as shown in the following table.

<table>
<thead>
<tr>
<th>Region / City</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regency Luwu</td>
<td>9.01</td>
<td>9.07</td>
<td>11.42</td>
</tr>
<tr>
<td>Regency Luwu Utara</td>
<td>11.3</td>
<td>15.02</td>
<td>11.46</td>
</tr>
<tr>
<td>Regency Luwu Timur</td>
<td>18.25</td>
<td>20.39</td>
<td>27.74</td>
</tr>
<tr>
<td>City of Palopo</td>
<td>14.74</td>
<td>15.88</td>
<td>22.28</td>
</tr>
</tbody>
</table>

Source: DJPK, 2019

Research on the level of regional financial independence has been widely investigated in Indonesia and shows different findings. Some research findings have found that government financial performance can be influenced by private investment (Anggraini, 2017; Ifrizal et al., 2014; Haryono and Nugraha, 2016; Anwar et al., 2007; Batik, 2013), government expenditure (Kurniawan et al. 2017 and Bellarminus , 2015), and labor productivity (Rustiono, 2008; Simanjuntak, 2002; and Arlani, 2012). In addition, the results of different studies found that investment does not affect the government's financial performance (Kurniawan et al., 2017; Sodik, 2007; Rion, 2013; Berutu, 2011; and Wiyono, 2017), government expenditure does not affect government financial performance (Handoko, 2013), and labor productivity not on government financial performance (Kurniawan et al., 2017; Julfiansyah, 2013; Haryanto, 2014; Kusrini, 2015; and Perwira et al., 2018).

The inconsistency of this research shows that the financial performance of regional governments in Indonesia is still diverse. This is due to the financial performance of local governments can be influenced by various factors. Factors that influence the financial performance of regional governments include: regional revenues, regional expenditure, regional financing, human resources and macroeconomic conditions of a region.
Therefore, the financial performance of the local government is an important point, so an analysis of the factors that affect the financial performance of local governments is important to do. Some studies that have been carried out in general the results state that the information contained in the financial statements of local governments and expressed in financial ratios affect the financial performance of local governments. Financial performance is a measure of performance that uses financial indicators (Hamzah, 2007). According to Halim (2012: 232), regional financial performance or regional capacity is one measure that can be used to see regional capacity in carrying out regional autonomy. Based on the statement above, it can be concluded that the financial performance of the regional government is a picture of the achievement of a program/policy that has been planned by the regional government for a certain period that can be measured using financial indicators.

**Literature Review:-**

**Fiscal Decentralization**

In implementing fiscal decentralization, the principle of money should follow function is a principle that must be considered and implemented, meaning that any transfer or delegation of government authority has consequences on the budget needed to carry out this authority. The number of government sectors that are the responsibility of the bureaucracy is the same between the levels of district/city and provincial governments in Indonesia, but the success of each region exercising its authority depends on the region concerned in accordance with creativity, regional government organizational capacity, and the condition of each region. According to Bird and Vallamcourt (2000), fiscal decentralization has three meanings, namely deconcentration, meaning the release of responsibilities within the central government to vertical agencies in the region or to the regional government; delegation, meaning that the region acts as a government representative to carry out certain functions on behalf of the government; and devolution, meaning that it relates to certain situations that are not only implementation but also the authority to decide what needs to be done in the area. According to Saragih (2003), fiscal decentralization is a process of distributing budgets from higher levels of government to lower governments to support the functions or duties of government and public services in accordance with the many authorities delegated to government.

**Investment**

Economic theory defines or defines investment as expenditures to buy capital goods and production equipment with the aim of replacing and mainly adding capital goods in the economy that will be used to produce goods and services in the future. According to Boediono (1992) investment is expenditure by the producer sector (private) for the purchase of goods and services to add to the stock used or for plant expansion. Dornbusch & Fischer argues that investment is the demand for goods and services to create or increase production capacity or income in the future. The general requirements of a country's economic development according to Todaro (1981) are: (1) capital accumulation, including new accumulations in the form of land, physical equipment and human resources; (2) population development coupled with the growth of the workforce and their expertise; and (3) technological progress.

**Government Expenditures**

Government expenditure can also be interpreted as the use of money and resources of a country to finance a state or government activity in order to realize its function in realizing prosperity. Correspondingly, Dornbusch and Fisher stated that government expenditure is a reflection of its policy (fiscal policy) which is an instrument used to influence its economic conditions in improving people's welfare (Manik and Hidayat, 2010). Theories regarding government expenditure in macroeconomic theory have two different views, namely Wagner's Theory and Peacock and Waseman's Theory. According to Wagner, government spending and government activities are increasingly increasing. This tendency by Wagner is called the law of increasing the role of the government. The core of the theory is the increasing role of government in the activities and economic life of society as a whole. Wagner stated that in an economy if per capita income increases, then government spending will relatively increase, mainly because the government must regulate relationships that arise in society, law, education, recreation, culture and so on. In addition to Wagner, government spending was also explained by Peacock and Wiseman by presenting their theories based on an analysis of government revenues and expenditures. The government has always tried to increase its expenditure by increasing tax revenues, even though the public does not like paying large taxes to finance the growing government expenditure. Increasing tax
revenues has also caused government spending to increase. Under normal circumstances, increasing GNP causes greater government revenues, as well as increasing government spending.

**Labor Productivity**

According to Todaro (2000) population growth and growth of the work force are traditionally considered as one of the positive factors that spur economic growth. A larger amount of labor means increasing the level of production, while greater population growth means that the size of the domestic market is greater. However, it is still questionable whether the rate of rapid population growth will really have a positive or negative impact on economic development.

According to BPS the population aged 10 years and over is divided as the workforce and not the workforce. The Labor Force is said to work if they do work with the intention of obtaining or helping to earn income or profits and the length of work at least one hour continuously during the past week. Whereas residents who do not work but are looking for work are called unemployed (Santosa, 2001). The number of work forces that work is a description of the conditions of available employment. The greater the amount of employment available, the more it will increase the total production in an area.

**Local Government Financial Performance**

Financial performance is a measure of performance that uses financial indicators. Basically, financial performance analysis is carried out to assess past performance by carrying out various analyzes to obtain financial positions that represent the reality of the entity and the potential performance that will continue. One tool to analyze the financial performance of local governments is to carry out a ratio analysis of the APBD that has been determined and implemented (Halim, 2008: 230). According to Mardiasmo (2009: 121), performance measurement in the public sector (local government agencies) is a system that aims to help public managers assess the achievement of a strategy through financial and non-financial measurement tools. Mahsun (2013: 25), argues that performance measurement is a process of evaluating the progress of work towards predetermined goals and objectives, including information on the efficient use of resources in producing goods and services, the quality of goods and services, the results of activities compared to the intended desired and effective actions in achieving goals. Based on the opinion above, it can be concluded that performance measurement is an assessment to determine the achievement of an organization's performance, because performance measurement is strengthened by establishing reward and punishment systems.

**Research Methods:**

This research is a causality study where there is a relationship between two or more variables. The relationship in this study is a causal relationship that is cause and effect, where there is an exogenous variable (free) that is a variable that affects the endogenous variable (bound) that is the variable that is affected. The locations of the research conducted were regencies/cities in South Sulawesi Province which were included in the Greater Luwu region which consisted of Palopo City, Luwu Regency, East Luwu Regency, and North Luwu Regency from 2010 to 2017, while the research period was planned to last for two months. The selection of research area categories within the Luwu Raya area is a research site because the three regencies and one city have similar characteristics both geographical and regional sources of revenue. Luwu Raya was once a large district which was later divided into Luwu district and Palopo City. Luwu Regency was later divided into two new autonomous regions, namely North Luwu district and East Luwu district. Thus, the results of this study can be generalized to answer research problems regarding the effect of investment, government expenditure, and labor productivity, on the financial performance of local governments. The data analysis technique used in this study is multiple linear regression analysis. The conceptual framework of research based on relationships between research variables is shown in Figure 1 below.
Results:

Descriptive Statistics
In this study the descriptive statistical analysis listed consisted of the minimum value, maximum value, mean value, standard deviation, and number of observations from the data, as shown in the following table.

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Investment</th>
<th>Government Expenditures</th>
<th>Labor Productivity</th>
<th>Local Government Financial Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>27.70</td>
<td>26.67</td>
<td>16.96</td>
<td>2.74</td>
</tr>
<tr>
<td>Maximum</td>
<td>28.94</td>
<td>28.02</td>
<td>18.62</td>
<td>18.61</td>
</tr>
<tr>
<td>Mean</td>
<td>28.31</td>
<td>27.39</td>
<td>17.91</td>
<td>9.50</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.36</td>
<td>0.37</td>
<td>0.42</td>
<td>4.38</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
</tbody>
</table>

Source: data processed, Attachment

Based on Table 2, it can be described about the variables used in this study as follows:

1. Investment
   The descriptive analysis shows that during the study period the lowest value of investment was 27.70 in Palopo in 2010. The highest value of investment was 28.94 in East Luwu district in 2017. Investment has an average of eight years 28.31. Investment has a standard deviation of 0.36 lower than the mean 28.31. Thus it is concluded that investment variables are normally distributed.

2. Government Expenditure
   Descriptive analysis results showed that during the study period the lowest value of government expenditure was 26.67 in Palopo in 2011. The highest value of government expenditure was 28.02 in Luwu district in 2016. Government expenditure had a mean of eight years of 27.39. Government expenditure has a standard deviation of 0.37 lower than the mean of 27.39. Thus it is concluded that government expenditure variables are normally distributed.

3. Labor Productivity
   The descriptive analysis showed that during the study period the lowest value of labor productivity was 16.96 in East Luwu district in 2010. The highest value of labor productivity was 18.62 in East Luwu district in 2014. Labor productivity had a mean of eight year of 17.91. Labor productivity standard deviation is 0.42 lower than the mean of 17.91. Thus it is concluded that labor productivity variables are normally distributed.

4. Local Government Financial Performance
   Descriptive analysis results show that during the study period the lowest value of local government financial performance was 2.74 in Luwu District in 2011. The highest value of local government financial performance was 18.61 in East Luwu District in 2013. Financial performance of local governments has a mean for eight years at 9.50. The
government financial performance of the regional standard deviation of 4.38 is lower than the mean of 9.50. Thus it is concluded that the variable financial performance of regional governments is normally distributed.

**Classic Assumption Test**

**Multicollinearity Test**
The results of multicollinearity testing as shown in the Attachment show that the variables of investment, government expenditure, and labor productivity do not experience symptoms of multicollinearity. This is because the independent variables of the study have a correlation value between variables below 0.8.

**Heteroscedasticity Test**
This test is conducted to determine whether in the regression model variance inequalities occur from residuals, one observation to another observation. To find out the existence of heteroscedasticity in the study can be done by the Park test. If the probability value of the dependent variable: Absolute Residual (Resabs) > 0.05 then accepts the null hypothesis which states that there is no heteroscedasticity. Conversely, if the probability value of the dependent variable: Absolute Residual (Resabs) < 0.05 then rejects the null hypothesis which states the occurrence of heteroscedasticity. The attachment to the results of the study shows that the probability of the independent variable is more than 0.05, so it can be concluded that the research data do not show any symptoms of heteroscedasticity.

**Normality Test**
The normality test aims to test whether in the regression model, the disturbing or residual variables have a normal distribution. There are two ways to detect whether the residual has a normal distribution or not, that is by graph analysis and the most commonly used residual normality testing statistical test is the Jarque-Bera (JB) test. Decisions are normally distributed by the residuals in a simple way by comparing the probability value of JB (Jarque-Bera) count with an alpha level of 0.05 (5%). If the JB Probability count is greater than 0.05, it can be concluded that the residual is normally distributed and vice versa, if the value is smaller then there is not enough evidence to state that the residual is normally distributed. The attachment to the results of the study shows the results of testing the normality of the data obtained by the probability value of Jarque-Bera of 0.523279. Thus the probability value of Jarque-Bera is greater than alpha 0.05 so the assumption of normality is fulfilled.

**Multiple Linear Regression Analysis**

<table>
<thead>
<tr>
<th>Variable Relationships</th>
<th>Direct Effect</th>
<th>t-Statistic</th>
<th>Prob.</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 → Y</td>
<td>0.452</td>
<td>0.247</td>
<td>1.827215</td>
<td>0.0787***</td>
</tr>
<tr>
<td>X2 → Y</td>
<td>-0.302</td>
<td>0.263</td>
<td>-1.149367</td>
<td>0.2605NS</td>
</tr>
<tr>
<td>X3 → Y</td>
<td>0.920</td>
<td>0.145</td>
<td>6.363409</td>
<td>0.0000***</td>
</tr>
</tbody>
</table>

The direct influence of the independent variables on the dependent variable according to Table 3 can be explained as follows:

1. Investment variable has a probability value of 0.0787 smaller than the significance value of 0.10. From these values it can be concluded that the investment variable has a significant influence on the financial performance of the local government. While the coefficient value of 0.452 which is positive indicates that investment has a positive effect or is directly proportional to the variable financial performance of the local government.

2. Government expenditure variables have a probability value of 0.2605 greater than the significance value of 0.10. From these values it can be concluded that the variable government expenditure does not have an effect on the financial performance of the regional government.

3. The labor productivity variable has a probability value of 0.0000 smaller than the significance value of 0.05. From these values it can be concluded that the variable labor productivity has a significant influence on the financial performance of local governments. While the coefficient value of 0.920 which is
positive indicates that labor productivity has a positive effect or is directly proportional to the variable financial performance of the local government.

**Discussions:**

*Effect of Investment on Local Government Financial Performance*

Based on the results of the analysis of research data it was found that investment was able to improve the financial performance of local governments. This shows that the increase in investment will encourage increased financial performance. The findings of this study are consistent with the theory of economic growth of Harrod-Domar (Tambunan, 2003) which explains the existence of a positive correlation between the level of investment and income of a region. It can be said that the increase in investment in a region makes economic growth and the level of people's income per capita in the region high, and conversely the decline in investment in a region makes economic growth and the level of people's income per capita in the region low. The findings of this study support the results of research conducted by Anggraini (2017), Ifrizal et al (2014), Haryono and Nugraha (2016), Anwar et al (2007), and Batik (2013) who found that investment has an effect on the financial performance of local governments.

*Effects of Government Expenditures on Local Government Financial Performance*

Based on the results of the analysis of research data, it was found that government spending was unable to improve the financial performance of regional governments. This shows that the increase or decrease in government expenditure does not cause an increase or decrease in financial performance. The results of this study contradict the expenditure theory of Wagner's government which suggests a theory regarding the development of government expenditures, the greater the per capita income, the higher the expenditure increases. In addition, the findings of the study also do not support the theory of Peacock and Wiseman that the government has a role as a catalyst and facilitator so that it requires a budget to carry out development. The budget issued is used for development administration and development activities. The greater the expenditure used for development activities it will encourage increased economic activity of the community. If the economic activities of the community increase, it will also increase the flow of Regional Original Income (PAD). One aspect that causes government expenditures is not able to influence financial performance because government expenditure is allocated the most to personnel expenditure rather than financing so that government spending which tends to increase is not in line with the increase in local revenue. From year to year the financing of regional development by local governments is increasing so that it is not able to trigger an increase in the amount of local revenue to increase self-reliance. The findings of this study support the research conducted by Handoko (2013) who found that government spending had no effect on financial performance.

*Effect of Labor Productivity on Local Government Financial Performance*

Based on the results of the analysis of research data it was found that labor productivity was able to improve the financial performance of local governments. This shows that the increase in labor productivity will encourage increased financial performance. The findings of this study are in accordance with the opinion of Adam Smith (Arsyad, 1999) that the addition of a high population accompanied by technological changes will encourage savings and also the use of economies of scale in production. Population addition is something that is needed and not a problem, but as an important element that can spur development and economic growth. The higher the population growth rate, the higher the level of income received because it will increase the level of public consumption, and will be followed by an increase in production so that it will result in the expansion and establishment of new businesses in the production sector. The establishment of a new business sector will increase the workforce or open opportunities for job opportunities for the community so that if many people work then income will increase and tend to increase regional income as well. The increase in Government Spending has a multiplier effect on the increase in Regional Original Revenue from regional taxes and levies through the development of schools, health facilities and infrastructure, so that government spending will have an effect on increasing local revenue. With the government expenditure used to build facilities, the community can use it and feel safe and comfortable so as to increase the productivity of the community and investors in the region, which has an effect on improving the regional economy. Thus, the government establishes taxes, as well as levies that aim to increase regional original income. The findings of this study support the research conducted by Rustiono (2008), Simanjuntak (2002), and Arlani (2012) who found...
that labor productivity has an effect on financial performance.

Conclusion:-
Based on the results of the data analysis of the research and discussion stated earlier, then some research conclusions can be drawn as follows:
1. Investment is able to encourage increased financial performance of regional governments. This indicates that the increase in the formation of gross total capital of a region can directly improve its financial performance.
2. Government expenditure is not able to encourage an increase in the financial performance of regional governments. This indicates that the increase or decrease in government expenditure has not provided a change in the financial performance of regional governments.
3. Labor productivity is able to encourage increased financial performance of regional governments. This indicates that with increasing labor productivity it will be able to mobilize local revenue sources.

Reference:-
Jakarta: Badan Penerbit Universitas Indonesia.


**Attachment**

**Multicollinearity Test**

<table>
<thead>
<tr>
<th></th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>1.000000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2</td>
<td>0.693294</td>
<td>1.000000</td>
<td>0.598410</td>
</tr>
<tr>
<td>X3</td>
<td>0.598410</td>
<td>0.354655</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

**Heteroscedasticity Test**

Dependent Variable: RESABS_Y1

Method: Panel Least Squares

<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>C</td>
<td>-5.992738</td>
<td>4.604388</td>
<td>-1.301528</td>
<td>0.2037</td>
</tr>
<tr>
<td>X1</td>
<td>0.154753</td>
<td>0.250659</td>
<td>0.617385</td>
<td>0.5420</td>
</tr>
<tr>
<td>X2</td>
<td>0.006449</td>
<td>0.207917</td>
<td>0.031015</td>
<td>0.9755</td>
</tr>
<tr>
<td>X3</td>
<td>0.097631</td>
<td>0.163043</td>
<td>0.598803</td>
<td>0.5541</td>
</tr>
</tbody>
</table>
Normality test

Series: Standardized Residuals
Sample 2010 2017
Observations 32
Mean -0.062906
Median 0.129062
Maximum 2.650318
Minimum -3.534402
Std. Dev. 1.363205
Skewness -0.426621
Kurtosis 3.493395
Jarque-Bera 1.295282
Probability 0.523279

Hypothesis Testing
Dependent Variable: Y2
Method: Panel EGLS
Sample: 2010 2017
Periods included: 8
Cross-sections included: 4
Total panel (balanced) observations: 32
Linear estimation after one-step weighting matrix

<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>C</td>
<td>9.413713</td>
<td>5.247966</td>
<td>1.793783</td>
<td>0.0841</td>
</tr>
<tr>
<td>X1</td>
<td>0.452128</td>
<td>0.247441</td>
<td>1.827215</td>
<td>0.0787</td>
</tr>
<tr>
<td>X2</td>
<td>-0.301672</td>
<td>0.262468</td>
<td>-1.149367</td>
<td>0.2605</td>
</tr>
<tr>
<td>X3</td>
<td>0.919649</td>
<td>0.144521</td>
<td>6.363409</td>
<td>0.0000</td>
</tr>
<tr>
<td>Y1</td>
<td>0.080858</td>
<td>0.029109</td>
<td>1.747136</td>
<td>0.0920</td>
</tr>
</tbody>
</table>

Weighted Statistics

| R-squared | 0.624011 | Mean dependent var | -2.508205 |
| Adjusted R-squared | 0.568309 | S.D. dependent var | 1.056083 |
| S.E. of regression | 0.343205 | Sum squared resid | 3.180316 |
| F-statistic | 11.20266 |               |          |
| Prob(F-statistic) | 0.000017 |               |          |