



## Examining Factors Affecting Economic Growth

Dahliah <sup>1</sup>

<sup>1</sup> Universitas Muslim Indonesia, Makassar City, 90231, South Sulawesi, Indonesia

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### Email Address :

[dahliah.dahliah@umi.ac.id](mailto:dahliah.dahliah@umi.ac.id)

### Abstract

This study aims to study population growth, labor, and the ratio of dependents, both partial and simultaneous to economic development in the Maros Regency. This study uses quantitative research, and data is processed with the model needs. Data processing techniques use multiple linear regression through the SPSS 21 program. Secondary data is derived from historical records or reports arranged in published and unsupported archives. The study showed that population growth and labor were significant for economic development in Maros Regency. At the same time, the ratio of dependents is insignificant to economic development in Maros Regency if the significance level is 5%. However, compared to the 10% significance level, the ratio of population dependence is significant for economic development in Maros Regency. This variable is positively related to economic development in Maros Regency



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## 1 Introduction

Every country in the world has a goal to build the country's economy. Economic development is the embodiment of a series of efforts and policies carried out by the government of a country to improve people's living standards, expand employment opportunities, and equal income distribution for the community. The level of development of something as measured by the increase in real national income. Economic development is economic growth followed by changes in the structure and pattern of economic activity. The main objective of economic development is to create the highest possible GNP growth. However, it is followed by eradicating poverty, reducing income inequality, providing employment, better education, increasing health and nutrition standards, improving environmental conditions, equal

Corresponding author. Dahliah

Email address: [dahliah.dahliah@umi.ac.id](mailto:dahliah.dahliah@umi.ac.id)

opportunity, equal distribution of individual freedom, and refreshment of cultural life. The national development of a nation that focuses on the economic sector will be able to take place in the long term and will become progressively more advanced if several basic requirements are met, including two important ones. First, there are human resources that are quite a lot and have the ability and enthusiasm for work that is quite large, which drives in an integrated and harmonious way all activities to process and utilize other resources in the development process. Second, a sizable market for selling goods and services produced under construction exists.

Indonesia is one of the developing countries actively pursuing economic development. Indonesia's abundant natural resources are valuable assets that have the potential to make Indonesia a developed country. However, the management that is not optimal due to the lack of quality human resources is why the State of Indonesia, with such potential, is still a Developing Country. Therefore, each Indonesia region focuses on developments in their respective regions to overcome the problems of backwardness in their regions, such as the economic development that occurred in the Maros Regency. The implementation of development cannot be separated from the population's participation. Implementation of the development requires a qualified population to achieve development goals quickly. Therefore, the quality of the population always gets the government's attention. Population growth will increase the number of workers, which allows the State or region to increase production. In addition, because of education, training, and work experience, the population's skills will always increase, so productivity will increase, which will further encourage an increase in the amount of production.

There is a positive influence of population growth on economic development where the condition and progress of the population are closely related to the growth and development of economic enterprises. Residents, on the one hand, can be actors or resources for factors of production. On the other hand, can be targets or consumers for the products produced. Population conditions, population data, and information, will be very useful in calculating how much labor will be absorbed, specific qualifications needed, and the types of technology used to produce goods or services. On the other hand, knowledge of population structure and socio-economic conditions in a particular area will be instrumental in calculating how many people can take advantage of development opportunities and results or how wide the market share is for a particular business product. Discussing employment problems will not be separated from population problems because the subject and object of employment problems are humans as every soul of the population. According to the 1945 Constitution, residents are Indonesian citizens and foreigners residing in Indonesia. Indonesia's population is so much a potential workforce. Population growth from year to year continues to grow. This population growth tends to lead to a growth in the labor force. The Labor Force is the number of people belonging to the age group between 15 years and 64 years who are working or actively looking for work. The ratio of productive age to the population of non-productive age greatly influences economic development in an area or is referred to as the ratio of the population's dependents. If the productive age population is more, then the economic development in the area is advanced due to the lack of non-productive age due to the small value of dependents.

Maros Regency is one of the Level II Regions in South Sulawesi, Indonesia. The district capital is in Maros City. This district had an area of 1,619.12 km<sup>2</sup> and a population of 346,383 people in 2017. This large population can affect economic development changes in Maros Regency. Economic growth in Maros Regency from 2010 to 2017 tends to increase. This is due to the GRDP sectors that are participating, such as the agricultural sector, the manufacturing industry, etc., in Maros Regency, which is shown in the increase in GRDP at constant prices in the following table:

**Table 1. GRDP of Maros Regency in 2010-2017 Based on Constant Prices in 2010 Base Year (Million Rupiah)**

No.	Year	GRDP (Basic Year 2010)	Growth (%)
1	2010	7,315,449	11.40
2	2011	8,137,588	11.24
3	2012	9,044,514	11.14
4	2013	9,612,782	6.28
5	2014	10,066.823	4.73
6	2015	10,916,729	8.44
7	2016	11,953,999	9.50
8	2017	12,768,318	6.81

Source: Central Bureau of Statistics of Maros Regency, 2018

Based on table 1, the GRDP in Maros Regency from 2010 to 2017 has increased, so its economic growth will also increase. Economic growth is not the only measure of people's welfare in an area. Although economic growth in Maros Regency has increased, the people in Maros Regency have not fully achieved prosperity. This can be proven by the high poverty and unemployment levels in Maros Regency. Therefore, to measure the level of community welfare in Maros Regency. Not only looking at the side of economic growth but also paying attention to economic development. The welfare of the people in Maros Regency can be measured by looking at how economic development is taking place in Maros Regency. Economic development is economic growth followed by changes in the structure of economic sector activities. One of the economic sectors that can affect changes in economic growth is the population sector, such as population, labor, and the ratio of the population's dependents.

The rate of population growth and matters related to the increase in the labor force has traditionally been regarded as positive factors in stimulating economic development. On the one hand, population growth in an area is a development capital because there is a labor force according to the development of the population. On the other hand, it will burden the government because every soul needs the necessities of life, such as clothing, food, provision of school facilities and infrastructure, and employment. Knowledge of the population is essential for private and government institutions at the national and local levels. Plans for education, taxation, and companies that produce goods and services, roads, hospitals, shopping centers, and recreation centers will be more appropriate if they are all based on population data. Population growth can encourage economic growth but can also be a barrier to economic growth. In developed countries, population growth can increase economic growth because it is supported by high investment, high technology, and others. However, in developing countries, the impact of population growth on development is not the same because the prevailing conditions are entirely different from the economic conditions of developed countries. The economy of developing countries lacks capital. Technology is still simple, and the workforce is not skilled. Because of that, population growth is considered an obstacle to economic development, where rapid population growth exacerbates pressure on land, causes unemployment, and encourages an increasing burden of dependence. It is increasingly challenging to provide adequate educational and social facilities. Every population increase is always related to an increase in the workforce, from dropping out of school, not completing elementary school, not graduating from junior high school, and not graduating from college. Facing population growth related to the workforce in an area will be an employment problem because, in general, they want to get a job, either according to their educational background or not according to their educational background.

Population growth is a dynamic balance between forces that increase and forces that reduce population. The population will continuously be affected by the number of babies born (increase in the number of residents), but at the same time, it will also reduce deaths that occur in all age groups. Generally, someone of productive age will be able to earn more income compared to someone of non-productive age. The age structure will affect the economic activities carried out by the population concerned. The male

and female populations certainly influence this age composition. In general, the male population, when compared to the female population, if the composition of the female population is much larger than the male population, will affect population growth. The more female population, the greater the possibility of a dense population because women are a means of reproduction that can increase the population. The gender factor also determines a person's level of participation and productivity in work. Labor is indistinguishable based on gender. However, men generally will be more productive for jobs that rely on physical strength. The sex ratio is helpful for developing gender-oriented development planning, especially regarding the equitable balance of male and female development. For example, because ancient customs and habits prioritized male education over female education, the development of gender-oriented education must consider both sexes by knowing how many males and females are of the same age.

**Table 2. Number of Population aged 15 and over (Work Force) and Number of Population Aged 15 and Over who work in Maros Regency in 2012-2017 (Life/Person)**

Population type	Year					
	2012	2013	2014	2015	2016	2017
Population aged 15 years and over (Work Force)	143,000	145,437	148,384	155,988	151,876	142,621
Working Population Age 15 and Over	133,810	136,245	141,625	145,081	139,456	132,854

Source: Central Bureau of Statistics of Maros Regency, 2018

In table 2 the number of people aged 15 years and over who are included in the labor force fluctuates every year, and the same happens to people aged 15 years and over who are already working, which occurs from year to year. It is seen from the number of residents of Maros Regency, which is increasing every year because the mindset of rural communities who want to find work in Maros Regency is the main driver for this. However, the number of jobs available in the Maros Regency is insufficient to meet the number of job seekers.

Malthus analyzed population growth about economic development. According to Malthus, population growth alone is insufficient for economic development (Rahman & Hamzah, 2017). Population growth is a result of the development process. For developing countries, rapid population growth will hamper economic development. Classics such as Adam Smith, David Ricardo, and Thomas Robert Malthus argued that there will always be a race between the level of development of output and the rate of population development. So, because the population also functions as labor, at least there will be difficulties in providing employment opportunities. If the population cannot get a job, which means they are unemployed, it will lower the standard of living of the nation. The rapidly increasing population causes the demand for clothing, food, and housing. However, the supply of these goods cannot be increased in the short term due to the lack of supporting factors such as raw materials, trained labor, capital, etc. The costs and prices of these goods rise so that the cost of living for the people becomes expensive. As a result, the low standard of living becomes lower. Poverty allows many children, which only further worsens the population's standard of living. This vicious circle between poverty and a low living standard keeps getting more complicated. When associated with the growth of a country's per capita income, the population can roughly reflect the country's economic progress. There is an opinion that says that a large population is very beneficial for economic development. However, some argue that it is precisely the small number of people who can accelerate the process of economic development in a better direction. In addition to these two opinions, there is also an opinion that says that a country's population must be balanced with the number of economic resources, then an increase in national income can be obtained. This means that the

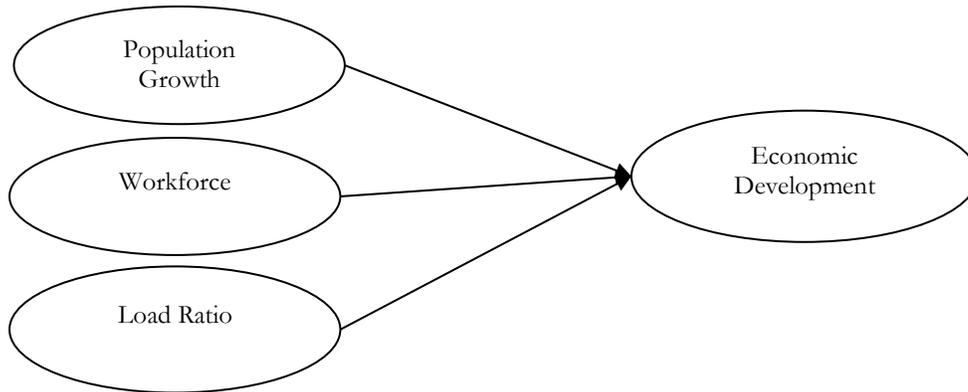
population should not be too small but also not too large. The effect of population growth on per capita income is usually unfavorable. Population growth tends to slow per capita income in three ways (Didu & Fauzi, 2016; Coale & Hoover, 2015): (a) it increases the population's burden on land; (b) it increases the cost of consumer goods because it lacks the enabling factors to increase their supply; (c) decrease the accumulation of capital because by adding family members costs increase. This adverse effect will be exacerbated when the percentage of children in the total population is high. A large number of children among the population carries a heavy burden on the economy because children only spend and do not add to the national product. Another factor is the short life expectancy. Population growth will significantly affect per capita income, the standard of living, agricultural development, employment, labor force, and capital formation. (Arianto et al, 2015; Rukmana, 2012; Wang & Li, 2021) His research found that population growth had a significant positive effect on Economic Development. In contrast, the research conducted by (Datu et al., 2021; Manbait et al., 2017) found that population growth has no significant effect on Economic Development.

Labor growth has traditionally been considered one of the positive factors that spur economic development, where the greater the number of workers, the greater the number of productive workers will increase productivity and spur economic growth. Human resources in national development is an essential dynamic factor determining the economic growth rate in its position as a productive workforce and consumer. The imbalance in the population distribution between regions results in disproportionate use of labor regionally and sectorally, hampering economic growth. The increase in labor productivity results in an increase in the labor-capital ratio. A high capital-labor ratio, i.e., with more capital-intensive production methods, will result in greater profits so that the optimal level of savings will result in maximum output growth (Rahman & Hamzah, 2017). Here it is clear that the goals of achieving maximum output growth and increasing maximum employment opportunities are contradictory and cannot be achieved simultaneously. The more workers can be used fully and productively in development, the more the domestic market will develop. This means that more and more community members can fulfill their various needs. The large and robust domestic market will provide the business world with the opportunity to live and develop. (Nizar et al, 2013; Sari et al, 2016) In their research, labor has a significant positive effect on Economic Development. In contrast to research conducted by (Gwijangge et al., 2018), labor has an insignificant effect on Economic Development.

The ratio of the dependents of the population can be used as an indicator that can roughly show the economic condition of an area classified as a developed or developing region. The ratio of the population's dependents is one of the essential demographic indicators. The higher the burden that the more productive population must bear. In comparison, the lower percentage of the dependent burden ratio indicates the lower burden borne by the productive age population to finance the unproductive and unproductive population (Rozmar et al., 2017). The increase in the population burden ratio is caused by an increase in the number of births. An increase in fertility will increase the unproductive young population. The productive age population will also allocate spending for investment and saving to the unproductive population, resulting in a slowdown/economic growth. In addition, another cause for the increase in the ratio of the population's dependents is the acceleration of the elderly population caused by life expectancy. The increase in the unproductive elderly population will increase government spending on pensions and health so that government spending on other sectors, such as the investment sector, will decrease. The decline in government spending on investment can result in a decline in economic growth. The increase in the unproductive elderly population also resulted in a decrease in the supply of labor. Assuming a constant level of productivity, a decrease in the number of inputs will decrease the output produced. In other words, changes in the aging population will impact slowing economic progress/growth. (Ramadhani, 2019; Hendra et al, 2019) His research found that the dependent load ratio variable had a significant adverse effect

on economic development. In contrast to the research conducted by (Burhanuddin, 2020) the dependent load ratio variable has no significant effect and is positively related to economic development.

Based on the description of the relationship between the variables mentioned above, the following research model can be developed:



**Figure 1. Research Model**

**H1:** It is assumed that population growth has a significant positive effect on Economic Development in Maros Regency

**H2:** It is assumed that labor has a significant positive effect on Economic Development.

**H3:** It is assumed that the ratio of dependents harms Economic Development.

## 2 Research Method

This study aimed to test the research hypotheses related to the variables studied. Data testing results are used as the basis for drawing research conclusions and supporting or rejecting hypotheses developed from theoretical studies. This study uses a research approach through secondary data with the type of time series data during the 2010-2017 period. The data used in this study include GRDP data, population growth rates, and labor for the 2010-2017 period. These data were obtained from South Sulawesi province's Central Statistics Agency (BPS). The analytical method that will be used in this study is an inferential analysis model, namely multiple regression analysis with the help of SPSS Software, to determine the effect of population, labor, and the ratio of the population's dependents on economic development in this case in terms of GRDP obtained in the Regency. Maros every year is put forward with the following model:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Info :

- Y = Economic Development (obtained from the value of GRDP based on constant prices)
- X1 = Population Growth
- X2 = Labor
- X3 = Population Dependent Load Ratio
- b0 = Constant

$b_1$ – $b_3$  = Regression Coefficient

$e$  = Error Term

Before conducting the regression analysis, the researcher conducted the Classical Assumption test. Furthermore, to see the significance level of the influence between the independent variables on the dependent variable, a partial test (t-test) was carried out. The test used a significance level of = 5%, and to see the ability of the independent variable to explain the dependent variable, we used the coefficient of determination.

### 3 Result and Discussion

#### Result

In the first stage of this research, we use descriptive statistical analysis. This analysis provides an overview or general description of this research.

**Table 3. GRDP at constant prices by business field in Maros Regency in 2010-2017**

Year	GRDP (million rupiah)	Growth (%)
2010	7,315,449	12.40
2011	8,137,588	11.24
2012	9,044,514	11.14
2013	9,612,782	6.28
2014	10,066.823	4.73
2015	10,916,729	8.44
2016	11,953,999	9.50
2017	12,768,318	6.81

Source: BPS South Sulawesi (processed) 2019

Based on table 3, from 2015 to 2016 the transportation and warehousing sector made the first major contribution to economic growth, followed by the financial and insurance services sector, which each year experienced a significant increase in the increase in GRDP in Maros Regency. However, in 2017 there was a change. This was caused by the decline in electricity and gas procurement, transportation and warehousing, financial and insurance services, and government administration. This is where the four sectors above significantly affect a very significant decline in the growth of GRDP in the Maros Regency.

**Table 4. Population Growth of Maros Regency in 2010-2017**

No	Year	Total Population (Soul)	Population Growth Rate (%)
1	2010	320.103	1.17
2	2011	322,212	1.12
3	2012	325,401	1.11
4	2013	331,864	1.16
5	2014	335.596	1.09
6	2015	339,300	1.10
7	2016	342.890	1.06
8	2017	346,383	1.07

Source: BPS South Sulawesi (processed) 2019

Table 4 shows the population of Maros Regency from year to year. However, the rate of population growth in the Maros Regency has fluctuated. This is because many residents from other areas have moved

to Maros Regency in the hope that there will be many jobs available to improve their income. Besides Maros Regency, it is known as a metropolitan city that provides various markets spread throughout Maros Regency, which are a means of buying and selling transactions between buyers and sellers that will support the level of regional original income.

**Table 5. Number of Manpower in Maros Regency in 2010-2017**

No	Year	Workers aged 15 years and over who worked a week ago (person)
1	2010	126,605
2	2011	126,605
3	2012	133,810
4	2013	136,245
5	2014	141.625
6	2015	145,081
7	2016	139,456
8	2017	132.854

Source: BPS South Sulawesi (processed) 2019

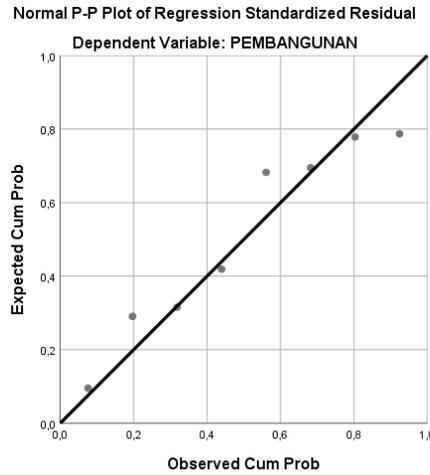
In Table 5, the workforce in Maros Regency, from year to year, has fluctuated. This is caused by companies in Maros Regency, on average, using a contract system, where the workers get a working time limit so that at the time of enumeration, they are registered as people who work, and when their work contract expires, they look for work again and so that in the following fraction they are registered as job seekers.

**Table 5. Maros Regency Dependent Load Ratio 2010-2017**

No	Year	Dependent Expense Ratio (%)
1	2010	55
2	2011	55
3	2012	54
4	2013	53
5	2014	53
6	2015	52
7	2016	52
8	2017	52

Table 5 shows that during the period 2010 to 2017, the ratio of dependents decreased, in 2010, the ratio of dependents to 55% and then in 2012, it fell to 54%. This means that in 2012 every 100 people of productive age bear 54 people were unproductive and were no longer productive. Likewise, in 2013 and 2014, the ratio of the population's dependents was 53%, and from 2015 to 2017, it fell to 52%. This is due to the low birth rate and the low life expectancy of the non-productive age population in Maros Regency.

The next stage is the normality test. This analysis is used to test the assumptions in multiple linear regression. Several ways can be done in the normality test, but the standard PP Plot is the most used. In the Normal PP Plot, the principle of Normality can be detected by looking at the spread of data (points) on a diagonal graph or at the histogram of the residuals.



**Figure 2. Normality Test Results**  
Source: Secondary Data Processed 2019

In Figure 2 , it can be seen that the distribution pattern is close to normal because the data follows the direction of the histogram graph line. In Figure 2 the Normal Probability Plot above shows that the data spread around the diagonal line and follows the direction of the diagonal line, and shows a typical distribution pattern, so it can be concluded that the normality assumption has been met and is feasible to use to predict economic development based on the independent variables.

The next stage is the autocorrelation test. One of the analytical methods to detect the presence or absence of autocorrelation is by testing the Durbin Watson value (DW test). If the DW value is greater than the upper limit ( $d_u$ ) and less than the number of independent variables, it can be concluded that there is no autocorrelation.

**Table 6 . Autocorrelation Test Results**

Model	Durbin-Watson
1	2,943

Source: Secondary Data Processed 2019

In Table 6, the Durbin Watson value listed on the SPSS output is called the calculated DW. This number will be compared with the acceptance or rejection criteria that will be made with  $d_L$  and  $d_U$  values determined based on the number of independent variables in the regression model ( $k$ ) and the number of samples ( $n$ ). The values of  $d_L$  and  $d_U$  can be seen in the DW table with a significance level (error) of 5% ( $\alpha = 0.05$ ). The next stage is the multicollinearity test. The test determines the existence of a linear relationship between the independent variables in the multiple linear regression model. To determine the presence or absence of multicollinearity, it can be seen from the value of the Inflation Factor (VIF) and Tolerance Value in the regression model used as a reference. If the value of  $VIF > 10$ , then there is multicollinearity. On the other hand, if  $VIF < 10$ , there is no multicollinearity.

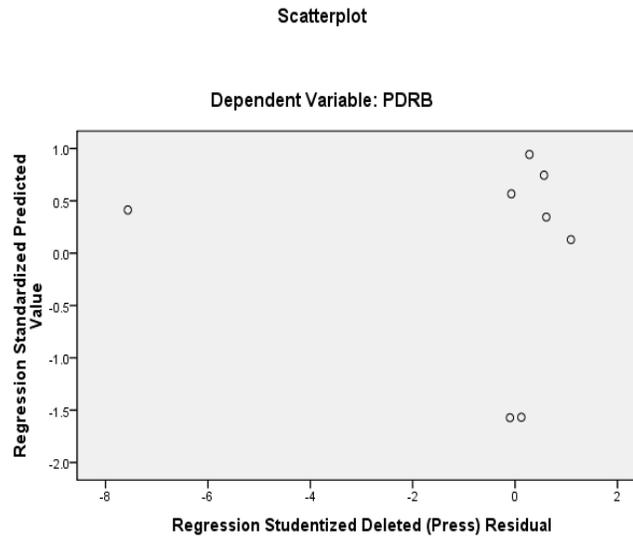
**Table 7 . Multicollinearity Test Results**

Model	Collinearity Statistics	
	Tolerance	VIF
Population growth	.19 5	3.359
Labor	.1 06	8,463
Expense Dependent	.241	4.152

Source: Secondary Data Processed 2019

Based on table 7 above, it can be seen that if the VIF value for the variables of population growth, labor and the ratio of dependents, the VIF value is less than 10 and the tolerance value is more than 0.10, then the regression model is declared to have no symptoms of multicollinearity.

The next stage is the Heteroscedasticity test. This analysis uses the scatterplot method, which is the method used to test Heteroscedasticity by looking at the distribution pattern of the scatterplot points.



**Figure 3 . Heteroscedasticity Test Results**  
 Source: Secondary Data Processed 2019

Based on Figure 2, the scatterplot graph shows that the dots do not form a specific pattern, which means that the regression model in this study is free from heteroscedasticity problems or homoscedasticity.

The next stage is multiple linear regression analysis to determine the direction of the relationship between the independent and dependent variables. The regression equation can be seen from the table of coefficient test results based on SPSS output:

**Table 8 . Multiple Linear Regression Analysis**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.690	1.456		.348	.598
	Population growth	.129	.042	.344	5.656	.000
	Labor	1,787	.156	.693	11.236	.000
	Expense Dependent	.017	.004	.113	1,853	.078

Source: Secondary Data Processed 2019

Table 8 data obtained the following regression model:

$$Y = 1.456 + 0.129X1 + 1.787X2 + 0.017 X3$$

The coefficients in the multiple linear regression equation in the table above can be understood if all independent variables are held constant, then the economic development value is 1.456. If Population Growth increases by 1%, it will increase economic development by 0.129. If Labor increases by 1%, it

will increase economic development by 1.787, and If the Population Load Ratio increases by 1%, it will increase economic development by 0.017.

The next stage is the t-test is carried out to determine the effect of each or partially between the independent variables on the dependent variable and assume the other dependent variables are constant.

**Table 9 . Partial Test**

Model		t	Sig.
1	(Constant)	.348	.598
	Population growth	5.656	.000
	Labor	11.236	.000
	Expense Dependent	1,853	.078

Source: Secondary Data Processed 2019

Table 9 shows the results of hypothesis testing partially independent variables on the dependent variable can be analyzed as follows: Population growth variable (X1), the probability t value of 0.000 is smaller than the actual level of 0.05, so it can be concluded that the population growth variable has a significant influence on economic development. In the labor variable (X2), the probability t value of 0.000 is smaller than the actual level of 0.05, so it can be concluded that the labor variable significantly influences economic development. A positive t value indicates that labor directly correlates with economic development. Dependent ratio variable (X3), the probability t value of 0.078 is greater than the actual level of 0.05, so it can be concluded that the dependent load ratio variable does not significantly affect economic development. However, if it is seen from the 10% significance level, it can be concluded that the dependent load ratio variable significantly affects economic development. Moreover, a positive t value indicates that the ratio of dependents has a direct relationship with economic development. The next stage is the analysis of the coefficient of determination (R<sup>2</sup>), in essence measuring how far the model can explain the variation of the dependent variable. The value of the coefficient of determination is zero and one. A small value of R<sup>2</sup> means that the independent variables' ability to explain the variation of the dependent variable is minimal.

**Table 10 . Coefficient of determination**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999a	.997	.995	.36873

Source: Secondary Data Processed 2019

The regression results in table 10 show the effect of the variable (X) population growth, labor and the ratio of dependents on economic development (Y) obtained an R<sup>2</sup> value of 0.997, which indicates that 99.7% of the variation of changes in economic development (Y) can be explained by the variables of population growth (X1), labor (X2) and the ratio of dependents (X3). While the remaining 0.3% is explained by other variables that have not been included in the model, so that R<sup>2</sup> of 0.997 is stated that the model is valid. The next stage is the F test, basically showing whether all of the *independent variables* included in the regression model have a simultaneous (together) effect on the *dependent variable*.

**Tables 11 . Simultaneous Test Results**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1,584	3	.280	465,279	.000a
Residual	.539	4	.135		
Total	1,589	7			

Source: Secondary Data Processed 2019

In table 11, the effect of population growth (X1), labor (X2), and the ratio of dependents (X3) on economic development (Y) shows a significant value of  $0.000 > 0.05$ . So this shows that the three independent variables simultaneously have a significant effect on economic development in Maros Regency

## Discussion

### *The Effect of Population Growth on Economic Development in Maros Regency*

Population growth has a significant effect and is positively related to economic development. The population growth rate will affect per capita income, living standards, agricultural development, employment, labor, and capital formation. When associated with the growth of a country's per capita income, the population can roughly reflect the country's economic progress. This is in line with research conducted by (Arianto et al., 2015; Rukmana, 2012) in his research that found population growth has a significant positive effect on Economic Development. Population growth has a positive and significant value to economic development. Regarding the role of the population in economic development, Smith argues that population development will encourage economic development. The larger the population expands the market, will increase the more specialization in the economy. The development of specialization in and division of labor will accelerate economic development because specialization will increase labor productivity and encourage technological development.

### *The Influence of Labor on Economic Development in Maros Regency*

Labor has a significant and positive effect on economic development. This is in line with research conducted by (Nizar et al., 2013; Sari et al., 2016), which found that labor has a significant positive effect on Economic Development. Boserup argues that population growth leads to adopting a more initiative agricultural system in society and increasing output in the agricultural sector. Boserup also argues that population growth results in the choice of higher-level agricultural technology systems. In other words, innovation (technology) comes first. Innovation is only profitable if the population is more significant. According to Boserup, innovation can increase workers' output, but only if the number of workers is significant. Population growth encourages the implementation of an innovation (technology). Of the theory of labor and growth that dominated most development theories in the 1950s and 1960s, and the early 1980s, supply-side economics was known as supply-side economics, which focused on policies to increase national output through capital accumulation. Because this model relates the level of employment opportunities with the growth rate of GNP, that is, by maximizing employment, maximizing the growth of GNP and employment opportunities by maximizing the level of savings and investment. The greater the number of workers means that it will increase the number of productive workers, increase productivity and spur economic growth both in their position as productive workers and as consumers. Labor growth and population growth can be regarded as positive factors that will trigger an increase in economic growth. A more significant number of workers means an increase in production level, while a more significant population growth means a larger domestic market size.

### *The Effect of Dependent Load Ratio on Economic Development in Maros Regency*

The ratio of dependents has no significant effect. However, compared with a significance level of 10%, the ratio of the population's dependents has a significant effect on economic development in Maros Regency and has a positive relationship. From the research results conducted (Burhanuddin, 2020) The dependent load ratio variable has no significant effect and is positively related to economic development. The same research in line with Syamsuddin was also put forward by Lailan Safina Hasibuan who stated that the ratio of the population's dependents had a negative and significant effect on economic growth in the city of Medan. This is because the number of people who are not productive is getting higher.

According to Everett S. Lee in (Qomariya, 2021). 4 factors need to be considered in a population migration study, including 1) Factors in origin; 2) Factors found in the destination area; 3) Obstacles between; 4) Individual factors. There are 2 that are always present in the area of origin and destination, which are always related to population movement, namely positive and negative factors. Positive factors are factors that attract someone not to leave the area, and negative factors are factors that cause someone to leave the area. The description of the experts is grouped based on the strength of the driving force and attractiveness of an area, from now on referred to as push factors and pull factors. In demographic books, it is stated that the driving factors are: 1) The depletion of natural resources; 2) Narrowing of work at the place of origin; 3) The existence of political, religious, or ethnic pressures and discrimination; 4) It is no longer compatible with the culture/custom of the area of origin; 5) Employment or marital reasons that prevent personal career development; 6) Natural disasters. If seen from the description above, the driving factors from the origin area are identical to the negative factors owned by the origin area and the attractive factors from the destination area are identical to the positive factors owned by the destination area. (Todaro, 2003) argues that human resources are the primary capital of the wealth of a nation. Physical capital and natural resources are only basically passive factors of production. Humans are active agents who collect capital, exploit natural resources, build various socio-economic and political organizations, and carry out national development. This is in line with the nature of national development, namely the development of Indonesian people as a whole and the development of Indonesian society as a whole. This means that national development places humans as subjects (actors) and objects (objects) of development. The essence of national development is the development of the Indonesian people as a whole and the development of Indonesian society. This means that national development places humans as subjects (actors) and objects (objects) of development. From the theory put forward by Todaro, the population factor plays a significant role in economic development in a country or region. Mainly population growth is supported by its quality in creating jobs and affecting work productivity, which is one of the critical indicators in determining the direction of development.

#### 4 Conclusions

Population growth significantly and positively affects economic development in Maros Regency. The workforce has a significant and positive relationship to economic development in Maros Regency. The ratio of dependents has no significant effect and is positively related to economic development in Maros Regency. Suggestions that can be given from the results of this study are that the government further increases labor productivity through increasing budget allocations for education in order to improve the quality of the workforce, provide skills training for workers and expand job opportunities so that output increases and, in the end, can spur economic development in Maros Regency. Furthermore, the regional government and the private sector create educational facilities and infrastructure that are complete, cheap, and affordable so that children of unproductive age give priority to education which is generally constrained by economic factors.

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