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DESCRIPTIVE OF QUANTITATIVE DATA | SUPPLEMENTARY

The Effect of Investment and Labor on Economic Growth in North Luwu Regency

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Abstract: The purpose of this study was to analyze the effect of investment and labor on the GRDP of North Luwu Regency and to find out which factors have the dominant influence on the GRDP of North Luwu Regency. This research was conducted in North Luwu Regency, where the data collection centers were the BPS Office (Central Statistics Agency) North Luwu Regency, as well as other official offices that could further refine the research data. The population in this study is all GRDP and investment, labor in North Luwu and the authors use secondary data (time series), there is no sample. The results of the study show that the effect of investment and labor on economic growth is positive. This means that if the investment is added it will increase economic growth. Likewise, if the workforce is added, it will be followed by an increase in economic growth. Through this research, the authors recommend this research to the local government so that to increase economic growth, factors that can have a positive impact are needed, including investment and labor factors.

Keywords: Economic Growth, Investment, Labor.

JEL Classification Code: O15, J24,

1. INTRODUCTION

Indonesia as a developing country faces various problems in economic development. One of these problems is the ever-increasing workforce which is not keeping pace with the growth of the development sectors. According to (Chu et al., 2021; Ullah et al., 2021) To achieve better economic growth, Indonesia is carrying out development in various sectors, especially the industrial sector which is expected to be able to reduce the role of the agricultural sector in national economic growth. The role of the industrial sector is highly expected because this sector can absorb a much larger number of workers compared to the agricultural sector. Thus, the development of the industrial sector will provide wider employment opportunities compared to the agricultural sector. This means that a large investment in the industrial sector must be made so that it can provide the broad employment opportunities expected. (Lane & Williams, 1994). The success of GRDP growth cannot be separated from increased investment. Investment is a keyword that determines the rate of economic growth because besides encouraging a significant increase in output, it will also automatically increase demand for inputs, which in turn will increase employment opportunities and people's welfare as a consequence of increasing the income received by the community.

One of the regions in Sulawesi, especially South Sulawesi Province, which has the largest GRDP contribution to South Sulawesi's GRDP is North Luwu Regency. Gross Regional Domestic Product (GRDP) is an indicator of the level of welfare of a region in a certain period. The calculation of GRDP in North Luwu changes every year. Based on statistical data (BPS Luwu Utara), the Gross Regional Domestic Product (GDP) in North Luwu has increased every year. This shows that the business sectors in North Luwu are progressing. All business fields in North Luwu play a role in increasing the GRDP figure. However, of all the business fields, several business fields have a significant role or influence on economic development in South Sulawesi as indicated by the amount of GRDP in each business sector. All business fields in North Luwu Regency play a role in increasing the GRDP figure.



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The role of the industrial sector in increasing economic growth in the form of industrial sector output or industrial sector GDP is inseparable from the role of investment and labor (Uçmak & Arslan, 2012). The investment made is a direct investment in the form of foreign investment (foreign investment) and domestic investment (domestic investment). Direct investment can absorb a large number of workers who are in the labor market and direct investment is also expected to increase economic growth. This happens because the resulting output will increase along with the increase in investment (Limanlı, 2015). In Indonesia, investment consists of foreign investment or commonly known as foreign investment (PMA), and domestic investment or domestic investment (PMDN). According to (Hromádka et al., 2021) In addition to the investment, labor is an input or factor of production used in the production process in the industrial sector. However, the manufacturing industry's significant contribution to economic growth is not accompanied by high employment in the industrial sector. Based on this description, the problems in writing this thesis can be drawn, including:

1. How do investment and labor factors influence GRDP in North Luwu Regency?
2. Which factors have the dominant influence on the GRDP of North Luwu Regency?

2. RESULT DESIGN AND METHOD

Research, (2) North Luwu Bappeda Office (3) North Luwu Regency Manpower and Transmigration Office, (4) Central Investment and Coordinating Board (BKPM), internet, and other official offices that can further refine research data. This research is planned to be carried out for 3 (three) months, starting from June to August 2021. The population in this study is all GRDP and investment, and labor in North Luwu. and the authors use secondary data (time series), there is no sample. Data used in this paper are secondary data in the form of Quantitative data, data in the form of numbers obtained through research conducted directly on the object of research. Qualitative data is data in the form of descriptions or explanations obtained from the results of literature studies and also from various literature or references and articles related to this writing. This data is sourced from publications published by North Luwu Regency BPS (Central Statistics Agency), North Luwu Regional Development Planning Agency, North Luwu District Manpower, and Transmigration Office, Central Coordinating and Investment Board (BKPM), the internet and other official offices that can provide more information. improve research data. The collection was carried out using the library research system. Data collection was carried out by recording data sourced from publications issued by official government publications as well as using literature studies from literature and journals related to research problems.

The method used to analyze the data in this study is the descriptive quantitative method. Descriptive analysis is used to describe the condition of the workforce, investment, and output of North Luwu Regency, especially those in the industrial sector. In addition, it is also to describe the influence of the industrial sector on the economic growth of North Luwu Regency which is reflected in the Gross Regional Domestic Product of North Luwu Regency. To find out the factors that influence economic growth in North Luwu Regency, a multiple regression production function model is used. Regression analysis is used to predict a causal relationship between the independent variables and the dependent variable. The regression analysis, besides measuring the strength of the relationship also shows the direction of the relationship between the independent variables and the dependent variable. The specifications used by for this research model are as follows:

$$\text{LogY} = A + \beta_1 \log X_1 + \beta_2 \log X_2$$

Description:

Y = Total GRDP

X1 = Investment



X2 = Labor
 A = Constant
 β_1, β_2 = Regression coefficient of

The resulting coefficient can be seen in the regression output based on the data analyzed to then be interpreted and see the significance of each variable studied:

- a. R^2 (coefficient of determination) aims to determine the strength of the independent variable explaining the dependent variable
 - b. Simultaneous test (F-test), intended to determine the statistical significance of the regression coefficients simultaneously. If $F_{hit} > F_{table}$, then H_0 is rejected and H_1 accepted.
 - c. Partial test (t-test), intended to determine the statistical significance of the regression coefficient partially. If that $>$ table then H_0 rejected and H_1 accepted
1. GRDP: all production or added value expressed in terms of money in North Luwu Regency every year
 2. Investment: the amount of investment in the value of money that is in North Luwu Regency every year.
 3. Manpower: the large number of workers absorbed by jobs in North Luwu Regency every year.

3. RESULT AND DISCUSSION

Table 1: Data on Investment, Labor, GRDP, and Economic Growth of North Luwu Regency in 2006-2012.

No.	Year	Investment (Rp)	Labor	GRDP (Millions of Rupiah)	Economic Growth (Millions of Rupiah)
1	2006	-	-	164,755,343	-
2	2007	208,080,000	121,544	186,447,742	21,692,399
3	2008	286,026,2031	132,436	132,436	506
4	2009	246,764,469	123,826	2,678,044.36	34,954.188
5	2010	267.142.560	124.319	3,066,339.43	38.829.507
6	2011	399,087,730	126,961	-	-

Table 2: F-Test

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	462339963313921,100	2	231169981656960,560	12,084	.076 ^b
Residual	38259067462893,780	2	19129533731446,890		
Total	500599030776814,900 4.900	a			

Table 3: Output Simultaneous Correlation

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.961 ^a	.924	.847	4373732.243

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