Journal of Business Issues
ISSN: 2985-4911
E-ISSN: 2985-4695
VOLUME 1 NO 2 2022
PP: 109-117

THE EFFECT OF POPULATION AND GRDP AND POVERTY ON ECONOMIC GROWTH IN MAKASSAR CITY

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Abstract
This study aims to analyze the impact of Population, Gross Regional Domestic Product (GRDP), poverty, and economic growth in Makassar City. This research is quantitative research. The type of data used in this study is secondary data in the form of annual time series starting from 2009 to 2018 wich are quantitative data. Data analysis was done using multiple linier regression statistical analysis with path analysis type. The results of this study show that population and GRDP have no significant influence on poverty and population and GDRP has no significant influence on economic growth and poverty has a significant influence on economic growth in Makassar City.
Keywords: Population, GRDP, Poverty, and Economic Growth.

A. INTRODUCTION

Studies on the factors of poverty and aspects of economic growth have been examined by previous researchers, namely (Chen et al., 2015; Hill, 2016; Pretnerr, 2014; Golley & Wei, 2014; Uddin et al., 2016; Halkos et al., 2014; Nakabashi, 2018; Mulok et al., 2011; Ferrer & Zermeno, 2015; Shkolnikov et al., 2019; Middlemiss, 2019). The studies above examine several factors that become variables that influence poverty and economic growth. Such as GRDP and population growth rate, which influence poverty, and economic growth is influenced by the rate of population growth and GRDP as well as poverty.

Several factors influence poverty and economic growth. Particularly in this study, some of the variables studied are factors that influence poverty and economic growth, including the variable population rate on poverty, GRDP on poverty, population rate on economic growth, GRDP on economic growth, and poverty on economic growth. . The variables above become a macroeconomic study so that researchers are interested in studying these variables.

Poverty is the center of attention of policymakers since incidents are directly related to the population's welfare. Income growth and economic development are generally pointed out as relevant for reducing poverty (Nakabashi, 2018). Meanwhile, according to (Klaus, 2014; Hill, 2016; Mullen et al., 2019; Chen et al., 2015; Pretnerr, 2014), high population fertility will lead to faster human accumulation and, therefore, faster economic growth. Regarding GDP, an increase in the number of productive residents will result in high per capita income and an increase in GDP (Golley & Wei, 2015).

The above are macroeconomic variables: population, GRDP, poverty, and

economic growth. These variables are significant to the study. Because for example, economic growth is needed in a country because it can reduce poverty (Mulok, 2012). Likewise with GDP, this variable is important to study because GDP is a measure of economic growth (Villegas & Zermeno, 2015; Shkolnikov et al., 2017). Moreover, population growth has positive and negative effects on a country's economic growth (Halkos et al., 2014; Uddin et al., 2016). It is because of the above statements that make these variables are significant to study.

Economic growth is a central theme in the economic life of all countries today. The government in any country can immediately fall or rise based on the high or low levels of economic growth it achieves in national statistical records. Programs' success or failure in third-world countries are often judged based on the output level and national income.

B. METHOD

This research is research that uses a quantitative approach. The data used in this research is secondary data in the form of time series from 2009-2018, which is quantitative. Data analysis from this study used path analysis or path analysis with econometric models by variable regression using the OLS method. In this study, there are four variables to look at in this path analysis, namely the dependent (bound) variable in the form of economic growth (Y), the independent (independent) variables in the form of poverty (X3), GRDP (X2), and total resident (X1).

C. RESULT

Two regressions are needed to determine the existence of a causal influence on the variables above. Namely, the first is the effect of population and GRDP on poverty; the second is the effect of population, GRDP, and poverty on economic growth. And the effect of population GRDP through poverty on the growth economy. Path analysis using the two regressions will produce the effect of the variables population, GRDP, and poverty on economic growth.

Based on the processing results contained in the table below that, in the path analysis, the value used is the value located in Beta so that it forms a regression equation, namely:

$$\mathbf{X_3 = a + \beta_1 X_1 + \beta_2 X_2} \text{ dan } \mathbf{Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3}$$

A summary of the results of data processing is presented in the following table.

Table 1: Research Results

Variable (a)	B	t	Sig.	Hasil
(Constant)	9.314			
Total population	-2.80E-06	-0.67	0.524	Tidak Sig.
GRDP	-5.50E-09	-0.847	0.425	Tidak Sig.
R Square	0.775			

Dependent Variable: Poverty

Tabel 2: Research Result

Variabel (a)	B	t	Sig.	Hasil
(Constant)	-16.235	-1.405	0.21	
Total Population	1.31E-05	1.686	0.143	Tidak Sig.
PDRB	-1.80E-08	-1.488	0.187	Tidak Sig.
Poverty	1.65	2.415	0.052	Sig.
R Square	0.801			

Dependent Variable: economic growth

Based on the results of processing the data contained in Table 1, the regression equation can be described as follows X3 = 9.314 – 2.8 X1 – 5.5 X2 and based on the results of processing the data contained in Table 2, the regression equation can be described as follows Y = -16.235 + 1.31 X1 – 1.80 X2 + 1.65X3.

Based on the results of data processing in table 1, it can be seen that the significance values of the two variables are X1 = 0.524 and X2 = 0.425. the second result, the significance of both variables is more significant than 0.05. These results conclude that the regression output table 1 variable X1 and X2 have no significant effect on X3. Furthermore, the R Square value contained in table 1 is 0.775. this shows that the contribution or influence of X1 and X2 on X3 is 77.5%. The rest is influenced by other variables not included in the study.

Based on the results of the regression output in table 2, it can be seen that the significance values of the three variables are X1 = 0.143, X2 = 0.187, and X3 = 0.05. the significance of X1 and X2 is greater than 0.05. these results conclude that the X1 and X2 have no significant effect on Y. while the X3 is smaller or equal to 0.05. these results conclude that the variable X3 has a significant effect on Y. then the value of R Square in table 2 is 0.801. this shows that the contribution or influence of X1, X2, and X3 on Y is 80.1%, the rest is influenced by other variables.

The direction of the regression coefficient β1 is -2.80, which means that a reduction will follow an increase in the population of 1% in poverty of 2.80% assuming X1 and X2 are constant. Analysis of the effect of population (X1) on poverty (X3) from the results of the study obtained a value of > 0.05 so that it can be concluded that there is a direct negative effect that is not significant.

The direction of the regression coefficient β2 is -5.50, which means a reduction will follow an increase in GRDP of 1% in poverty of 5.50%, assuming X1 and X2 are constant. Analysis of the influence of GRDP (X2) on poverty (X3) from the results of the study obtained a value of > 0.05 so that it can be concluded that there is a direct negative effect that is not significant.

The direction of the regression coefficient β3 is 1.31, which means that an increase will follow an increase in the population of 1% in population growth of 1.31%, assuming X1, X2, and X3 are constant. Analysis of the effect of the population (X1) on economic growth (Y) from the results of the study obtained a value of > 0.05 so that it can be concluded that there is a direct, insignificant positive effect.

The direction of the regression coefficient β4 is -1.80, which means that a decrease will follow an increase in GRDP of 1% in the economic growth of 2.80%, assuming X1, X2, and X3 are constant. Analysis of the influence of GRDP (X2) on

economic growth (Y) from the results of the study obtained a value of > 0.05 so that it can be concluded that there is a direct negative effect that is not significant.

The direction of the regression coefficient β5 is 1.65, which means that an increase will follow an increase in poverty of 1% in the economic growth of 1.65%, assuming X1, X2, and X3 are constant. Analysis of the effect of poverty (X1) on economic growth (Y) from the analysis results obtained a value > 0.05, so it can be concluded that there is a direct significant positive effect.

D. DISCUSSION

Based on the analysis above, the first hypothesis in this study is proven. Rapid population growth is under the control of the State to achieve ever-improving economic performance and high living standards (Sinding, 2009). This aligns with research (Zaman et al., 2011) in Pakistan, saying that the population can protect an environment for economic growth by reducing poverty. This is because population growth can be a helpful factor in providing labor for the production of goods and services to enhance economic development and reduce poverty (Ukpong et al., 2013). (Zaman, 2010) said empirically that an increase in population can be used as a productive investment that reduces local poverty. (Sanso, 2014) in his findings in India, he argues that increasing the number of people can reduce poverty. Government policies or assistance are also needed, such as creating jobs or equalizing income distribution. This is the same as the findings from (Djamaluddin, 2017) in Malaysia, which says that an increase in population will provide human capital, reducing increased poverty.

Likewise, in the second hypothesis, it is proven, in a result it is said that a decrease in the number of poor people caused by economic growth based on GRDP. Distributing economic development to the poor will reduce the number of poor people (Anaam et al., 2018). Similar to the study (Hassan 2015) in his research in Nigeria, the impact of the GDP growth rate reduces poverty. This is because some citizens are more productive, generating income and contributing to their country's revenue. Besides that (Susila et al., 2018) also said in their research that economic growth through its contribution to GDP, increased exports of tourism products, and tax revenues can be used as a more comprehensive community development strategy. (Akhmad et al., 2018) said that increasing GDP is one of the ways to reduce poverty. According to (Todaro & Smith, 2009) in their research in Taiwan and Korea, by making equal income distribution to various regions in the country. There are many ways to alleviate poverty, one of which is by providing microcredit. Microcredit is given to the poor to help them form new businesses or modify existing companies to become more developed and advanced (Johnson & Rogaly, 1997; Fasoranti, 2010) this step will trigger an increase in GDP which will increase economic growth to reduce poverty. Poverty (Purmiyati et al., 2019). According to (Sessu & Hamka, 2018) the government, individual communities, and the private sector have maximum efforts to reduce unemployment and poverty by increasing the growth of the gross domestic product (GDP) contribution by the business sector in order to reduce the poverty rate.

The third hypothesis is also proven. Population growth contributes to economic growth. Even though the contribution is not much, the fast rate of population growth still affects population growth (Sinding, 2009). Based on research (Furuoka & Munir, 2011) states that the relationship between population growth and economic performance can be considered positive when upward demographic trends stimulate

economic development and result in an increase in living standards. Population growth promotes competition in business activities, leading to market expansion and encouraging entrepreneurs to set up new businesses.

Meanwhile, according to (Temin, 2013), a dense population with active productivity has increased income, thereby accelerating economic growth. This is also in line with the results of a study obtained by (Palumbo et al., 2010) that the impact of changes in the population growth rate on one of the growth rates is increasing the number of workers, one of the two productive factors and thus both the absolute level of output and the country stable output growth rate. In an increasingly globalized world, human capital is now much more mobilized than in the past decades. In other words, nowadays, there is a lot of superior and more productive human money, and with the help of technology, this will positively affect population growth (Kyaw, 2019). Over the years, it has become established that the efficient and effective existence of human capital is the key to economic growth and development in any country. This stems from the fact that every other facility and resource required for economic growth is driven by the availability of human resources (Beetseh et al., 2013). He agrees (Sheffield, 2018) with his findings in England stating that in general, economic growth means the population must also grow because it will increase the supply of both workers and consumers, although the precise nature of this relationship is of course complex.

For the fourth hypothesis, a relationship between GRDP and economic growth is also proven. Economic growth can be measured through many aspects, such as output, income, employees, added value, taxes, and so on (Simatupang & Chilk, 2014). Generally, the benchmark for regional economic growth is GRDP, the most effective measure. The indicators for increasing GRDP include investment, exports, production, and population income (Sadovin et al., 2016). According to (Muryani, 2008), an increase in GRDP is only bad for some of the population because this can lead to inequality in income distribution and unemployment and makes economic growth not felt by some residents in certain areas. This is also supported by (Budiyanto et al., 2014), saying that, generally, developing countries, especially those in the agricultural sector, which contribute to GDP, tend to increase. And according to (Akhmad, 2018), an increase in GRDP in the early stages will result in an increase in income inequality, or income distribution tends to be wrong. This problem usually requires government policies from each of the country's governments.

The fifth hypothesis is also proven. Rapid population growth will result in income inequality in various regions. This will only widen poverty rather than solve it (Nuredden & Ibrahim, 2014). Likewise with findings (Ionescu, 2017) in the European Union, according to Romanian official statistics, the economic growth rate has been higher than the European Union average for the last five years. This trend will continue during 2016-2017, too. The problem is that an increase does not follow this economic growth in the population's welfare. This is related to income inequality in various countries. Meanwhile, based on findings (Serrano, 2017) in Brazil that from 2000-2014 the results of determining the percentage of gross domestic product and inflation did not affect the poverty rate, economic growth was largely unaffected, while changes in foreign debt and unemployment affected poverty. Rapid economic growth may not be best for the poor due to the high probability of being neglected or marginalized by the structural changes that have accompanied recent growth (Todaro & Smith, 2013). Also, in his research (Hariadi, 2009), economic growth only has a small contribution

to poverty alleviation and more to income inequality, which ultimately leads to poverty in specific households**.**

E. CONCLUSION

Based on the data analysis and discussion that has been done previously, the following conclusions can be drawn: The first hypothesis states that it is suspected that the rate of population has a direct and insignificant effect on poverty in the city of Makassar. The second hypothesis states that it is assumed that GRDP has a natural, negligible impact on poverty. The third hypothesis states that the population rate directly affects economic growth in Makassar City is insignificant. The fourth hypothesis states that it is suspected that GRDP directly influences economic growth in a little way. The fifth hypothesis states that poverty's influence on economic growth is supposed to be significant. This is due to the many constraints or problems experienced by the local government of the city of Makassar, so the distribution of income is uneven. The condition of the town of Makassar, which states that economic growth has experienced an increase with the GRDP benchmark, has an effect, namely the distribution of income is unequal so that most of the population in the city of Makassar does not feel the results of economic growth, on the contrary even though economic growth has increased. Still, poverty has also increased in the city. Macassar.

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