The Role of Public Expenditure and Private Investment on Economic Growth in Makassar

D. Dahliah†

1 Universitas Muslim Indonesia, Urip Sumohardjo, Street. Panaikang, Makassar, 90231, South Sulawesi, Indonesia

Abstract

This study aims to determine the influence of government spending and private investment on Economic Growth in Makassar City. Descriptive data analysis methods and quantitative approaches. The data collected is secondary data using document studies obtained from the Makassar City Central Bureau of Statistics (BPS) and the One-Stop Integrated Services and Investment Agency (DPMPTSP) in Makassar City. This study uses multiple linear regression data analysis techniques and statistical tests. The results showed that Government Expenditure Variables positively and significantly affect economic growth in Makassar City. Private Investment Variables have a positive and significant impact on Economic Growth in Makassar City. Government Expenditure and Private Investment have a positive and significant effect on Economic Growth in Makassar City.

1. Introduction

As one of the countries that are actively promoting national development, Indonesia realizes the importance of action and the level of people's welfare and catches up with other countries to improve the standard of life. Development is a process of improvement or progress by making efforts towards a better chance. The change referred to is to cover all existing systems in a region or country, such as political, economic, infrastructure, defense, education and technology, institutional and cultural systems (Arfah et al., 2020). In essence, a region's economic development is a series of activities carried out consciously and continuously to create a better condition jointly and always. Within this framework, economic development is also aimed at spurring equitable growth and improving people's welfare in a just and unbiased manner (Barata, 2019; Habibi et al., 2018; Liu et al., 2019; Moutinho et al., 2015; Radas, 2009; Roșoiu, 2015; Szkorupová, 2014).

One of the essential benchmarks in determining economic development's success is economic growth, which illustrates the real impact of the implemented development policies (Florek, 2012; Ranis et al., 2000; Vandenoot & van Hove, 2014). Besides, the government's role is also essential, especially in planning the country's economic growth and raising funds for investment purposes so that economic growth can increase. The government's role in enhancing economic development and spurring economic growth, especially in developing countries, is carried out through monetary policy and fiscal policy. Monetary policy plays an essential role in

† Corresponding author. D. Dahliah
Email address: dahliah.fekon79@gmail.com
accelerating development by influencing the cost and availability of credit, controlling inflation, and maintaining payments. As one of the countries that are actively promoting national development, Indonesia realizes the importance of action and the level of people's welfare and catches up with other countries to improve the standard of life. The success of the development is marked by high economic growth. Economic growth is expected to be able to increase production factors, which stimulate large-scale economic development. Stable economic growth will impact increasing population income, which ultimately aims to improve people's welfare. In this case, increasing the level of welfare is the obligation of the government and all components of society. For this reason, the government must be able to encourage and empower all elements of culture, especially the private sector, to play a more significant role in improving people's welfare. Thus, economic growth is higher, fairer, and more equitable will be achieved better and faster.

According to (Sukirno & Siengthai, 2011; Bohlmann et al., 2019; Lee & Xuan, 2019; Zaidi & Saidi, 2018) economic growth is the development of economic activities that cause increased goods and services produced in society. The rate of regional economic growth is usually used to assess regional development's success over a certain period. The regional economic growth can be addressed by increasing GDP (Gross Domestic Product) or (Gross Domestic Regional Gross). To obtain this high economic growth, government regulation is required by making government spending and investment. The importance of the government's role in an economic system has been widely discussed in public economic theory. So far, there has been much debate about how far the role the government should play. This is because everyone is different in assessing the cost of benefits obtained from programs made by the government. However, it cannot be denied that people's lives have so far depended on the government's services. Many parties benefit from government activities and spending. Government spending can be a tool for government intervention in the economy that is considered the most effective. So far, the level of effectiveness of government spending can be measured by how much economic growth. The government expenditure of a country represents the financing of government activities. As is well known, government spending through the State Revenue and Expenditure Budget (APBN) is reflected in realizing the development expenditure budget (Roşoiu, 2015; Wu et al., 2020). Also, the success of development in an area is determined by government expenditure and the amount of investment. Investment or investment is the purchase of capital goods and production equipment to increase the ability to produce goods and services needed in the economy. The relationship between government spending and economic growth, more commonly known as the public sector's role, has become an essential and exciting analysis. Based on theoretical reasons, there are several controversial opinions regarding the public sector's role in driving a steady rate of economic growth in the long run. The general view is that government spending, especially on human capital and physical infrastructure, can accelerate growth (growth-retarding). Government expenditure becomes an essential factor in driving economic growth, considering that one of the components in aggregate demand (AD) is government spending. In theory, it is stated that if government spending increases, aggregate demand will increase.

Expenditure is all regional government expenditure in a budget period. Restricted payment according to expenditure group based on Permendagri 13/2006 consists of indirect expenditure and direct expenditure. The indirect expenditure group is budgeted expenditure not directly related to the implementation of programs and activities. The immediate expenditure group is the budgeted expenditure directly related to the performance of programs and activities. Expenditure is one fiscal policy component that primarily aims to achieve stable economic stability while maintaining economic growth. If you look at the development of government activities from year to year, it can be seen that the role of government is always increasing in almost all economic fields. The increasing role of government can be seen from the more lavish government spending and its proportion to national income. Investment is an investment made by the public, especially entrepreneurs, to make a profit. This type of asset is called a profit motive, which is a motive for making a profit. The actor or those who invest is called an investor. According to (Kuznets, 1955; Lingens, 2007; Zagler, 2005) Economic growth is defined as an increase in GDP or GNI regardless of whether the increase is more significant or less than the population growth rate and whether there is a change in the economic structure improvement institutional system or not. Economic growth is a substantial increase in national income (with an increase in per capita revenue) in a particular calculation period.

In the endogenous growth model, it is said that the investment yield will be higher if the aggregate production in a country is more significant. It is assumed that private and public investment in resources or human
capital can create an external economy (positive externalities) and spur productivity that can offset the scientific tendency to scale down yields. Although technology is still recognized as playing a vital role, the endogenous growth model states that it does not need to be highlighted to explain the process of creating long-term economic growth. Private investment or Gross PMDN is a component of aggregate spending that is unstable and an essential source of its conjunctions. The size of the company's investment can be explained by analyzing its relationship to the interest rate if the interest rate is low. More investment will be made. On the contrary, an increase in interest rates will cause a reduction in the amount of investment. Furthermore, it is said that investment activities allow society to continuously increase economic activity and job opportunities, increase national income, and increase society's welfare. Investment plays a vital role in the economic development of an area where foreign investment can accelerate economic growth (Afroz et al., 2020; Moutinho, 2017; Sadiku et al., 2015; Solow, 1956; Wu et al., 2020). According to Devarajan et al (1996), development financing from private investment is significant for economic development. Private investment is an essential factor for increasing economic growth, and increased private investment cannot be separated from the increase in economic growth in a country. Economic growth positively influences expanding private investment because if an area has high economic growth, it is considered the right investment place. After all, the increase in economic growth is accompanied by an increase in the community's welfare (Adelman & Morris, 1973; Ioan, 2014). Through private investment, there will be a flow of capital, which impacts changes in the business climate, and of course, reduces the constraints on lack of money that occur in Indonesia. Not only capital expenditures but local revenue is also a factor in increasing private investment in Indonesia (Burhan et al., 2014; Liu et al., 2019; Luong et al., 2020; Taylor et al., 2016). This is based on the logic of the high community in the area; the community's high welfare is reflected in the HDI value. If the level of interest in a room is high, the tendency is to have a high public consumption level. The high level of consumption that exists will make investors if they invest there, they will get high profits.

According to the Central Statistics Agency (BPS), Gross Regional Domestic Product is defined as the amount of added value generated by all business units in a region or the total value of all financial companies' goods and services. GDP is divided into two, namely, GDP at current prices and GDP at constant prices. A society is considered to experience a growth in society's prosperity if the per capita income according to price or payment continues to increase, and the rate of economic growth is rising. One of the areas or cities whose economic growth will be seen is the economic growth of the city of Makassar, where the city of Makassar is an area or a city that has a large population. Until the second quarter of 2019, investment realization in Makassar City showed a positive trend. Based on data available at the Makassar City Investment and One-Stop Integrated Services (PM-PTSP) Office, it is noted that the value of the private investment in Makassar City has exceeded the IDR 432.51 billion mark. Meanwhile, the GRDP of Makassar City has continued to increase in the last five years (2014-2017). The processing industry has primarily supported this increase. In 2016, the GRDP of Makassar City was the highest in South Sulawesi, amounting to IDR 95,836.98 billion. This figure is far above the GRDP of other cities. Based on the phenomenon that occurs, it can be said that government spending and private investment will have a significant influence on the increase in PDRB of Makassar City, which will result in increased economic growth in Makassar City. The economic development carried out by the Makassar city government is a sustainable effort that is expected to improve the welfare of the people as shown by the increasing Gross Regional Domestic Product (GRDP) produced to achieve this goal; regional development is focused on economic growth. In this description, the main problems raised in this study are: 1) Does government expenditure affect economic growth in Makassar City? 2) Does private investment affect economic growth in Makassar City? 3) Does government expenditure and private investment affect joint economic growth in Makassar City? This research was conducted to know and analyze government spending on economic growth in Makassar City. This is to determine and analyze the effect of private investment on reference growth in making policies to predict economic growth in Makassar. This is to define and analyze the impact of government spending and private investment on joint economic growth in Makassar City. The benefits of this research include, it can add insight into knowledge about the effect of government spending and private investment on economic growth, as information about input or consideration for local governments, especially in the city of Makassar, and as a further reference that will discuss the Effects of Government Expenditure and Investment. Private Against Economic Growth.
2. Research Method

This research was conducted in Makassar City, South Sulawesi Province. This study's population is all data on the development of government spending, private investment, and economic growth from time to time. This study's sample was secondary data sampling with data series for the past ten years, namely from 2009-2018. This study's sources of data come from various sources obtained through secondary data from the Central Statistics Agency (BPS) of Makassar City. The research data used is data on government expenditure, private investment, and the amount of economic growth according to districts/cities in Makassar City in 2018. This research uses a quantitative approach. The analytical tool used in this research is multiple linear regression analysis.

3. Result and Discussion

3.1. Results

The descriptive statistical analysis explains the average value (mean) and the standard deviation of the variables in this study, namely the independent variable (government expenditure and private investment) and the dependent variable (economic growth) using data for the last ten years, 2009 to 2019.

<table>
<thead>
<tr>
<th>Tabel 1. Statistik Deskriptif</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Government Expenditure</td>
</tr>
<tr>
<td>Private Investment</td>
</tr>
<tr>
<td>Economic Growth</td>
</tr>
</tbody>
</table>

a. The Government Expenditure Variable (X1) has an average value of 529175.09 with the smallest value of 168523.78 in 2009-2010 and the most considerable value 1123952.32 in 2019. Meanwhile, the standard deviation value of 293719.98 indicates that the distribution of the importance of government expenditure is between 822895.07 and 235455.11.

b. The private investment variable (X2) has an average value of 40236834.50, with the smallest value of 24845615.16 in 2009 and the most considerable value of 56427983.36 in 2019. Meanwhile, the standard deviation value of 11398991.71 indicates that the distribution of private investment values is between 51635826.20 and 28837842.8

c. The Economic Growth Variable (Y) has an average value of 80802512.46 with the smallest value of 53314933.94 in 2009 and the most considerable value of 112568414.88 in 2019. Meanwhile, the standard deviation value of 19615519.33 indicates that the distribution of economic growth values is between 100418031.7980 and 61186993.13.

To produce a good regression model, regression analysis requires testing classical assumptions before testing hypotheses, so in this study it is necessary first to carry out classical assumption tests which include: data normality test, multicollinearity test, heteroscedasticity test and autocorrelation test which is carried out. Test whether the residual variables are normally distributed or not. The statistical test that can be used to test whether the residuals are normally distributed is the Kolmogorov-Smirnov (KS) non-parametric statistical test by making a hypothesis: H0: residual data is normally distributed and Ha: residual information is not normally distributed. If the significance value is more significant than 0.05 then H0 is accepted by Ha. Vice versa, if the significance value is smaller than 0.05, then H0 is rejected, or Ha is accepted.
From the results of data processing in table 2, the Kolmogorov-Smirnov value for the Government Expenditure variable is 0.129 and significant at 0.200, the Kolmogorov-Smirnov value for the Private Investment variable is 0.138 and significant at 0.200, and the Kolmogorov-Smirnov value for the Economic Growth variable is 0.095 and significant at 0.200. Obtained a significance value greater than 0.05, then H0 is accepted, which means that the residual data is usually distributed. The multicollinearity test aims to test whether there is a correlation between the regression model's independent variables. If the regression model multicollinearity occurs, the regression coefficient cannot be estimated, and the standard error value is infinite. The detection of multicollinearity in a model can be seen; namely, if the Variance Inflation Factor (VIF) value is not more than ten and the Tolerance value is more than 0.1, the model can be said to be free from multicollinearity.

From the data in Table 3, it can be concluded that there is no multicollinearity symptom between the independent variables as indicated by the tolerance value of each independent variable is more significant than 0.1 and the VIF value is less than 10. The heteroscedasticity test aims to see whether the regression model has unequal variables from the residuals of one observation to another. A good regression model does not occur heteroscedasticity. Predict the presence or absence of heteroscedasticity in a model can be seen from the model's Scatterplot image pattern. The Scatterplot image analysis states that the multiple linear regression model does not have heteroscedasticity if: Data points are spread above and below or around the 0. Data points do not collect only above or below. Spread of data points should not form a wavy pattern widened then narrowed and widened. Back and Spread of data points should not be patterned.
Figure 1 shows that the scatterplot graph shows that the dots are spread randomly and are scattered both above and below the number 0 on the Y-axis. It is based on input variables of government expenditure and private investment. Table 4 presents the regression coefficient values and the t statistical value for partial impact testing.

**Table 4. Multiple Regression Test Results**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Zero-order</td>
</tr>
<tr>
<td>(Constant)</td>
<td>20245080.33</td>
<td>3682183.28</td>
<td></td>
<td>5.498</td>
<td>.001</td>
</tr>
<tr>
<td>1 Government Expenditure</td>
<td>18.515</td>
<td>6.246</td>
<td>.277</td>
<td>2.964</td>
<td>.021</td>
</tr>
<tr>
<td>Private Investment</td>
<td>1.262</td>
<td>.161</td>
<td>.733</td>
<td>7.838</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Economic Growth

Based on Table 4, the linear regression equation is obtained as follows:

\[ Y = 20,245,080.33 + 18.515 \times X_1 + 1.262 \times X_2 \]

Description:

\[ Y = \text{Economic Growth} \]
\[ X_1 = \text{Government Expenditure} \]
\[ X_2 = \text{Private Investment} \]

Based on Table 4, the regression coefficient value for each independent variable is restated. For the Government Expenditure variable, the value is 18.515 (positive value), meaning that any increase in government spending will increase economic growth by 18.515. Government spending has a positive effect on economic growth. The private investment variable has a value of 1.262 (positive value) means that any increase in private investment will increase economic growth by 1.262. Private investment has a positive influence on economic growth. To test the hypothesis, the researcher used multiple regression analysis. Data were processed using the SPSS program. Based on the results of data processing with the SPSS program. The correlation coefficient R indicates how much correlation or relationship between the independent variables and the dependent variable. The correlation coefficient is substantial if the R-value is above 0.5 and close to 1. The coefficient of determination (R2) shows how much the independent variable explains the dependent variable. The adjusted R square value is zero to one. If the adjusted R square value gets closer to one, the independent variables provide all the information needed to predict the dependent variable. Conversely, the smaller the adjusted R square value, the more limited the independent variables' ability to explain the variation in the dependent variable. The adjusted R square value has a weakness. The adjusted R square value will increase every time there is an addition of one independent variable even though it does not significantly affect the dependent variable. Therefore, the adjusted R square value is used to evaluate, which is the best regression model.

**Table 5. Results of the Analysis of the Coefficient of Determination**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.996</td>
<td>.991</td>
<td>.989</td>
<td>2051412.80623</td>
<td>1.691</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Private Investment, Government Expenditure
b. Dependent Variable: Economic Growth

The value of Adjusted R Square in Table 5 shows that the relationship between the variable government expenditure and private investment on economic growth is 0.989 or equal to 98.9%, which means it has a strong relationship level. Thus, the effect of government spending and private investment simultaneously on economic growth is 98.9%, and the remaining 1.1% is influenced by other factors outside the variables of this study. This test is conducted to determine whether all the independent variables have a joint influence on the dependent
variable. The simultaneous test results through SPSS processing can be seen in the following table:

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3433459324757603.000</td>
<td>2</td>
<td>1716729662378801.500</td>
<td>407.940</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>29458061511064.640</td>
<td>7</td>
<td>4208294501580.663</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3462917386268667.500</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6. F-Test

The value of Adjusted R Square in Table 6 shows that the relationship between the variable government expenditure and private investment on economic growth is 0.989 or equal to 98.9%, which means it has a strong relationship level. Thus, the effect of government spending and private investment simultaneously on economic growth is 98.9%, and the remaining 1.1% is influenced by other factors outside the variables of this study. This test is conducted to determine whether all the independent variables have a joint influence on the dependent variable. The simultaneous test results through SPSS processing can be seen in the following table:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>20245080.33</td>
<td>3682183.28</td>
<td>5.498</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Government Expenditure</td>
<td>18.515</td>
<td>6.246</td>
<td>.277</td>
<td>2.964</td>
<td>.021</td>
</tr>
<tr>
<td>Private Investment</td>
<td>1.262</td>
<td>.161</td>
<td>.733</td>
<td>7.838</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 7. t-test

The results of the t-calculated statistical test in Table 7 can be explained as follows:

a. t-Calculated < t-Estimated, then H0 is accepted and Ha is rejected for α = 5% or significance < 0.05.
b. t-calculated > t-estimated, then Ha is accepted and H0 is rejected for α = 5% or significance < 0.05.

3.2. Discussion

From the partial test results, it is known that government spending has a significant and significant effect on economic growth. The significance value is 0.021 < 0.05, so that individual government spending has a substantial and significant impact on economic growth. The results of the analysis show that government spending has a significant effect on economic growth. This follows the previous hypothesis, which states that government spending has a significant positive impact on economic growth. Government spending has a positive and significant impact on economic growth. Government spending support in development activities in Makassar has been increasing from year to year. In the macroeconomic concept, government spending will improve the national economy. This government expenditure that drives the economy assumes that government spending is fully used for economic activities or boosts economic activity development. So, if government spending increases, there will be economic growth. The role of government is significant in improving economic growth.
because it includes providing public needs and services to the community that cannot be provided by private parties. This role is in government spending, namely the government budget, which is reported annually as the State Revenue and Expenditure Budget, from now on abbreviated as APBN. The APBN is implemented as much as possible for the people's prosperity by the ability to collect state revenue to support the realization of a sustainable national economy. Including the government's role in increasing human resources (HR) through the quality of education, health, and expanding business opportunities or employment opportunities. The test results show that this study's developments follow the products of research conducted by M. Zahari MS (2017) that government spending has a significant and significant effect on economic growth. In contrast to the research results conducted by Famisada (2018), partially government spending has no significant impact and has a negative relationship to economic growth. From the partial test results, it is known that private investment has a substantial and significant effect on economic growth. A significance value of 0.000 < 0.05, then private investment individually and significantly affects economic growth. The results of the analysis show that private investment has a significant impact on economic growth. This is consistent with the previous hypothesis, which states that private investment has a significant positive effect on economic growth. Private investment has a positive and significant effect on economic growth. The private sector's role in regional economic activities is primarily to invest both at the regional and regional levels to spur economic growth. The development of private investment is highly dependent on the facilities and facilities provided by the government in the form of stimulating facilities and infrastructure to attract foreign and domestic investors. Investment activities allow people to continue to carry out economic activities and job opportunities and increase income to increase the level of community welfare. The positive impact obtained from investment, especially in private investment, is the provision of state infrastructure, the establishment and development of industries, and new resources that tend to help increase new jobs. Thus, it can be seen that economic growth in the following year will increase if the private investment has increased, seen from the results of my research that there is a significant relationship between private investment and economic growth so that it is inevitable that next year there will be an increase in economic growth in Makassar City. The test results show that this study's developments follow the products of research conducted by Yandiles Weya et al. (2017) that private investment has a significant and significant effect on economic growth. In contrast to the research results achieved by Ahlu Hafriandi (2018), private investment has absolutely no significant effect on economic growth.

From the partial test results, it is known that government spending and private investment have a significant and significant effect on economic growth. The significance value of 0.000 < 0.05 means that government spending and private investment simultaneously positively and significantly impact economic development in Makassar City. The analysis results show that government spending and private investment have a significant impact on economic growth. This is following the previous hypothesis, which states that government spending and private investment significantly affect economic growth. To test the most dominant variable that affects the dependent variable, we must first determine the independent variable's respective contributions. Each variable's contribution is known from the multiple linear regression coefficients in the coefficient table in the beta column. From the results of these calculations, it is known that the variable with the most dominant influence in private investment is indicated by the value of the beta coefficient, which is the highest compared to other variables. In development, growth is expected. To achieve these targets, facilities and infrastructure are needed, mostly adequate financial support. This is where investment participation has a reasonably significant scope because it follows its function to support development and growth. The objective is to support national development implementation to increase equitable economic growth and national stability towards improving people's welfare. Investment accumulates capital accumulation by building several buildings and equipment useful for productive activities. The potential output of an area will increase, and long-term economic growth will also increase. Investments in Makassar City consist of domestic investment and investment from abroad (PMDN and PMA). The largest private investments are in the other service sector, the transportation sector, buildings, telecommunications, and trade and repair. PDRB growth as a benchmark for the development of a regional economy cannot be separated from government spending in the public service sector—the greater the productive regional government expenditure, the greater the economic level of a region. Local government spending through direct and indirect spending is the most effective government intervention in the economy. So far, the level of government spending effectiveness can be measured by how much economic growth is. It can be
concluded that the greater the government spending and private investment, the greater the economic growth rate in Makassar City.

4. Conclusions

Based on the results of the analysis and discussion that has been stated, several conclusions can be presented, namely as follows: Government Expenditure Variable ($X_1$) has a positive and significant effect on Economic Growth ($Y$) in Makassar City. The Private Investment Variable ($X_2$) has a positive and significant effect on Economic Growth ($Y$) in Makassar City. Government Expenditure and Private Investment have a positive and significant effect together on Economic Growth in Makassar City.

5. References


