Influence of Population, Unemployment, and Poverty on Economic Growth in South Sulawesi Province

Taufik Hidayat [1], Madris [2], Anas Iswanto Anwar[3]

Faculty of Economics and Business, Hasanuddin University, Indonesia | hidayattaufik130299@gmail.com[1]
Faculty of Economics and Business, Hasanuddin University, Indonesia | madris@fe.unhas.ac.id[2]
Faculty of Economics and Business, Hasanuddin University, Indonesia | haliah@fe.unhas.ac.id[3]

Abstract

Poverty and economic growth are important indicators of a country's development success. To achieve development, countries strive to optimize economic growth and reduce poverty. The purpose of this study was to determine the impact of population and unemployment on poverty and economic growth in South Sulawesi. Data from South Sulawesi Central Bureau of Statistics. This study utilizes a quantitative survey using the path analysis method. The results of this study show that demographic variables have a negative and significant impact on poverty. The unemployment rate variable has no significant positive impact on poverty. Variables such as population, unemployment and poverty have a negative and significant impact on economic growth. At the same time, population and unemployment have a large impact on poverty. At the same time, population, unemployment and poverty have a significant impact on economic growth.

Keyword: Population, unemployment, poverty, economic growth

Introduction

Regional economic development aims to change the process for the better, improve the economy continuously, create jobs, minimize economic development problems, with the aim of creating social welfare. In various regions in Indonesia, poverty is still the subject of public discussion. The facts show that economic development has not succeeded in reducing the poverty rate in various regions, especially in areas where the poverty rate has relatively increased from year to year.

Each year the region's population grows depending on how many births there are. This population becomes a problem for the government if it cannot be controlled because when the population increases every year it also causes high poverty. Population growth can reduce

poverty rates, depending on who gets a job and is able to meet their needs. It is difficult for the government to provide jobs for the community when the population continues to grow.

This happens because development, within the scope of the area, spatially does not always take place systemically. Some areas will achieve fast growth, while some other areas will experience slow growth. These areas do not experience the same progress because of a lack of available resources, there is a tendency for the role of capital (investors) to choose urban areas or areas that already have facilities such as transportation facilities, electricity networks, telecommunications networks, banking, insurance, as well as skilled labor besides that there is an imbalance in the redistribution of revenue sharing from the central government to the regions (Elda et al, 2018).

The population of each province is very diverse and grows at very different rates. South Sulawesi Province is one of the provinces with the most population. The population of South Sulawesi continues to grow every year. Based on data from the Central Bureau of Statistics for South Sulawesi Province, the population in 2011 was 8,115,638,000 people, so that the population of South Sulawesi Province continues to grow from year to year, and in 2020 the population will become 9,073,509,000 people. As the population growth accelerates, the provincial government of South Sulawesi must annually develop a strategy that is sustainable for the situation and medium-term goals for implementing poverty alleviation measures in an appropriate manner.

One of the most important indicators of successful economic development is the reduction in the poverty rate. Efficiency in reducing the poverty rate is very important when choosing a development strategy. The development process requires high national income and rapid economic growth. In many countries, economic growth is the most important prerequisite for poverty alleviation. Increasing economic growth is not enough to eradicate poverty, but it is something that is needed. This fact means that high economic growth does not mean a decline in society if it is not accompanied by equal distribution of income (Romi Syahrul, 2018). A measure of poverty can be described as a low standard of living, i.e. there is a material shortage of a certain population or group of people compared to the general standard of living in that community, for example.

Based on data from the Central Statistics Agency for South Sulawesi Regency, the number of poor people fluctuated between 2016 and 2020, namely 807.03 in 2016 and increased slightly to 813.07 in 2017. However, it continued to decrease to 792.63 in 2018 and 767.80 in 2019. In 2020 it increased to 800.24 people. Although the number of poor people has decreased in recent years, South Sulawesi Province is still the highest among the provinces on Sulawesi Island. The increase in this number is due to income that is classified as not poor but close to the poverty line. In addition, the increase in the number of unemployed was caused by layoffs (PHK) in the business world.

Based on data from the Central Bureau of Statistics for South Sulawesi Province, the rate of economic growth in 2016-2020 has decreased. In 2016 the percentage was 7.42 percent and fell to 7.21 percent in 2017, then continued to fall from 2018-2019 to 7.04 percent and 6.91

percent respectively. The most drastic decline is in 2020 the percentage rate of economic growth will be -0.70 percent.

On the other hand, a comparison between poverty and economic growth in South Sulawesi Province shows that poverty in South Sulawesi Province has decreased, this is not comparable to economic growth in South Sulawesi Province which has decreased to -0.70%. This indirectly illustrates that in South Sulawesi Province there are other factors that affect the decline in economic growth.

Based on the background above, the authors are interested in conducting a study entitled "Influence of Population, Unemployment, and Poverty on Economic Growth in South Sulawesi Province".

Literature Review

Definition of Poverty

Poverty is the situation of a population or part of a population that can only fulfill the food, clothing, and housing that are necessary to maintain a minimum level of life.

Literally, according to Poerwadarminta, poverty comes from the root word poor, which means "having no possessions". In a broader sense, poverty can be connoted as a condition of inability both individually, in groups, and in families so that this condition is vulnerable to the emergence of other social problems.

Economic Growth

According to Sukirno, economic growth is a quantitative measure that describes the development of the economy in a particular year when compared to the previous year. The statement is always expressed in the form of a percentage change in national income in a previous year. According to Boediono, economic growth is the process of long-term increase as a percentage of the increase in output must be greater than the population and economic growth will continue.

Simon Kuznets defines economic growth as a long-term increase in the capacity to provide a variety of economic goods based on population. Kuznets also defines that economic growth occurs if output (goods and services, whether enjoyed by humans or not) grows faster than population growth. According to Kuznet, economic growth and poverty have a very strong relationship, because in the early stages of the development process poverty tends to increase then as it approaches the final stages of development poverty will decrease.

Population

According to the Central Bureau of Statistics, population is an important indicator and component in economic activity. The population is a development asset that can be optimally empowered. Even so, the population can become a "burden" in development if its empowerment is not accompanied by an adequate quality of population in the region / region concerned (Usman et al., 2018).

Influence of Population, Unemployment, and Poverty on Economic Growth in South Sulawesi Province

According to Kuncoro, residents are all people who live in the geographical area of the Republic of Indonesia for six months or more and or those who live for less than 6 months but aim to settle down.

Unemployment

According to the Central Bureau of Statistics, unemployment is a population that is not working but is looking for work or is preparing a business or a population that is not looking for work because they feel it is impossible to get a job or who already have a job but have not started working.

According to Sadono Sukirno, unemployment is where a person who has been classified in the labor force who is actively looking for work at a certain wage level, but cannot get the job he wants.

Research Method

a. Types and Research Locations

The type of research used is quantitative research which explains the independent variables of the dependent variable. This research was conducted in the province of South Sulawesi. This study explains the effect of the independent variables, namely population and unemployment, on the dependent variable, namely Economic Growth through Poverty as an Intermediate Variable in South Sulawesi Province.

b. Data Types and Sources

The data used in this research is secondary data. Secondary data is research information obtained indirectly through the media. This secondary data is time series data (period) for the period 2006-2020 obtained from the Central Statistics Agency (BPS) of South Sulawesi Province.

c. Method of collecting data

In this study the data collection method used is the documentation method. Documenting and collecting information collected by agencies and institutions on issues to be written about.

d. Data analysis method

Data related to this study were analyzed using quantitative data analysis methods using path analysis tools. To facilitate analysis, this study uses Eviews 10 software, where the relationship between the dependent variable (Y) and the existing independent variable (X) is formulated in an econometric equation, and the relationship between population and unemployment with poverty and economic growth is presented. The data used on the existing variables is limited to 2006-2020. To measure the influence between variables, several testing steps are used, namely the classic assumption test and hypothesis testing.

Results

Results of Data Analysis
1. Hypothesis testing
1.1 Simultaneous Test (f test)

The f test is used to determine whether all the independent variables included in the regression model have a simultaneous effect on the dependent variable. The results of the analysis can be seen in the following table:

Table 4.10 Simultaneous Test Results (Test F)

Model 1	**F-statistic**	51,699 35
	Prob(F-statistic)	0,0000 01
Model 2	**F-statistic**	9,4335 76
	Prob(F-statistic)	0,0022 40

Source: Eviews 10, 2023

From the results of the regression model equation 1 shown in the table of the effect of the variable population (X1) and unemployment (X2) on poverty (Y1), a significant value of 0.000 <0.05 is obtained. This shows that the independent variables together have a significant and simultaneous effect on the poverty variable in South Sulawesi Province.

Whereas in the equation 2 model shown in the table the effect of the variable population (X1) and unemployment (X2) on poverty (Y1) through the intervening variable namely economic growth (Y2), a significant value of 0.002 <0.05 is obtained. This shows that the independent variables together have a significant and simultaneous effect on the economic growth variable in South Sulawesi Province.

1.2 Partial Test (t test)

The t test is basically to partially show the effect of the independent variables on the dependent variable. Calculation of t table seen from the results of partial testing of each variable.

Equation 1

Table 4.11 Partial Test Results (T Test) Model Y

Varia ble	Coefficie nt	Std. Error	t- Statistic	Pro b.
C	12.34434	2.38734 3	5.17074 3	0.00 02

X1	-1.253128	0.30636 3	- 4.090338	0.00 15
x2	0.235070	0.06595 4	3.56414 6	0.00 39

Source: Eviews 10, 2023

Effect of Population on poverty

Based on the results of the regression analysis, the t-count probability value is -4.090 which is smaller than the t-table (df = 2.20099), so that the hypothesis H0 is accepted. This means that the population variable has a negative and significant effect on poverty. A negative t value indicates that the total population shows a relationship that is not in the same direction as the increase in poverty in South Sulawesi Province. Because it is not only the total population that contributes the most to the poverty rate in South Sulawesi Province.

Effect of Unemployment on poverty

Based on the results of the regression analysis, the probability value of t-count is 3.564 greater than t-table (df = 2.20099), so the hypothesis H0 is rejected. This means that the unemployment variable has no significant and positive effect on poverty. A negative t value indicates that unemployment is not associated with an increase in poverty in South Sulawesi Province.

Equation 2

Table 4.12 Partial Test Results (T Test) Model Y_2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	951.5554	277.151 3	3.43334 3	0.005 6
X1	- 114.9553	30.6303 5	- 3.752988	0.003 2
x2	- 17.14056	6.11448 5	- 2.803271	0.017 2
Y1	- 11.52575	18.6526 9	- 0.617914	0.549 2

Source :Eviews 10, 2023

Effect of Total Population on Economic Growth

Based on the results of the regression analysis, the t-count probability value is -3.752 which is smaller than the t-table (df = 2.20099), so that the hypothesis H0 is accepted. This

means that the population variable has a negative and significant effect on economic growth. A negative t value indicates that there is a relationship between the number of population that is not in the same direction as the increase in economic growth in South Sulawesi Province. This is because the population is not the only factor that most influences the economic growth of South Sulawesi Province.

The Effect of Unemployment on Economic Growth

Based on the results of the regression analysis, the t-count probability value is -2.803 which is smaller than the t-table (df = 2.20099), so that the hypothesis H0 is accepted. This means that the unemployment variable has a negative and significant effect on economic growth. A negative t value indicates that the unemployment rate is not directly related to the increase in economic growth in the province of South Sulawesi. This is because unemployment is not the only factor that most influences economic growth in South Sulawesi Province.

The Effect of Poverty on Economic Growth

Based on the results of the regression analysis, the t-count probability value is -0.617 which is smaller than the t-table (df = 2.20099), so that the hypothesis H0 is accepted. This means that the poverty variable has a negative and insignificant effect on economic growth. A negative t value indicates that poverty has a relationship that is not in the same direction as increasing economic growth in South Sulawesi Province. Because poverty is not the only factor that has the greatest influence on economic growth in South Sulawesi Province.

1.3 The coefficient of determination (R^2)

The results of the coefficient of determination can be seen in the following table:

Table 4.13 Test Results for the Coefficient of Determination (R^2)

Model	R Square	Adjusted R Square
1	0.896	0.878
2	0.720	0.643

Source: Eviews 10, 2023

Table of regression results in model 1 on the effect of population and unemployment on poverty in South Sulawesi Province, the R value is obtained[2] of 0.896 . This means that the variation of the variable population and unemployment to poverty in South Sulawesi Province is 89.6 percent. The remaining variations of other variables explained outside the model amounted to 10.4 percent.

The regression results table in model 2 shows the effect of the variable population and unemployment on poverty through economic growth in South Sulawesi Province, the R value is obtained[2] of 0.720 . This means that the variation of the variable population and unemployment to poverty through economic growth in South Sulawesi Province is 72 percent. As for the remaining variations from other variables explained outside the model by 28 percent.

2. Path Analysis*(Path Anayisis)*

In path analysis, direct and indirect effects can be distinguished from the dependent variable to the independent variable. The direct path is the direct effect of one independent variable on the dependent variable, while the indirect path is the influence through an intermediate variable or intervening variable.

Table 4.14 Effect of population and unemployment on poverty and economic growth

Influence between variables	Direct Influence	Significance Level	Influence No Jump Through Y1	Total Influence
X1 → Y1	-4,090	0,0015*	-	-4,090
X2 → Y1	3,564	0,0039*	-	3,564
X1 → Y2	-3,752	0,0032*	2,523	-1,229
X2 → Y2	-2,803	0,0172*	2,198	-0.605
Y1 → Y2	-0,617	0,5492*	-	-0,617

Note: * is significant data (0.05) Source: Eviews 10, 2023

Based on the structural model above, it can be rewritten into the regression equation as follows:

Equation 1: $Y1 = a_0 + a_1X_1 + a_2X_2 + and_1$

$$Y1 = 12,344 - 1,253 \ X1 + 0,235 \ X2 + 0,05$$

The results of the regression equation above can be interpreted as follows:

1. β coefficient value$_0$ of 12,344. If the variables of population (X1) and unemployment (X2) do not change statically or are constant, then there is a possibility that there will be an increase in poverty (Y1) of 12.344.
2. β coefficient value$_1$ of -1.253, this indicates that if there is an increase in poverty by 1 percent it will reduce the population (X1) by -1.253 assuming that the unemployment variable (X2) is considered constant.
3. β coefficient value$_2$ of 0.235, this indicates that if there is an increase in poverty by 1 percent it will reduce unemployment (X2) by 0.235 assuming that the variable population (X1) is considered constant.

Equation 2: $Y2 = b_0 + b_1X_1 + b_2X_2 + b_3AND_1 + and_2$

$$Y2 = 951,555 - 114,955X1 - 17,140X2 - 11,525 \ Y1 + 0,05$$

The results of the regression equation above can be interpreted as follows:

1. β coefficient value$_0$ of 951,555, if the variable population (X1), unemployment (X2) and poverty (Y1) status does not change or is constant, then there is a possibility that there will be an increase in economic growth of 951,555.
2. β coefficient value$_1$ of -114.955, this shows that if there is an increase in population by 1 percent it will reduce economic growth by -114.955 assuming that the variables unemployment (X2) and poverty (Y1) are considered constant.
3. β coefficient value$_2$ of -17.140, this shows that if there is an increase in unemployment by 1 percent it will reduce economic growth by -17.140 assuming that the variables of population (X1) and poverty (Y1) are considered constant.
4. β coefficient value$_3$ of -11.525, this shows that if there is an increase in poverty by 1 percent it will reduce economic growth by -11.525 assuming that the variables of population (X1) and unemployment (X2) are considered constant.

Discussion

Number of Population to Poverty

Based on the results of this research data analysis, the population variable has a negative and significant effect on the poverty variable in South Sulawesi Province. This shows that there is a correlation with the population which is not in line with the increase in poverty in South Sulawesi Province.

This is the same as the research conducted by Nazoti Suhandi, Efri Ayu Kartika Putri, and Sari Agnisa (2018) with the results stating that the population variable has a negative effect on the poverty rate variable in Palembang City.

Unemployment to Poverty

Based on the results of this research data analysis, it can be seen that the unemployment variable has no significant and positive effect on the poverty variable in South Sulawesi Province.

These results are in line with research conducted by Didu et al (2016) with the results stating that unemployment has no effect on the number of poor people in North Sumatra Province. And Muliza (2020) with the result that unemployment does not affect poverty. This is different from the research conducted by Soleh and Ahmad (2014) with the result that unemployment has a significant influence on the poverty rate.

Total Population Against Economic Growth

Based on the research results, it can be seen that the population variable has a negative and significant effect on the economic growth variable in South Sulawesi Province. This shows that the ratio to population is not in line with economic growth in South Sulawesi Province.

The results of this study are in line with research conducted by Hastin et al (2021), with the results showing that population has a negative and significant relationship to economic growth in North Sulawesi Province.

Unemployment on economic growth

Based on the research results, it is known that the unemployment variable has a negative and significant effect on the economic growth variable in South Sulawesi province. This shows that unemployment has a correlation that is not in the same direction as the increase in economic growth in the province of South Sulawesi.

This is in line with research conducted by Yosephina et al (2019). The results found that unemployment has a negative effect on economic growth in the city of Padang. Usman et al (2018) with the results showing that unemployment has a significant effect on economic growth in Indonesia.

Poverty variable on economic growth

Based on the results of the research conducted in this study, it is known that the poverty variable has a negative and insignificant effect on the economic growth variable in South Sulawesi Province. This shows that poverty has a correlation that is not in the same direction as increasing economic growth in South Sulawesi Province.

This is in line with research conducted by Selamet Rahmadi and Parmadi (2019) results showing that poverty has a negative effect on economic growth and Wuku Astuti (2015) with results showing that economic growth has a negative effect on poverty in Java in the 2007-2011 period.

Effect of population on economic growth through poverty

The effect of the population variable on economic growth through poverty is shown in the table, an indirect effect is obtained with a value of 2.198, this indicates that the population variable has a positive and significant effect on economic growth through poverty in South Sulawesi Province.

This research is the same as the theory put forward by Malthus which states that "population growth follows a geometric progression while the growth in food availability follows an arithmetic progression" from this statement if there is an increase in population, food availability will decrease, low-income people who do not get food will become poor. This is in line with research conducted by A.A GdeAlit Wiradyatmika and I Ketut Sudiana (2013) with the results stating that population, employment and unemployment have a significant simultaneous effect on the number of poor people in Buleleng Regency.

The effect of unemployment on economic growth through poverty

The indirect effect of the unemployment variable on economic growth through poverty can be seen in the table above, which has a value of 2.198. This shows that the unemployment rate variable has a positive effect on economic growth through poverty in South Sulawesi Province. This research is the same as that conducted by Anak Agung Wife Diah Paramita and Ida Bagus Putu Purbadharmaja (2015) the results show that the unemployment rate variable has a positive effect on poverty through economic growth.

This is different from what was done by Nenny Latifah et al (2017) with the result that economic growth has no effect on the number of poor people through the open unemployment rate and Siti Amalia (2014) with the result that the indirect effect of economic growth on the number of poor people through open unemployment is negative.

Conclusion

Total population has a direct and significant negative effect on poverty in South Sulawesi Province. Unemployment has no direct and significant positive effect on poverty in South Sulawesi Province. Total population has a direct and significant negative effect on economic growth in South Sulawesi Province. Unemployment has a direct and significant negative effect on economic growth in South Sulawesi Province. Poverty directly has a negative and insignificant effect on economic growth in South Sulawesi Province. Total population indirectly has a significant effect on economic growth through poverty in South Sulawesi Province. Unemployment indirectly has a significant effect on economic growth through poverty in South Sulawesi Province.

References

Badan Pusat Statistik (BPS) Provinsi Sulawesi Selatan. *Provinsi Sulawesi Selatan dalam angka*. Situs Resmi Badan Pusat Statistik Provinsi Sulawesi Selatan. https://sulsel.bps.go.id/publication.html (19 Juni2021)

Badan Pusat Statistik (BPS). *Statistik Indonesia*. Situs Resmi Badan Pusat Statistik. https://www.bps.go.id/publication.html (19Juni2021)

Darma, Budi. "Pengaruh Jumlah Penduduk Terhadap Pertumbuhan Ekonomi Kabupaten Tebo Tahun 2016-2020."*CITRA EKONOMI* 2.1 (2021) : 86-92.

Didu, Saharuddin, and Ferri Fauzi. "Pengaruh jumlah penduduk, pendidikan dan pertumbuhan ekonomi terhadap kemiskinan di Kabupaten Lebak." *Jurnal Ekonomi-Qu* 6.1. (2016).

Elda Wahyu, Sudarti, dan Hendra. *"Pengaruh Pendidikan Pendapatan Perkapita Dan Jumlah Penduduk Terhadap Kemiskinan di Provinsi Jawa Timur".* Jurnal Ilmu Ekonomi JIE, 2018.

Fachreza, Achmad Naufal. "Analisis Penyerapan. Tenaga. Kerja Sektor Konstruksi Di Kabupaten/Kota. Provinsi Jawa. Timur Tahun 2011-2015. "*Jurnal Ekonomi Pembangunan* 15.2 (2017) : 157-170.

Franita, Riska. "Analisa pengangguran di Indonesia." *Jurnal Ilmu Pengetahuan Sosial* 1.3. (2016): 88-93.

Hastin, Mira, and Ferry Siswadhi. "Pengaruh Pertumbuhan Ekonomi, Investasi, Tingkat Inflasi, Dan Pengangguran Terhadap Tingkat Kemiskinan Di Provinsi Jambi."*Jurnal Ekonomi Sakti (Jes)* 10.1 (2021): 1-22.

Herman, Bahtiar. (2022). EFFECT OF ORGANIZATIONAL COMMITMENT AND

COMPENSATION ON TURNOVER INTENTION OF PT INFOMEDIA NUSANTARA. Vol 7 No 1 (2022): JPIM (JURNAL PENELITIAN ILMU MANAJEMEN).

Mahsunah,Durrotul."Analisispengaruhjumlahpenduduk,pendidikandanpengangguranterhadap kemiskinan di Jawa Timur." *Jurnal PendidikanEkonomi(JUPE)*1.3. (2013).

Muliza, Muliza. "Analisis Pengaruh Jumlah Penduduk Dan Produk Domestik Regional Bruto (Pdrb) Terhadap Kemiskinan Di Kabupaten Nagan Raya." At-Tasyri'*: Jurnal Ilmiah Prodi Muamalah*. (2020): 63-73.

Prasetyo ningrum, Ari Kristin, and U. SuliaSukmawati. "Analisis Pengaruh Indeks Pembangunan Manusia (IPM), Pertumbuhan Ekonomi dan Pengangguran Terhadap Kemiskinan di Indonesia." *Equilibrium:Jurnal Ekonomi Syariah* 6.2 (2018): 217-240.

Romi Syahrul. *" Pengaruh Pertumbuhan Ekonomi dan Upah Minimum Terhadap Kemiskinan Di Kota Jambi"*. E-Jurnal Prespiktif Ekonomi Dan Pembangunan Daerah Vol.7 No.1 (2018)

Rudi ningtyas, Dyah Arini. "Pengaruh Pendapatan dan Belanja terhadap Pertumbuhan Ekonomi, Kemiskinan Dan Pengangguran (Studi Pada Apbn 2004-2008)." *Iqtishoduna* (2011).

Soleh, Ahmad. "Pertumbuhan Ekonomi dan Kemiskinan di Indonesia." *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis* 2.2 (2014)..

Suaidah, Imarotus. "Pengaruh Tingkat Pendidikan Terhadap Tingkat Pengangguran Di Kabupaten Jombang. " *Jurnal Pendidikan Ekonomi (JUPE)* 1.3. (2013).

Yosephina, Risky Meri, and Murtala Murtala. "Pengaruh Jumlah Uang Beredar dan Jumlah Penduduk Terhadap Pertumbuhan Ekonomi di Indonesia."*Jurnal Ekonomi Regional Unimal* 2.2(2019): 88-97.