ANALYSIS OF THE INFLUENCE OF GOVERNMENT EXPENDITURE, INVESTMENT, AND LABOR FORCE ON ECONOMIC GROWTH IN MALANG REGENCY 2000-2018

Dian Caesario Pandu Setya
Ghozali Maskie
Sri Muljaningsih

ABSTRACT

Economic growth is the main goal of economic development carried out by the government. Economic development is a process to change a situation to be better than the previous one or to improve the quality better so that welfare and prosperity are higher. The purpose of this study was to determine the effect of government spending, investment, and the workforce on economic growth. This research is a quantitative research. The research location was taken in Malang Regency, using data on government expenditure, PMDN and PMA data, and data on labor in Malang Regency. This research was conducted over a period of three months, starting from November 2019 to January 2020. The results showed that (1) in the short term the regional expenditure variable has significant effect on economic growth. (2) in the short term the investment variable has a significant effect to Economic Growth. (3) in the short term the labor force has a significant negative effect on economic growth.

Keywords: influence of government spending, influence of investment, influence of labor force

INTRODUCTION

Economic growth is the main objective of economic development carried out by the government. Economic development is a process to change a situation to be better than the previous one or to improve the quality better, so that welfare and prosperity are higher. In the discourse of development economics, economic development is synonymous with creating and maintaining and increasing national income (Michael, 2016).

According to Sukirno (2014), in economic activity, economic growth actually means the development of production of goods and services in a country, such as the increase and production of industrial goods, infrastructure development, increase in the number of schools, increase in service sector production and increase in the production of capital goods. Aggregate economic growth can be seen from the GDP of a country. The high value of GDP is assumed that the economic condition of a country is also good. Comparing the value of GDP per capita from several countries will provide an overview of the rate of economic growth. Every country generally wants rapid economic growth in order to improve the standard of living and welfare of the people.

Economic growth can be influenced by many things, one of which is the quality of the people a region has. Economic growth is something that is often associated with human development. An increase in economic growth can allow an increase in output and income in the future. One of the most important development tasks is to translate economic growth into enhancement of human development. Human development or the quality of Human Resources (HR) is very important, efforts to improve the quality of human resources in development have become a necessity. The quality of good human resources in a region has a role in determining the success of development management in the region (Putra, 2015).

The economic growth of Malang Regency in 2017 can be seen from the growth of GDP at constant prices (2000). Gross Regional Domestic Product (PDRB) has increased, but the growth rate of Malang Regency in 2015 has slowed down compared to the previous year which reached 6.01 percent, the growth rate of Malang Regency itself is still below East Java Province with a growth rate in 2016 of 5.5 percent, there are many factors that affect economic growth so that it continues to increase and can be sustained in the long term. As in the Neo-Classical economic growth theory which states economic growth (in areas with growth) depends on the development of production factors such as government spending, investment, and technology (Sukirno, 2014).

Indicators of success in the country's development are also reflected in the rate of economic growth, high and sustainable economic growth are good conditions for the continuity of the country's economic development. However, high economic growth without being accompanied by an increase in the quality of human resources will also not be useful for overcoming poverty, unemployment and improving human living standards (Panggalih, 2018).

Some economists argue that an increase in government spending such as direct spending will boost economic growth. Keynes (Boediono, 2008) states that in order to help the country's economic system, people must be willing to leave the pure laissez faire ideology contained in Classical thinking. The government must make more active interference in controlling the national economy. In achieving this goal, the government must actively intervene to influence the movement of the economy. The government makes a lot of spending to finance its activities. These expenditures are not only used to finance daily government needs but are also used to finance economic activities in general. Government spending itself is a tool for government intervention in the economy that is considered the most effective. Government consumption is one of the expenditures made by the government. Government consumption is a routine government expenditure which includes the purchase of goods and services to be consumed such as paying debt interest, subsidies and personnel expenditure (Sajafi, 2009).

Another factor that can affect economic growth is investment. Investment is the first step in production activities and becomes a factor for increasing economic growth. Thus, investment is essentially an initial step for economic development activities. The dynamics of investment affect the high and low levels of economic growth, reflecting the high and sluggish development levels. The issue of investment has often received many responses by development theorists and practitioners.

Investment in Malang Regency is supported by various developments in national scale infrastructure development, as well as a conducive climate for investors that has made Malang Regency a favorite part of investing in East Java and nationally.
Although, it is still dominated by domestic investors who invest in Malang Regency. However, it is possible that foreign investors will compete to invest their funds in Malang Regency. As noted in BPS (2018) Malang Regency, the investment value that came in 2018 for small industries was 232 billion Rupiah, while for large and medium industries it was 2.6 trillion Rupiah.

Harrod-Domar in Arsyad (2010) developed the Keynesian theory by giving a key role to investment in the process of economic growth, especially regarding the dual nature of investment. First, investment creates income (is the impact of investment demand), and second, investment increases the production capacity of the economy by increasing the capital stock (which is the impact of the supply of investment). Solow and Swan in Arsyad (2010) then correct the Harrod-Domar theory by showing that economic growth depends on the availability of production factors (population, labor, and capital accumulation) and the level of technological progress. The assumptions used are constant return to scale, the substitution between capital (K) and labor (L) is perfect, and the diminishing marginal productivity of each input.

This means that high investment will increase economic growth, and further increase employment. The unemployment rate can be reduced, people's income increases and people's welfare increases. Investment also allows the transfer of technology and knowledge from developed to developing countries. The results of this study are also in accordance with research conducted by Pambudi (2013) which states that investment shows positive and significant results on economic growth.

problem of the economy of a region in the long run towards a better condition during a certain period. Therefore, research related to economic growth is important to do, especially economic growth in Malang Regency. This is because the economic growth rate of Malang Regency in 2015 experienced a slowdown compared to the previous year which had reached 6.01 percent. In addition, the growth rate of Malang Regency itself is still below East Java Province with a growth rate in 2016 of 5.55 percent. So it can be said that development activities in Malang Regency have not been carried out optimally. To optimize economic growth in Malang Regency, it is necessary to know the factors that can encourage economic growth so that it can be used as a consideration in implementing policies and programs for economic growth in the future.

Based on the background and phenomena described above, the researcher took the title "Analysis of the Influence of Government Expenditure, Investment, and the Workforce on Economic Growth in Malang Regency 2000-2018". The purpose of this study is to determine the effect of government spending, investment, and the workforce on economic growth.

LITERATURE REVIEW

Economy Growth Theory

Classical Growth Theory

According to the view of classical economists, there are four factors that influence economic growth, namely: population, stock of capital goods, land area and natural resources, and the level of technology used. Although realizing that economic growth depends on many factors, classical economists mainly focused their attention on the effect of population growth on economic growth. In their theory of growth, suppose that land area and natural resources are constant and the level of technology does not change. Based on this example, it is then analyzed how population growth affects the level of national production and income.

Keyness Theory

Keynes's view criticized Classical thinking which states that full employment is always achieved. According to Keynes that in the labor market, unemployment is a manifestation in the economy. Wage levels are not volatile and tend to be difficult to fall. If the supply of labor exceeds the demand for labor, the wage level will not fall so that the demand and supply of labor will return to equilibrium.

Rostow Theory

This Development Model concerning the Development of Government Expenditure, was developed by Rostow and Musgrave which connects the development of government spending with the stages of economic development, namely the initial stage, the intermediate stage and the advanced stage. In the early stages of economic development, according to them the ratio of government expenditure to national income was relatively large. This is because at this stage the percentage of government investment to total investment is large, so the government must provide various facilities and infrastructure such as education, health, transportation infrastructure and so on.

Government Spending

Government expenditure is a set of products that contain choices or decisions made by the government to provide public goods and services to the community. Total government expenditure is the sum total of budget decisions at each level of government (central-province-region). At each level in this government can have a different final decision-making process and only a few things the government under it can be influenced by the higher government. Regional expenditures include all expenditures from the Regional General Treasury Account which reduce current fund equity, which are regional obligations in one fiscal year for which the regions will not be paid back. Regional expenditure is used in the context of implementing government affairs which fall under the authority of the province or regency / city which consists of mandatory affairs and optional affairs stipulated by statutory provisions.

Investment

Economic theory defines investment as "spending expenses to buy capital goods and production equipment with the aim of replacing and especially adding to capital goods in the economy that will be used to produce goods and services in the future". According to (Budiono: 1992). Investment is expenditure by the (private) producer sector for the purchase of goods and services to increase stocks used or for factory expansion. Dornbusch & Fischer argues that investment is the demand for goods and services to create or increase production capacity or income in the future.
Labor
The workforce is a population that is economically able to work and be productive to be able to produce added value from the various goods and services it produces. Thus, the definition of labor force is nothing but a definition of labor. Where labor is an input from the production process that will make a positive contribution to the aggregate output of a region from both an expenditure and production point of view. So that there is a positive relationship between the number of labor force and economic growth. Where an increase in the workforce will increase production inputs so that aggregate productivity will also increase which in turn will have an impact on increasing the economic growth of a region.

Economic Growth
In general, economic growth is defined as an increase in the ability of an economy to produce goods and services. Economic growth is one of the most important indicators in analyzing the economic development that occurs in a country. Economic growth shows the extent to which economic activities will generate additional income for the community in a certain period. Because basically economic activity is a process of using production factors to produce output, this process will in turn produce a flow of remuneration for the production factors owned by the community. With the existence of economic growth, it is expected that people's income as the owner of production factors will also increase.

RESEARCH METHODS
The research method is a scientific way of obtaining data for specific purposes and uses. Based on this, there are four keys that need to be considered, namely, scientific methods, data, objectives, and uses. The scientific way means that research activities are based on scientific characteristics, namely rational, empirical and systematic. Rational means that research activities are carried out in ways that make sense, so that human reasoning can reach them. Empirical means that the ways that are done can be observed by the human senses, so that other people can observe and know the methods used (Sugiyono, 2015).

This research is a quantitative research, as for the definition according to Sugiyono (2015) the definition of quantitative method is: "Quantitative method can be interpreted as a research method based on the philosophy of positivism, used to research specific populations or samples, data collection using research instruments, data analysis is quantitative / statistical, with the aim to test the hypothesis that has been set ".

The research location was taken in Malang Regency, using data on government expenditure, PMDN and PMA data, and data on labor in Malang Regency. This research was conducted over a period of three months, starting from November 2019 to January 2020.

The data used in this research is quantitative data, and the data source used is secondary data. Where Sukender data is data obtained indirectly, secondary data can be obtained through literature or directly come to the relevant office to request data for research. So that the validity of the data can be justified. The type of data used for this research is panel data (pooling data). Panel data is a combination of time series and cross section. The number of observations in this study was obtained from a combination of time series data in the form of 2000-2018, and cross section data of Malang Regency.

RESEARCH RESULT
Descriptive Analysis
Table 5.1 Descriptive Statistics of Growth, Regional Expenditure, Investment, and Labor Force

<table>
<thead>
<tr>
<th></th>
<th>Economic Growth</th>
<th>Government Expenditure</th>
<th>Investment</th>
<th>Labor Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>28202914</td>
<td>1.94E+09</td>
<td>2.66E+09</td>
<td>1302845</td>
</tr>
<tr>
<td>Median</td>
<td>29923823</td>
<td>1.89E+09</td>
<td>2.77E+09</td>
<td>1310685</td>
</tr>
<tr>
<td>Maximum</td>
<td>39571724</td>
<td>2.71E+09</td>
<td>2.87E+09</td>
<td>1399610</td>
</tr>
<tr>
<td>Minimum</td>
<td>20382714</td>
<td>1.01E+09</td>
<td>2.30E+09</td>
<td>1226782</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>7140929</td>
<td>5.50E+08</td>
<td>2.08E+08</td>
<td>42069.22</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.168185</td>
<td>-0.066157</td>
<td>-0.736162</td>
<td>0.116501</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>1.391728</td>
<td>1.861768</td>
<td>1.865623</td>
<td>3.015505</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>2.137248</td>
<td>1.039520</td>
<td>2.734852</td>
<td>0.043170</td>
</tr>
<tr>
<td>Probability</td>
<td>0.343481</td>
<td>0.594663</td>
<td>0.254762</td>
<td>0.978646</td>
</tr>
<tr>
<td>Sum</td>
<td>5.36E+08</td>
<td>3.68E+10</td>
<td>5.05E+10</td>
<td>24754048</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>9.18E+14</td>
<td>5.45E+18</td>
<td>7.78E+17</td>
<td>3.19E+10</td>
</tr>
<tr>
<td>Observations</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
</tbody>
</table>

Economic growth is one of the main objectives of the development of an area, because economic growth is a measure of the welfare of the community. Based on the table above, it is known that the mean value of the economic growth variable is 28202914. The mean value of the government spending variable is 1.94E + 09. The mean value of the investment variable is 2.66E + 09. The median value of the investment variable is 2.77E + 09. The mean value of the labor variable is 1302845. The median value of the labor variable is 1310685. The maximum value of the labor variable is 1399610. The minimum value of the labor variable is 1226782. The st deviation value of the labor variable is 42069.22.
Stationarity Test at Level and 1st Difference Stage

Table 5.2 Augmented Dickey-Fuller Test Results at the Level and First Difference

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level Augmented Dickey-Fuller Prob.</th>
<th>First Difference Augmented Dickey-Fuller Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic growth</td>
<td>0.7111</td>
<td>0.0013</td>
</tr>
<tr>
<td>Regional expenditure</td>
<td>0.9505</td>
<td>0.0013</td>
</tr>
<tr>
<td>Investment</td>
<td>0.5908</td>
<td>0.0000</td>
</tr>
<tr>
<td>Labor Force</td>
<td>0.0611</td>
<td>0.0044</td>
</tr>
</tbody>
</table>

The table above shows the results of the unit root test with the ADF method. The independent variable is government spending, investment, and the labor force and the dependent variable is that there is no stationary economic growth at the level level. Since there are no variables that are not stationary at the level level, it is necessary to carry out the unit root test again until all the variables are stationary at the same degree. The next level after the level is the first difference level. The test results using the Augmented Dickey-Fuller test at the first difference level show that all variables are stationary with a significant probability level at the $\alpha = 5\%$ level.

Analysis of the Co-Integration Department

Null Hypothesis: E has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=3)

<table>
<thead>
<tr>
<th>Augmented Dickey-Fuller test statistic</th>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4.438728</td>
<td>0.0031</td>
<td></td>
</tr>
</tbody>
</table>

Test critical values:
- 1% level: -3.857386
- 5% level: -3.040391
- 10% level: -2.660551


Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 18

Based on the table above, the cointegration test results show that the t-statistic in the ADF test, greater than MacKinnon Critical Value and stationery at the same degree of integration, namely at the level level, so that the residuals are considered cointegrated.

Normality test

Based on the results above, it can be seen that the Jarque-Bera probability value is 0.540854, thus it can be concluded that the data from the variables in this study have been normally distributed.
Multicollinearity Test

Table 5.3 Multicollinearity Test

<table>
<thead>
<tr>
<th></th>
<th>Economic growth</th>
<th>Regional expenditure</th>
<th>Investment</th>
<th>Labor Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic growth</td>
<td>1</td>
<td>0.7442205631330922</td>
<td>1.7931722845576974</td>
<td>0.1306367377571901</td>
</tr>
<tr>
<td>Regional expenditure</td>
<td>0.7442205631330922</td>
<td>1</td>
<td>1.6763751416674869</td>
<td>1.3839721631913547</td>
</tr>
<tr>
<td>Investment</td>
<td>0.7931722845576974</td>
<td>0.6763751416674869</td>
<td>1</td>
<td>0.3032882689228212</td>
</tr>
<tr>
<td>Labor Force</td>
<td>0.1306367377571901</td>
<td>0.3839721631913547</td>
<td>0.3032882689228212</td>
<td>1</td>
</tr>
</tbody>
</table>

Based on the table above, it can be seen that all independent variables have a low correlation, this can be seen from the correlation value between independent variables, where the correlation between independent variables is lower than 0.85 so that in this study it proves that this study has no multicollinearity problem. However, if in this study there is a multicollinearity problem, there is no need for healing because the multicollinearity problem does not affect the estimator or the multicollinearity still results in a BLUE estimate, but only causes a model to have a large variant.

Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

<table>
<thead>
<tr>
<th></th>
<th>F-statistic</th>
<th>Prob. F(3,15)</th>
<th>Obs*R-squared</th>
<th>Prob. Chi-Square(3)</th>
<th>Scaled explained SS</th>
<th>Prob. Chi-Square(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>1.486095</td>
<td>0.2585</td>
<td>4.353283</td>
<td>0.2258</td>
<td>2.771974</td>
<td>0.4281</td>
</tr>
</tbody>
</table>

Based on the table above, it can be concluded that the results of the heteroscedasticity test using Prob. Chi-Square of 0.2585 is greater than alpha 1%, 5%, and 10%, so the regression model in this study is free from heteroscedasticity problems and does not need to be treated.

Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:

<table>
<thead>
<tr>
<th></th>
<th>F-statistic</th>
<th>Prob. F(2,13)</th>
<th>Obs*R-squared</th>
<th>Prob. Chi-Square(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>0.079751</td>
<td>0.9238</td>
<td>0.230292</td>
<td>0.8912</td>
</tr>
</tbody>
</table>

Based on the table above it can be concluded that the results of the Autocorrelation test using Prob. Chi-Square of 0.9238 is greater than alpha 1%, 5%, and 10%, so the regression model in this study is free from autocorrelation problems and does not need to be treated.

Regression Test (Long-Term Analysis)

Based on the results of the p-value these results are not significant at the 1% level. These results indicate that H0 is accepted, meaning that the constant variable has no influence on Y. The coefficient of the independent variable X1 has a positive effect on Y with a significant p-value at the level of α = 5%.

These results indicate that partially in the long run the regional expenditure variables and investment have a significant effect on economic growth. Where, it is assumed that every 1% change in regional expenditure and investment will increase economic growth by 0.2%.

The coefficient of the independent variable X3 has a negative effect on Y with the result that the p-value is significant at the level of α = 10%. These results indicate that partially in the long run the workforce has a significant effect on economic growth. Where, it is assumed that every 1% change in the workforce change will reduce economic growth by 0.8%.

The long-term equation model in the above, has a probability F-statistic of 0.000098 which means it is significant at the level of α = 1%. This illustrates that the independent variables in each model simultaneously in the long run have an effect or are able to explain the dependent variable, namely the Y variable. The R2 value of 0.746154 indicates that 74% of changes in the Economic Growth variable can be explained by the independent variables in the long-term equation, and the remaining 26% is explained by other factors outside the model. Meanwhile, the Adjusted R2 value of 0.695385 shows that taking into account the degree of freedom, all independent variables included in the model are able to explain the dependent variable by 69%, while the remaining 31% is explained by other factors outside the model.
The Effect of Investment on Economic Growth

Investment is one of the important things for economic growth, in order to accelerate economic development in a country and improve work productivity. Increased production can increase a country's economy, so that the amount of investment affects the amount of economic growth, and it needs to be realized that exports have an important role in determining the rate of economic growth. The rate of growth of exports as a whole can ensure sufficient foreign exchange reserves. Therefore, this increase in exports should be used as a momentum to increase domestic production.

Based on the results of the p-value these results are not significant at the 1% level. These results indicate that H0 is accepted, meaning that the constant variable has no influence on Y. The coefficient of the independent variable X2 has a positive effect on Y with the result that the p-value is significant at the level of α = 10%. These results indicate that partially in the short term the labor force has a significant effect on economic growth. The coefficient of the independent variable X3 has a negative effect on Y with the result that the p-value is significant at the level of α = 5%. These results indicate that partially in the short term the labor force has a significant effect on economic growth.

The Effect of Government Expenditure on Economic Growth

According to Tambunan (2011), government spending is part of the government's fiscal policy which aims to spur economic growth. Government expenditure in the form of capital expenditure allocation is based on the need for facilities and infrastructure both for the smooth implementation of government duties and for public facilities. General government spending is allocated to build facilities and infrastructure which in turn are expected to increase the intensity of economic activity which is expected to stimulate economic growth which will then improve the welfare of the community.

Local budgets are used as a tool to determine the amount of income and expenditure, assist in decision-making and development planning, authorization of future expenditures, a source for developing standard measures for performance evaluation, a tool for motivating employees, and a coordination tool for all activities of the various work units.

Based on the results of the p-value these results are not significant at the 1% level. These results indicate that H0 is accepted, meaning that the constant variable has no influence on Y. The coefficient of the independent variable X1 has a positive effect on Y with the result that the p-value is significant at the level of α = 10%. These results indicate that partially in the short term the labor force has a significant effect on economic growth.

The Effect of Labor Force on Economic Growth

Assuming the growth of labor is exogenously determined in terms of economic growth, when the stock of capital grows at a growth rate that is faster than the growth of the labor force, the amount of additional capital created by each labor force will increase. From this description, it can be concluded that the most fundamental problem in employment and economic development is supply-demand in the labor market.

Based on the research results, it is known that the coefficient of the independent variable X3 has a negative effect on Y with the result that the p-value is significant at the level of α = 10%. These results indicate that partially in the short term the labor force has a significant effect on economic growth. Where, it is assumed that every 1% change in the workforce change will reduce economic growth by 0.8%.

According to Todaro (2012) population growth and labor force growth are traditionally considered as positive factors that spur economic growth. A larger number of workers means an increase in the level of production, while a larger population growth means a larger size of the domestic market. The rapid inflow of capital creates many new jobs so that the number of workers increases. In Astuti (2018) conducted research and the results of his research stated that investment in Indonesia had a positive and significant effect on GDP which was the effect of investment in the previous year.
CONCLUSION

1. In the short term the regional expenditure variable has a significant effect on economic growth.
2. In the short term the investment variable has a significant effect on economic growth.
3. In the short term the labor force has a significant negative effect on economic growth.

SUGGESTION

1. In connection with the level of investment that has a positive effect on economic growth, it should be maintained in the context of the effort to collect investment or capital by increasing the ease of bureaucracy, stability of policies, and good infrastructure conditions.

2. Some problems related to the negative impact of the labor force on economic growth should be immediately provided with solutions, such as the provision of more employment opportunities in order to accommodate the increasing number of the labor force every year. In addition, problems such as training for a labor force that does not have skills so they can have competitiveness and increase productivity.

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Dian Caesario Pandusetya  
*Postgraduate school, Universitas Brawijaya, Malang, Indonesia*  
*Email: dianrio200@gmail.com*

Ghozali Maskie  
*Faculty of Economics and Business, Brawijaya University, Malang, Indonesia*  
*Email: ghozalimaski@ub.ac.id*

Sri Muljantingsih  
*Faculty of Economics and Business, Brawijaya University, Malang, Indonesia*  
*Email: ningsih2006@yahoo.com*