

The Effect of Economic Growth and Investment on the Absorption of Industrial Sector Labor in Central Sulawesi in 2003-2017

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ABSTRACT

This study aims to determine the effect of economic growth and investment on the absorption of industrial sector labor in Central Sulawesi in 2003-2017 both partially and simultaneously. This research is a type of descriptive research using a quantitative approach. The data used is secondary data consisting of: Large and medium industrial sector labor data and economic growth data obtained from the publication of the Central Sulawesi Provincial Statistics Agency, and investment data obtained from the publication of the Investment Coordinating Board with a time series of 2003-2017. The analysis used is multiple linear regression analysis with the help of SPSS software. The results showed that: 1) Economic growth and investment simultaneously have a positive and significant effect on industrial sector employment with a significance value of $0.000 < 0.05$; 2) Economic growth partially has no significant effect on industrial sector employment with a coefficient value of 51.530; 3) Investment partially has a positive and significant effect on industrial sector employment with a coefficient value of 0.0004.

Keywords: Economic Growth, Employment, Investment

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INTRODUCTION

Economic development and growth carried out by developing countries are directed to achieve prosperity and welfare for all their people, for example by creating jobs that aim to equitably distribute income and reduce the unemployment rate.

Economic development is a process that is continuous and uninterrupted. Economic development is caused by changes especially in the fields of industry and trade. According to Todaro (2002), development is a multi-dimensional process that includes various fundamental changes in social structure, attitudes of the community, and national institutions, income inequality and poverty alleviation.

An indicator that is often used to assess the economic performance of a region in a certain period in a certain country is indicated by GDP (Gross Regional Domestic Product), which is the total added value generated by all business units in a region or the total amount of the total value of final goods and services produced by all economic units in a region. To calculate real economic growth, the influence of price changes inherent in the economic aggregate figures according to the prevailing price must be eliminated so that the economic aggregate price according to constant prices must be removed.

Economic growth will also affect regional income. The more able a region is to explore the economic potential of its existing region, the greater the GDP of the region, so that it can increase regional finances in supporting the development and implementation of regional autonomy.

Based on BPS data, from 2010 to 2018 it is stated that the GDP figure of Central Sulawesi Province from year to year has increased, namely from 51,752,071 (million rupiah) in 2010 to

103,617,686 (million rupiah) in 2018, this is different from the rate of Economic Growth of Central Sulawesi Province which fluctuated from 2010 to 2018. In 2010 to 2013 the economic growth of Central Sulawesi Province increased from 8.74 percent in 2010 to 9.59 percent in 2013, but the increase in 2013 was relatively small from the previous year which only increased by 0.06 percent from 2012. The economy of Central Sulawesi in 2015 has increased, which in 2015 reached 15.50 percent higher than in 2014 of 5.07 percent.

The development of various economic sectors during 2015 showed a significant increase, the agricultural sector, which is the largest sector of its role in the economy of Central Sulawesi in 2015, distributed 31.77 percent of the total GDP in 2015. Other factors that contribute to the growth of GDP in 2015 are the more conducive overall security in Central Sulawesi, price stability, the more effective implementation of development after the crisis, the implementation of regional autonomy and the start of nickel smelter operations in Morowali Regency. Entering 2018, Central Sulawesi's economic growth has decreased, namely to 6.30 percent, which is lower than the previous year, namely in 2017 Central Sulawesi's economic growth was 7.10 percent (BPS, 2019).

Employment is a problem that has always been the main concern of the government from time to time. This problem is very important considering that it is closely related to unemployment both directly and indirectly, the problem of employment shows that the higher the unemployment rate, the increase in poverty, crime, and socio-economic problems in society.

Addressing the employment problem is a very big task for the government to solve, because this problem will continue continuously if it is not addressed, then the impact caused by this employment problem will extend the list of problems faced by this country.

Several policies that the government has taken to reduce the unemployment rate, one of which is to encourage economic growth to create job opportunities (Siregar and Wahyuniarti, 2008). Economic development is indispensable to reduce the unemployment rate. Economic development is expected to make the economic growth rate always at a higher level than the population growth rate, so that it can reduce the number of unemployed people. In overcoming the unemployment problem, it is necessary to have development oriented towards sectors that have a higher (labor-intensive) ability to absorb labor.

Another thing that also affects the absorption of labor through economic growth is the accumulation of capital that has investment value and greater output or production will encourage an increase in people's income. Investment is seen as one of the indicators of the success of the implementation of regional autonomy. This is because investment has a multiplier effect that includes the absorption of labor, which indirectly increases people's purchasing power and the growth of economic activities around the location of industrial development or other investment projects. The investment factor can directly increase production capacity. The increase in production capacity will increase the demand for production factors, including labor.

Based on BPS data (2019), the realization of investment in Central Sulawesi in 2018 amounted to Rp. 21.7 trillion, this value decreased compared to the previous year which amounted to Rp. 22.56 trillion. In 2017, the realization of investment was mostly supported by the realization of investment in the base metal industry amounting to Rp. 13.90 trillion. Meanwhile, in 2018 there are seven sectors that play an important role, namely the basic metal industry sector, the plantation sector, the basic chemical industry sector, the housing sector, the electricity, gas and water sector, the mining sector and the hotel sector.

Industrial development is a function of the main goal of people's welfare, not an independent activity to achieve only physicality. The industrial sector is believed to be a sector that can lead other sectors in an economy towards progress (Dumairy, 2009).

Industries can be classified based on multiple viewing angles or multiple approaches. In Indonesia, industries are grouped based on commodities, business scale, and product flow. The industrial sector is divided into large and medium industries and small household industries. The definition used by the Central Statistics Agency is that large industries are companies that have a workforce of 100 people or more, medium industries are companies with a workforce of 20 to 99

people, small industries and households, are enterprises with a workforce of 2 to 19 people, and household industries are labor companies with 1 to 4 people (BPS, 2019).

In Central Sulawesi itself, the number of large and medium industrial workers from year to year has increased, it was recorded in 2015 that the number of large and medium industrial workers in Central Sulawesi was 9,249 people, this is a double increase from 2006 which was only 2,035 large and medium industrial workers spread throughout Central Sulawesi. The results of the latest survey show that the number of large and medium industry workers in 2017 was 13,063 people (BPS, 2019).

LITERATURE REVIEW

Economic Growth

According to Kuznets (in Jhingan, 2000), economic growth is the long-term increase in a country's ability to provide more and more types of economic goods to its population. According to Sukirno (2008), economic growth is the fiscal development of the production of goods and services that prevails in a country. Economic growth is one of the indicators to assess the performance of an economy, especially to analyze development results. Increased economic growth reflects economic development in a region.

According to Arsyad (2000), economic growth is an increase in Gross Domestic Product (GDP) and Gross National Product (GNP) regardless of whether the increase is greater or smaller than the rate of population growth, whether there is a change in economic structure or not. Meanwhile, according to Boediono (2002), economic growth is a process of increasing per capita output in the long term. Economic growth can be measured based on the increase in national income reflected in the value of Gross Domestic Product (GDP). In this measure it is more relevant to use because it is measured according to the boundaries of the region. With this, the effectiveness of government policies can be assessed.

Classical Economic Growth Theory

According to Adam Smith, development is a process of unity between population growth and technological progress. The increased demand will expand the market, and the expansion of the market will drive the level of specialization. Specialization will increase the level of economic activity or accelerate the process of economic development, because specialization will encourage the level of technological development (Suryana, 2000).

In the Classical theory of growth, a theory is put forward that explains the relationship between per capita income and the number of population. This theory is called the Optimal Population Theory. From the Classical theory of growth, it can be seen that when there is a shortage of population, marginal production is higher than per capita income. So the increase in population will increase per capita income. However, if the population increase is getting higher, it will affect the production function, that is, marginal production will begin to decrease. Therefore, the growth of national income and per capita income is becoming slower. A population that continues to grow will cause marginal production to be equal to the per capita income of a certain number of people. In this situation, the per capita income reaches the optimal value. The number of people at that time was called the optimal population (Sukirno, 1999).

Theory Neo-Classical

Neo-Classical growth theory is an analysis of economic growth based on the views of Classical economists. Neo-Classical theory was developed by Robert Solow and Trevor Swan. The Neo-Classical opinion states that the level of economic growth and development depends on (Sukirno, 1999):

Capital increase and marginal capital productivity.

Increase in labor and productivity of marginal workers.

Technological developments.

According to Neo-Classical, interest rates and income levels determine the high level of savings. Where the interest rate will determine the high level of investment. If the interest rate is low, then the investment rate will be high, and vice versa. If the demand for investment decreases, interest rates fall and capital goods fall, and the desire to save will decrease. At this rate of development, capital accumulation ends, and the economy becomes undeveloped.

Keynes' Theory (1936)

According to Keynes, the greater the national income, the greater the number of jobs produced, and vice versa. The amount of work depends on the effective demand. Effective demand determines the level of work-income balance. Effective demand is demand that is accompanied by the ability to pay for those goods and services that are demanded, which exist in the economy. Effective demand consists of consumption demand and investment demand.

Investment can mediate between income and consumption. If the required amount of investment is not met, then the ask price will fall lower than the aggregate bid price. As a result, income and consumption will fall until it is mediated by investment. The amount of investment depends on the marginal efficiency of the capital and interest rates.

Theory Harrod Judgments

According to Harrod-Dommar's theory, capital formation is an important factor that determines economic growth. The formation of capital can be obtained through the process of accumulating savings.

GDP (Gross Regional Domestic Product)

Gross Regional Domestic Product (GDP) is the amount of added value generated for all business and service areas in a region, applying the sum of all the final value of goods and services produced by all economic units. GDP can be defined as the amount of added value produced by all business units or the sum of all the value of goods and services by all economic units in a region.

The Relationship between Economic Growth and Labor Absorption

The relationship between labor and economic growth has a two-way relationship. The development of labor quality makes an important contribution to economic growth. In terms of economic growth, it provides resources that enable the development of human development. Macrologically, the growth rate of job opportunities can be related to the rate of economic growth. In other words, economic growth will affect the growth rate of employment opportunities (Widodo, 1990). Increased economic growth requires additional labor as a factor of production to meet the increasing aggregate demand.

Investment

According to Neo-Classical Theory, it emphasizes the importance of savings as a source of investment. Investment is seen as one of the main drivers of economic growth and development, whereas, according to Harrod-Domar's Theory, capital formation is considered as an expenditure that will increase the ability of an economy to produce goods and or services, as well as an expenditure that will increase the effective demand of the entire society. Where if a certain period of capital formation is carried out, then in the next period the economy has the ability to produce greater goods and or services (Sukirno, 2007).

In Law No. 25 of 2007 article 1 paragraph 1 it is stated that investment is any form of investment, both by domestic investors and foreign investors to conduct business in the territory of the Republic of Indonesia. Meanwhile, according to Rahardja (2014), investment is an expenditure that increases the stock of capital goods.

Types of Investment

Capital facilities that are generally referred to as investment or investment can come from 2 sources, including (Salvatore, 1997):

1. Foreign Investment (FDI)

Foreign investment or commonly called Foreign Investment (FDI) is a form of capital raising to support the economic development process sourced from abroad. Usually, FDI consists of: Portfolio investment and Foreign Direct Investment.

2. Domestic Investment (PMDN)

Domestic Investment or commonly known as Domestic Investment (PMDN) is a form of effort to increase capital to support national and regional development through domestic investors. The capital obtained from within the country can come from the private sector or from the government.

The Relationship between Investment and Labor Absorption

According to Sukirno (2000), investment is the expenditure made by investors to buy capital goods and production equipment with the aim of replacing and adding capital goods in the economy that will be used to produce goods and services in the future.

Investment is one of the crucial factors for the continuity of the long-term economic development process. According to the theory put forward by Harrod-Domar, that an increase in the level of output and employment opportunities can be done with the accumulation of capital (investment) and savings. Therefore, according to him, every economic venture must save a certain proportion of national opinion, namely, to increase the capital stock to be used in new investments (Suryana, 2000). So direct investment can increase production capacity. The increase in production capacity will increase the demand for production factors, including labor.

Workforce

Labor is defined as a working-age population, namely people aged 15-64 years. Before 1997, the definition of labor was those aged 10 years and above (BPS, 2019).

Labor has an important role and position, either as actors or as development goals. The role of labor is related to the ability of development goals. The role of labor is related to the ability of workers to produce goods/services, while their position is related to work before, during and after their working period.

Labor Absorption

There is a difference between the demand for labor and the amount of labor demanded or in this case the labor absorbed by a company or a sector. Labor demand is the overall correlation between the different wage levels and the number of people asked to be employed. Meanwhile, the number of workers required is more indicated by the quantity or quantity of demand for labor at a certain wage level (Sukirno, 2004)

Absorbed populations, spread across various sectors that employ many people, generally produce relatively large goods and services. Each sector experiences a different growth rate. Likewise with the ability of each sector to absorb labor. First, there is a difference in the rate of increase in work productivity in each sector. Second, there are gradual sectoral changes, both in the absorption of labor and its contribution to national income (Simanjuntak, 2001).

Hipotesis

The hypotheses used in this study are:

1. It is suspected that economic growth and investment simultaneously affect the absorption of industrial sector labor in Central Sulawesi.

2. It is suspected that partial economic growth has a positive effect on the absorption of industrial sector labor in Central Sulawesi.
3. It is suspected that partial investment has a positive effect on the absorption of industrial sector workers in Central Sulawesi.

METHOD

The type of research used in this study is a type of descriptive research using a quantitative approach. The location of this research was carried out in Central Sulawesi Province. The data used in this study is secondary data that uses time series data, or a time series for 15 years, from 2003 to 2017. The data sources in this study were obtained indirectly through intermediary media, in this case from government agencies or agencies, including the Central Statistics Agency of Central Sulawesi Province and the Investment Coordinating Board.

This study uses multiple linear regression analysis methods with the help of the SPSS program. The equation of multiple linear regression analysis for this study is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$$

Description:

- Y : Industrial Sector Labor Absorption (soul)
 β_0 : Constant
 β : Regression coefficient
 X_1 : Economic Growth (Percent)
 X_2 : Investment in Central Sulawesi Province (Million Rupiah)
 ϵ : Error Term

Some of the tests carried out in this study are determination test, F test, statistical t-test and classical storage test (Normality, Autocorrelation, Multicollinearity and Heterokedasticity).

RESULTS AND DISCUSSION

Research Results

The data analysis method used in this study is multiple linear regression analysis. Multiple linear regression is useful for predicting the influence of two or more predictor variables on a single criterion variable or to prove whether or not there is a functional relationship between two or more independent variables (X) and a dependent variable (Y). Multiple linear regression analysis in this study was used to determine the influence of economic growth and investment on the absorption of industrial sector labor in Central Sulawesi in 2003-2017.

Table 1. Multiple Linear Regression Coefficient Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2876.658	999.063		2.879	.014
11 PE	51.530	118.272	.031	.436	.671
I	0.0004	0.000	.962	13.367	.000

a. Dependent Variable TK (Y)

Source: Output SPSS data processed

Based on table 1 above, it can be concluded that the form of multiple linear regression equations in this study is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$$

$$Y = 2876.658 + 51.530 X_1 + 0.0004 X_2 + \epsilon$$

Description:

Y : Industrial Sector Labor Absorption

X₁ : Economic Growth

X₂ : Investment

€ : Error Term

From the results of the equation above, it shows that:

1. The constant value is 2876,658, which means that if economic growth (X₁) and investment (X₂) are assumed to be 0 (zero), then the amount of absorption of industrial sector labor (Y) is 2876,658 people.
2. Based on the results of the calculation of the regression coefficient multiple regression test on the positive economic growth variable of 51.530, it shows that if the economic growth variable increases by 1 percent, then the labor absorption variable of the industrial sector has increased by 51.530 percent. The results of the calculation of the positive value coefficient mean that there is a positive relationship between economic growth and labor absorption in the industrial sector. If the amount of economic growth increases, it will increase the number of industrial sector labor absorption, and vice versa.
3. Based on the results of the calculation of the regression coefficient multiple regression test on the positive investment variable of 0.0004, it shows that if the investment variable increases by 1 percent, then the labor absorption variable of the industrial sector increases by 0.0004 percent. The results of the calculation of the positive value coefficient mean that there is a positive relationship between investment and labor absorption in the industrial sector. If the amount of investment increases, it will increase the number of industrial sector labor absorption, and vice versa.
4. The error standard (e) represents all factors that have an influence on Y but are not included in the equation.

Determination Test (R²)

The determination test (R²) in this case is to measure how much the proportion of variation in dependent variables is explained by all independent variables, or to measure the extent to which the percentage of regression models is able to explain the variation of its dependent variables (goodness of fit). If the determination numbers get stronger, that means independent variables provide almost all the information needed to predict dependent variables. Meanwhile, a smaller coefficient value of determination (R square) means that the ability of independent variables to explain the variation of dependent variables is limited.

Table 2. Determination Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.971 ^a	.942	.933	1002.318	2.161

Source: Output SPSS data processed

Based on table 2, it is known that the R Square value is 0.942, that is, the contribution of independent variables (economic growth variables and investment variables) in explaining the variation of dependent variables (labor absorption variables in the industrial sector) is 94.2

percent, while the 5.8 percent is explained by other variables outside this regression model. In general, this shows a very strong relationship between dependent variables and all independent variables.

Overall Test (F Test)

The economic growth and investment hypotheses proposed in this study are as follows:
H0: Economic growth and investment simultaneously have no effect on the absorption of industrial sector labor.

Ha: Economic growth and investment simultaneously affect the absorption of industrial sector labor

Table 3. F Test Results

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.966E8	2	9.832E7	97.868	.000 ^a
	Residual	1.206E7	12	1004641.196		
	Total	2.087E8	14			

Source: Output SPSS data processed

Based on table 3, it is known that the significance value for the effect of economic growth and simultaneous investment on the absorption of industrial sector labor is $0.000 < 0.05$. So it can be concluded that H0 is rejected, which means statistically that all independent variables simultaneously affect the labor absorption of the industrial sector.

Significance test of individual parameters (Statistical t-test)

This T test aims to determine the influence of independent variables consisting of economic growth and investment on the absorption of industrial sector labor in Central Sulawesi.

Table 4. Statistical t-test results

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2876.658	999.063		2.879	.014
	PE	51.530	118.272	.031	.436	.671
	I	0.0004	.000	.962	13.367	.000

a. Dependent Variable: TK (Y)

Source: Output SPSS data processed

Based on table 4, it can be explained about the hypothesis testing of each independent variable, which is as follows:

1. For the variable Economic Growth (X1)

H0 : X1 has no effect on the variable Y.

Ha : X1 has an effect on the variable Y.

Based on table 4.6, a Sig value of $0.671 > 0.05$ with a coefficient of 51.530 was obtained. This shows that the economic growth variable has a positive relationship and has a insignificant effect on the absorption of labor in the industrial sector. So it can be concluded that receiving H0, which means statistically economic growth has no effect on the absorption of industrial sector labor.

2. For the Investment variable (X2)

H0 : X2 has no effect on the variable Y.

Ha : X2 affects the variable Y.

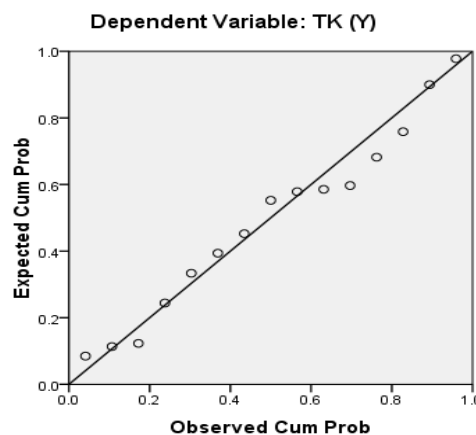
Based on table 4.6, a Sig value of $0.000 < 0.05$ with a coefficient of 0.0004 was obtained. This shows that investment variables have a positive and significant effect on the absorption of labor in the industrial sector. So it can be concluded that rejecting H_0 , which means that statistically investment affects the absorption of labor in the industrial sector.

Classical Assumption Deviation Test

The classical assumption deviation test is carried out to obtain a regression model that really has accuracy in estimation. Testing against classical assumptions aims to find out whether the regression model is good or not if it is used to perform assessments. A model is said to be good if it is BLUE (Best Linear Unbiased Estimator), which is to meet classical assumptions or avoid problems of multicollinearity, autocorrelation and heteroscedasticity. To obtain results that meet these properties, classical assumption testing is carried out which includes normality tests, autocorrelation tests, multicollinearity tests, and heteroscedasticity tests.

Normality Test

The data normality test is carried out to test the normality of data distribution. The normality test in this study uses a normal probability plot, which compares the cumulative distribution of the actual data with the cumulative distribution of the normal distribution. According to Ghazali (2006), if the data is spread around the diagonal line and follows the direction of the diagonal line or the histogram graph shows a normal distribution, then it indicates that the regression model meets the assumption of normality. However, if the data spreads far from the diagonal and or does not follow the direction of the diagonal line or the histogram graph does not show a normal distribution, then it indicates that the regression model does not meet the assumption of normality.



Source: SPSS output, Data processed

Figure 1. Normality Test Results

Based on Figure 1, it shows that the data distribution points follow the direction of a diagonal line or histogram graph. Thus, the conclusion for the normality test of this regression model is normally distributed.

Autocorrelation Test

The autocorrelation test is a test to determine the relationship that occurs between the residual of one observation and another. The autocorrelation test used in this study is the Durbin-Watson test.

Table 5. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.971 ^a	.942	.933	1002.318	2.161

Source: Output SPSS data processed

According to Ghozali (2011), there is no symptom of autocorrelation, if the Durbin Watson value is between du to $(4-du)$. The du value is searched on the distribution of the values of the Durbin Watson table based on k (2) and N (15) by a significant 5%.

From: 1,543

4 – from: 4 – 1,543

: 2,457

Durbin Watson: 2,161

Because, Du (1,543) < Durbin Watson (2,161) < 4- du (2,457) Thus, the conclusion of the autocorrelation test in this regression is that there are no symptoms of autocorrelation.

Multicollinearity Test

This multicollinearity test aims to test whether in the regression method carried out there is a correlation between independent variables. According to Ghozali (2011), there are no symptoms of multicollinearity, if the Tolerance value is > 0.100 and the VIF value is < 10.00.

Based on table 6, we can see that the Tolerance value of Economic Growth and Investment is 0.930 which is greater than 0.100, and for the VIF value of Economic Growth and Investment is 1.076 which is less than 10.00. Thus, the conclusion of the multicollinearity test in this regression is that there are no symptoms of multicollinearity.

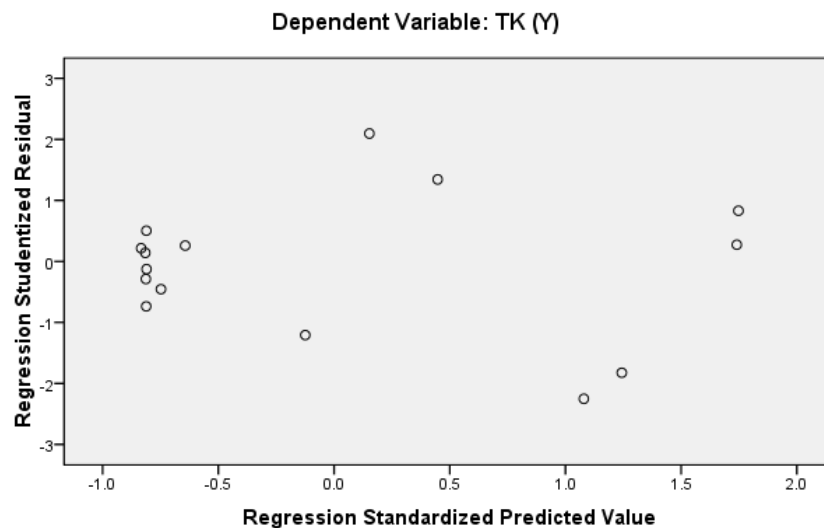
Table 6 Multicollinearity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
(Constant)	2876.658	999.063		2.879	.014		
PE	51.530	118.272	.031	.436	.671	.930	1.076
I	.000	.000	.962	13.367	.000	.930	1.076

Source: Output SPSS data processed

Heteroscedasticity Test

The heteroscedasticity test is to test whether in the regression model there is variance disparity from the residual of one observation to another. If the variance from one residual observation to another observation is fixed, then it is called homoscedasticity and if it is different it is called heteroscedasticity or heteroscedasticity does not occur. The heteroscedasticity test in this study was carried out by looking at scatter plot graphs. According to Santoso (2002), the basis for heteroscedasticity test decision-making is that if there is no clear pattern and the data points are spread above and below zero on the Y axis, then heteroscedasticity does not occur.



Source: SPSS output, Data processed

Figure 2 Heteroscedasticity Test Results

Based on figure 2, it can be seen that the above point spreads randomly, where it does not form a certain pattern and the points spread above and below the zero on the Y axis.

Discussion

The Effect of Simultaneous Economic Growth and Investment on the Absorption of Industrial Sector Labor

From the results of the analysis in table 3, it shows that the significance value is $0.000 < \alpha = 0.05$. This shows that there is a significant positive influence of economic growth and simultaneous investment on the absorption of industrial sector labor in Central Sulawesi. This means that if the amount of economic growth and investment increases, the absorption of labor in the industrial sector will increase. And vice versa, if the amount of economic growth and investment decreases, the absorption of labor in the industrial sector will also decrease. This indicates that economic growth and investment can determine the level of labor absorption of the industrial sector in Central Sulawesi.

Increasing economic growth and investment in Central Sulawesi will create jobs and will encourage economic activity in Central Sulawesi Province, which will then be followed by increased labor absorption which will ultimately improve community welfare and economic growth in Central Sulawesi.

The magnitude of the contribution of economic growth and investment to the fluctuations in the absorption of industrial sector labor in Central Sulawesi can be seen from the determination coefficient (R^2) of 0.942. This means that 94.2 percent of the absorption of industrial sector labor in Central Sulawesi is influenced by economic growth and investment, while the remaining 5.8 percent is explained by other factors that were not included in this study.

Economic growth and investment that have a significant effect on labor absorption occur because investment is an important thing in determining the production process and the level of national income. The level of economic growth and investment is positively correlated with labor absorption. In simple terms, the level of economic growth and investment will increase production capacity, which will ultimately create jobs, so that unemployment can be reduced and will result in an increase in people's income.

The Central Sulawesi regional government should focus on increasing and maintaining economic growth and investment in the industrial sector in order to add and create new jobs in the industrial sector itself. Considering that the development of the industrial sector is a function

of the main goal of people's welfare. The industrial sector is believed to be a sector that can lead other sectors in an economy towards progress (Dumairy, 2009).

Holding job training to improve the quality of workers is also very necessary. So that the workforce in Central Sulawesi can compete with other workers. This is because foreign companies or large companies need more experts, professionals and educated.

The results of this study also support the findings of the research of Dimas and Woyanti (2009) which found that GDP, real wage level, and real investment together have a significant effect on the absorption of labor in DKI Jakarta. Furthermore, research conducted by Azaini (2014) also shows that economic growth, minimum wage and investment have a significant effect on the absorption of labor in Malang City in 1998-2012. After that, research conducted by Wasilaputri (2016) also showed provincial municipal wages, GDP and investment on labor absorption in Java in 2010-2014. Likewise, research conducted by Kamar (2017) shows that economic growth and investment simultaneously have a positive and direct and significant effect on the absorption of labor in Tangerang Regency in 2009-2015. The results of this study also show that it is in accordance with the research hypothesis that economic growth and investment simultaneously affect the absorption of industrial sector labor in Central Sulawesi in 2003-2017, so the research hypothesis is accepted.

The Effect of Economic Growth on the Absorption of Labor in the Industrial Sector

Based on the results of the analysis, it can be seen that the economic growth variable has a coefficient of 51.530. This shows that there is a positive relationship of the economic growth variable to the absorption of industrial sector employment in Central Sulawesi in 2003-2017. The regression coefficient of the economic growth variable of 51.530 also shows that every 1 percent increase in economic growth will tend to be followed by an increase in labor absorption in the industrial sector by 51.53 percent assuming other variables are constant. However, the significance value of the economic growth variable is $0.671 > \alpha = 0.05$ so that economic growth does not have a significant effect on the absorption of industrial sector labor in Central Sulawesi in 2003-2017. This means that if economic growth increases, the absorption of industrial sector labor increases, but does not have a direct impact.

Economic growth that has an insignificant effect on the absorption of labor in the industrial sector, reflects that economic growth is not qualified to absorb labor. The low quality of economic growth is indicated by a relatively low labor absorption rate and slow increase. From 2003 to 2017, the average economic growth was 8.45 percent, with an average industrial sector workforce of around 6,324 people, which is a very small number, considering the average economic growth of 8.45 percent. The low quality of economic growth, which is indicated by the low rate of labor absorption, occurs because economic growth is largely supported by the service sector which has very minimal labor absorption. So labor-intensive sectors play less of a role in the absorption of labor.

The results of this research support the findings of Priambodo (2014) who found that economic growth has a positive and insignificant influence on the absorption of labor in Semarang City. Furthermore, research by Kamar (2017) in his research also found that economic growth did not have a significant effect on the absorption of labor in Tangerang Regency in 2009-2015. The results of this study show that there is a discrepancy with the research hypothesis that economic growth affects the absorption of industrial sector labor in Central Sulawesi in 2003-2017, so the research hypothesis is rejected.

Partially, economic growth in this study did have a insignificant effect on the absorption of industrial sector labor in Central Sulawesi, but simultaneously or simultaneously economic growth and other independent variables (investment) had a positive and significant effect on the absorption of industrial sector labor in Central Sulawesi (dependent).

The Effect of Investment on the Absorption of Labor in the Industrial Sector

Based on the results of the analysis, it can be seen that the investment variable has a coefficient of 0.0004. This shows that there is a positive relationship between investment variables and on the absorption of industrial sector labor in Central Sulawesi in 2003-2017. The regression coefficient of the investment variable of 0.0004 also shows that every 1 percent increase in investment will tend to be followed by an increase in industrial sector labor absorption of 0.0004 percent assuming other variables are constant. The significance value of the investment variable is $0.000 < \alpha = 0.05$, this shows that the investment variable has a significant effect on the absorption of industrial sector labor in Central Sulawesi in 2003-2017.

Investment activities carried out by investors will result in an increase in economic activities and employment opportunities, an increase in national income and the level of public welfare. According to Sukirno (2000), investment has three roles, namely: 1) investment is one of the aggregate expenditures, where increasing investment will increase aggregate income, national income and employment opportunities. 2) investment will result in an increase in capital goods that will increase production capacity. 3) Investment is always accompanied by technological developments.

This research is also in line with the theory put forward by Harrod-Domar, which states that an increase in the level of output and employment opportunities can be done with the accumulation of capital (investment) and savings.

The factor that causes investment to have a direct and significant effect on the absorption of labor is that with investment, it will require labor to realize the investment. We can see this in appendix 1, where in the appendix it can be seen that every year investment in Central Sulawesi tends to increase, this also happens to the large and medium industrial workforce which every year experiences an increase. We can see that in 2016 investment in Central Sulawesi amounted to Rp. 22,583,383.31 million, so the absorption of labor in the industrial sector increased by 13,576 people. This means that the investment that has been made has been able to increase production capacity, which will further result in the absorption of labor. So it can be concluded that increasing investment will be followed by the absorption of industrial sector labor in Central Sulawesi.

The absorption of labor in Central Sulawesi will continue to increase in line with the increasing value of investment in Central Sulawesi. Almost all districts/cities in Central Sulawesi have been entered by investors, so with these investors it is hoped that they will recruit a lot of workers, especially in the industrial sector.

Efforts that can be made by the government and the private sector to be able to increase the role of investment in optimizing the industrial sector workforce in Central Sulawesi is to increase the amount of investment made every year and allocate these investments to create new jobs. This aims to optimize the existing workforce and can absorb new workers in the industrial sector. The increase in investment, the companies will increase their production output or will create new companies that will require more labor so that it will increase labor absorption.

The results of this study support the findings of Dimas and Woyanti (2009) who found that partially the variables of GDP, real wage levels, and real investment have a significant effect on the absorption of labor in DKI Jakarta. Research conducted by Azaini (2014) found that investment had a significant effect on the absorption of labor in Malang City in 1998-2012. The results of this study also show compatibility with the research hypothesis which states that investment affects the absorption of industrial sector labor in Central Sulawesi in 2003-2017, so the research hypothesis is accepted.

CONCLUSIONS AND SUGGESTION

Conclusion

Based on the results of the research and discussion, the author draws conclusions about the influence of economic growth and investment on labor absorption in Central Sulawesi in 2003-2017 as follows:

1. Based on the F test, it shows that the significance value of economic growth and investment is $0.000 < 0.05$ which means that economic growth and investment have a simultaneous effect on the absorption of labor in the industrial sector in Central Sulawesi. This indicates that economic growth and investment together can determine the absorption of industrial sector labor in Central Sulawesi.
2. Based on the results of the statistical t-test, it shows that the significance value for economic growth (X1) is $0.671 > 0.05$ with a coefficient value of 51.530 which means that economic growth has a positive and insignificant effect on the absorption of industrial sector (Y) labor in Central Sulawesi, this shows that if economic growth increases, then the absorption of industrial sector labor in Central Sulawesi tends to increase. The value of Investment Significance (X2) is $0.000 < 0.05$ with a coefficient value of 0.0004 which means that investment has a positive and significant effect on the absorption of labor in the industrial sector (Y) in Central Sulawesi, this shows that when investment increases, the absorption of industrial sector labor in Central Sulawesi will increase.

Suggestions

Based on the conclusions of the research above, several suggestions can be proposed to overcome the problem of employment in central Sulawesi, especially in the industrial sector:

1. For the Government, this research aims to provide input so that the Central Sulawesi government should encourage and spur increased economic growth in the industrial sector so that labor absorption increases. Local governments should also encourage investment in labor-intensive sectors and be more selective in granting permits to capital owners related to projects to be realized so that they can absorb more labor. The local government should also hold job training to improve the quality of workers, so that the workforce in Central Sulawesi can compete with workers both from other regions in the country and from abroad.
2. For academics, this research is expected to be a reference material for academics in understanding the influence of economic growth and investment on the absorption of industrial sector labor, especially in Central Sulawesi.
3. For other researchers, this research still has shortcomings in terms of data, studies and discussions. Therefore, it is hoped that future research that wants to research with the same theme will increase the research period and use other variables so that the next results are more developed and more useful.

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