The Influence of Labor, Population Growth and Poverty on Economic Growth in North Luwu Regency

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Abstrak

This research aims to identify factors that influence economic growth in North Luwu Regency. In this research, labor, population growth, and poverty are considered as independent variables, while economic growth is considered as the dependent variable. Data disclosed by the Central Statistics Agency (BPS) of North Luwu Regency regarding labor variables, population growth and poverty in the form of secondary data (time series from 2013 to 2022) is the information used in this research. The methodology used in data processing is multiple linear regression. Based on the results of research that has been conducted, it shows that the labor variable has a positive and significant effect on economic growth in North Luwu Regency, while population growth has a negative and significant effect on economic growth in North Luwu Regency and poverty has a negative and significant effect on economic growth in North Luwu Regency. North Luwu Regency. Therefore, it can be concluded that all are important factors that can influence the level of economic growth in North Luwu Regency.

Keywords: Labor; Population Growth;Poverty; and Economic Growth

1. Introduction

Economic growth is an important indicator that reflects a country's economy. The factors that influence economic growth are very complex and involve various aspects. A number of economic, social and political variables play a role in shaping the direction and level of economic growth of a country. Therefore, understanding the factors that influence economic growth is very crucial for policy makers, economists and other stakeholders. There is a positive relationship between the effectiveness of government policies and the distribution of economic transformation [1].

A country's economy is considered to have developed and developed faster than what had been achieved previously. Annual changes in GDP at the national level indicate national economic growth. One way to measure the success of development of a region or country is to look at the rate of economic growth. Each region's development planning and goals always set higher targets than the previous year [2].

According to the views of classical economists, there are 4 factors that influence economic growth, namely population size, stock of capital goods, land area and natural resources, and the level of technology used. In classical growth theory, it is assumed that land area and natural wealth are fixed in number and the level of technology does not change. However, classical economists generally only focus on the influence of population growth on economic growth[3].

Referring to the description of opinion explained by Todaro and Smith (2006) explain that economic development is a process that involves many dimensions which include basic changes in national institutions, community attitudes, social structures but continues to develop the implementation of poverty alleviation, handling income inequality, and also economic growth[4].

North Luwu Regency is one of the regions in Indonesia that faces various challenges and opportunities in managing the factors that influence its economic growth. In this context, an in-depth analysis of the influence of labor, population growth and poverty becomes very relevant to describe the economic dynamics of this region. Labor as the main asset in production activities has a strategic role in determining the rate of economic growth. In line with that, sustainable economic growth also requires attention to the quality and distribution of labor in North Luwu Regency.

These factors are an important basis for research. Exploring the relationship between these variables can provide a clearer picture of regional economic dynamics, so that the government and stakeholders can take strategic steps to improve the welfare of society as a whole. Through this analysis, it is hoped that effective and targeted policies can be created to accelerate the economic growth of North Luwu Regency towards a more sustainable and inclusive direction.

Based on the explanation by Simanjutak (1985), workers are described as residents aged ten years or over ten years who are carrying out certain activities such as taking care of the household or going to school, who are looking for work or are currently working. Even though the age group over ten years old is not currently working, this is because they are considered to have the ability to work physically and have the ability to work at any time[4].

As in previous research conducted by Budi Prayitno in 2014-2018, labor has a positive and significant influence on economic growth in East Java[5].

Sukirno in Smith (2006:243) states that four factors influence economic growth: population, amount of capital goods, land area, natural wealth, and technology used. This theory focuses more on the effect of population growth on economic growth because it assumes that land area, natural resources and technology do not change[6].

As in previous research conducted [7], population growth in Pelalawan Regency in 2006-2015 had a negative and significant effect on economic growth.

According to Peter Townsend (Roberd Gordon University) states that poverty is the absence or lack of food, comfort, service standards and activities needed by society[8].

Based on previous research conducted by Diva Abigail Yuwanda 2005-2020, poverty has a significant negative influence on the economic growth of in Badung[9].

It is known that the rate of economic growth in North Luwu Regency in 2018 was 8.39%, in 2019 it was 7.11%, in 2020 it was -0.59%, in 2021 it was 3.90%, and in 2022 it was 4.54%. %. In 2018-2020 it is known that the level of economic growth in North Luwu Regency continues to decline and increases from 2021 to 2022.

Based on constant 2010 prices, the GRDP figure has also increased from 8.49 trillion rupiah in 2021 to 8.88 trillion rupiah in 2022. This shows that during 2022 North Luwu experienced positive economic growth of around 4.54 percent, fast in compare to previous year. This GRDP is purely caused by increased production in all business fields.

It is known that Gross Regional Domestic Product or GRDP Per Capita in North Luwu Regency in 2020 was 41.07%, in 2021 it was 44.33%, in 2022 it was 48.96%.

One indicator of the level of prosperity of the population in an area can be seen from the GDP per capita value, which is the quotient between the added value generated by all economic activity es and the population. Therefore, the size of the population will influence the value of GRDP per capita, while the size of the GRDP value is very dependent on the potential of natural resources and production factors found in the area. GRDP per capita at current prices shows the value of GRDP per head or per one resident. In 2022 GRDP per capita will be recorded at 48.96 million rupiah.

Like previous research conducted by Fitri Wulandari et al., (2023), the influence of population growth on economic growth in Agam Regency in 2010 - 2020 from regression data can be seen to have a positive and significant effect.

2. Methodology

To solve the problem the author carried out data analysis using quantitative methods, namely a method of analyzing data obtained in the form of numbers and will then be discussed and analyzed using statistical tools, namely the SPSS statistics 2022 program in the form of the Multiple Regression method (RLS). The analysis used is multiple linear regression, which is an analysis used to determine the closeness of the relationship between the independent (free) variable and the dependent (bound) variable.

3. Result and Discussion

3.1 Result

This research is quantitative research with secondary data, meaning the data comes from the Central Statistics Agency (BPS) of North Luwu Regency from 2013 to 2022. The research data is as follows:

Table. Research data

Year	Labor (Soul)	Population Growth (Percent)	Poverty (Soul)	Economic Growth (Percent)
	(X1)	(X2)	(X3)	(Y)
2013	124,028	1.02%	240721.00	7.39
2014	135,436	0.99%	251627.00	8.82
2015	135,553	1.02%	265882.00	6.67
2016	135,553	0.96%	288081.00	7.49
2017	146,270	0.94%	299339.00	7.6
2018	136,597	0.93%	329967.00	8.39
2019	161,966	0.91%	342277.00	7.11
2020	134,870	1.13%	354669.00	-0.59
2021	146,770	0.88%	368716.00	3.9
2022	169,845	0.86%	382251.00	4.54

Source: Secondary data processed, 2024

Multiple Linear Analysis

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	61,534	7,487		8,219	,000
	Tenaga kerja	,072	,029	,403	2,486	,047
	Pertumbuhan Penduduk	-33,213	4,926	-,936	-6,743	,001
	Kemiskinan	-,042	,008	-,747	-5,317	,002

From the table above, the constant value is 61.534 and the coefficient value for the labor variable is (0.072), population growth is (-33.213) and poverty is (-0.042), so the regression equation is obtained as follows:

$$\mathbf{Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e}$$

$$Y = 61{,}534 + 0{,}072X_1 - 33{,}213X_2 - 0{,}042X_3 + e$$

From the regression equation obtained, it has the following meaning:

- The constant value of 61.534 is positive, which means that if the labor, population growth and poverty variables are 0, the economic growth variable will increase by 61.534%.
- The regression coefficient for the labor variable (X1) = 0.072, meaning that every increase in the labor variable by 1 person causes a decrease in economic growth of 0.072%.
- The regression coefficient for the population growth variable (X2) = -33.213, meaning that every 1% increase in the population growth variable causes a decrease in economic growth of -33.213%.
- The regression coefficient for the poverty variable (X3) = -.042, meaning that for every increase in the poverty variable by 1 person, it causes a decrease in economic growth of -.042%.

Hypothesis testing

Determinant Coefficient (R2)

Table. Coefficient of Determination (R2)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,964[a]	,929	,893	,92488

Based on the table above, it shows that the R Square (R2) value is 0.929, meaning that 92.9% of the economic growth variable can be explained by labor, population growth and poverty, while the remaining 7.1% is explained by other variables outside this research model.

Partial Test (t)

Tab. Partial Test Results (t)

Variabel	T hitung	T tabel
Tenaga kerja	**2,486**	**2,446**
Pertumbuhan penduduk	**-6,743**	**2,446**
Kemiskinan	**-5,317**	**2,446**

Source: Secondary data processed, 2024

Based on the table above, it is found that the first hypothesis test (H1) of the labor variable (X1) shows that the calculated t value is 2.486 > the t table value is 2.446 while the significant value is 0.047 < 0.05. It can be concluded that the labor variable has a positive and significant effect on growth. economy. The second hypothesis (H2) is that the population growth variable (X2) shows that the calculated t value is 6.743 > the t table value is 2.446, while the significant value is 0.001 < 0.05. It can be concluded that the population growth variable has a significant effect on economic growth. The third hypothesis (H3) is that the poverty variable (X3) shows that the calculated t value is 5.317 and the t table value is 2.446, while the significant value is 0.002 <0.05. It can be concluded that the poverty variable has a significant effect on economic growth.

F test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66,721	3	22,240	26,000	,001[b]
	Residual	5,132	6	,855		
	Total	71,853	9			

Source: Secondary data processed, 2024

Based on the table above, it is known that the significant value is 0.001 < 0.05 and the calculated F value is 26,000 > F table 4.757. Thus, all independent variables, namely labor, population growth and poverty in this study, simultaneously have a significant effect on economic growth.

3.2 Discussion

1. The labor variable has a positive and significant effect on economic growth. This is also in accordance with the theory stated by Solow, namely that economic growth is also influenced by the growth of the workforce as seen from the population.

Population growth can better explain sustainable economic growth. Population increases the number of workers and this will automatically increase economic growth. The results of this research are also in line with research conducted by Raden Wiweka Surya Firdausy in 2011-2019 and Abdul Rajab in 2010-2019 that labor has a positive and significant influence on economic growth.

2. The population growth variable has a negative and significant effect on economic growth. This is also in line with Lincolin's theory that uncontrolled population growth will cause many problems and hamper business because an increase in population will produce many workers, even though there is little potential in the region to create new job opportunities. Sadono Sukirno supports this theory by stating that population growth over time can hinder economic growth. The results of this research are in line with previous research conducted by Adul Wahab in South Sulawesi in 2010-2020 and Windy Ayu Astuti 2006-2015 in Pelalawan Regency that population growth has a negative and significant influence on economic growth.
3. The poverty variable has a negative and significant effect on economic growth. This is also in line with the theory stated by Kuncoro (2005) that there is a negative relationship between economic growth and poverty. Higher economic growth will reduce poverty, and vice versa. This shows how important the government's role is in accelerating economic growth in order to reduce poverty levels. The results of this research are also in line with research conducted by Diva Abigail Yuanda (2022) and Moh. Arif Novriansyah 2006-2014 that poverty has a negative and significant effect on economic growth.

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4. Conclusion (Font 12, Times New Roman, 1.15 Spacing)

Based on the results of research regarding the influence of labor, population growth and poverty on economic growth in North Luwu Regency, the following conclusions were obtained:

1. Test the first hypothesis (H1) that the energy variable (X1) has a positive and significant effect on economic growth in North Luwu Regency.
2. Test the second hypothesis (H2) that the population growth variable (X2) has a significant negative effect on economic growth in North Luwu Regency.
3. Test the third hypothesis (H3) the poverty variable (X3) has a negative and significant effect on economic growth in North Luwu Regency.
4. Hypothesis test: all variables influence economic growth in North Luwu Regency.

5. Acknowledgement (Font 12, Times New Roman, 1.15 Spacing)

After completing this research, the author found that there were still many things that needed to be improved. Therefore, the author suggests further research on the following matters:

1. So that future researchers add research variables that influence population growth, such as community consumption levels, the tourism industry, and other fields that can show the conditions of economic growth in North Luwu Regency.
2. It is hoped that the government will be able to control the increase in population which will have a negative impact on the country.
3. It is hoped that the government will further realize development strategies, especially pro-poor people, so that economic growth can reduce the number of poor people as much as possible by empowering the community and making poverty reduction policies that focus more on efforts to increase income, health and education as a whole. together.

6. Reference (Font 12, Times New Roman, Spacing 1.15)

[1] Rismawati, R. S. Hamid, and M. Lubis, "Inclusive Policies and Distribution of Green Economic Transformation of Mining Areas: A Regional Development Perspective," *J. Distrib. Sci.*, vol. 22, no. 3, pp. 71–81, 2024.

[2] P. Yuniarti, W. Wianti, and N. E. Nurgaheni, "Analisis Faktor-faktor yang Mempengaruhi Tingkat Pertumbuhan Ekonomi di Indonesia," *SERAMBI J. Ekon. Manaj. dan Bisnis Islam*, vol. 2, no. 3, pp. 169–176, 2020.

[3] D. Ningsih and S. I. Sari, "Pengaruh Investasi Dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi Di Kota Batam," *Desrini Ningsih Selvi Indah Sari J. Akunt. BARELANG*, vol. 3, no. 1, pp. 21–31, 2018.

[4] Www.kemkes.go.id, "Analisis Pengaruh Pertumbuhan Penduduk, Angkatan Kerja Dan Rasio Ketergantungan Terhadap Pertumbuhan Ekonomi Di Kabupaten/Kota Provinsi Banten," *Satukan Tekad Menuju Indones. Sehat*, 2020.

[5] B. Prayitno and R. Yustie, "Pengaruh Tenaga Kerja, IPM Dan Kemiskinan Terhadap Pertumbuhan Ekonomi Kabupaten Kota Di Jawa Timur Tahun 2014-2018," *Equilib. J. Ekon.*, vol. 16, no. 1, p. 47, 2020.

[6] Y. Akbar, "Inflasi Serta Upah Tenaga Kerja Terhadap Pertumbuhan Ekonomi Dan Tingkat," *Ekon. Dan Bisnis Univ. Mulawarman*, 2017.

[7] W. A. Astuti, M. Hidayat, and R. Darwin, "Pengaruh Investasi, Tenaga Kerja dan Pertumbuhan Penduduk Terhadap Pertumbuhan Ekonomi di Kabupaten Pelalawan," *J. Akunt. dan Ekon.*, vol. 7, no. 2, pp. 141–147, 2017.

[8] A. Somba, D. S. . Engka, and J. I. Sumual, "Analisis Pengaruh Pengangguran dan Kemiskinan terhadap Pertumbuhan Ekonomi di Sulawesi Utara," *J. Berk. Ilm.*

Efisiensi, vol. 21, no. 05, pp. 63–74, 2021.

[9] Diva Abigail Yuanda and R. Haryatiningsih, “Pengaruh Kemiskinan, Pengangguran, dan Inflasi terhadap Pertumbuhan Ekonomi di Kota Bandung 2005-2020,” *J. Ris. Ilmu Ekon. dan Bisnis*, pp. 115–124, 2022.