

## **THE EFFECT OF UNEMPLOYMENT, ECONOMIC GROWTH AND HUMAN DEVELOPMENT INDEX ON POVERTY LEVELS IN SUMBAWA REGENCY IN 2012-2021**

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**Abstract:** This study aims to determine the effect of the unemployment rate, the rate of economic growth and the human development index on the poverty rate in Sumbawa Regency for the period 2012 – 2021. The research method used in this study is a quantitative method by using secondary data that is time-series data, namely in 2012 – 2021 sourced from the Central Statistics Agency for Sumbawa Regency. Analysis of the data used is the multiple linear regression method. The results of the study show that only the unemployment rate and the Human Development Index have a significant effect on the poverty level in Sumbawa Regency during 2012-2021. This is due to several things, including the local government of Sumbawa Regency for less than 10 years launching an increase in human capital development with the hope of reducing poverty by investing in education and health. Because these two investments have been more meaningful for the poor in Sumbawa Regency for the last 10 years. With the realization of this, it will greatly help increase productivity and in turn increase income for the people of Sumbawa Regency.

**Keywords:** *Poverty level, Sumbawa district.*

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### **1. Introduction**

Poverty is a social problem that is always present in the midst of society in several parts of Indonesia. Poverty always attracts the attention of various groups, both academics and practitioners. Various theories, concepts and approaches are continuously being developed to solve this mystery of poverty. In Indonesia, the problem of poverty is a social problem that is always relevant to be studied continuously. The problem of poverty is not decreasing, but actually increasing in number. The growth of income per capita in Indonesia is decreasing over time. The decline in the amount of income per capita is not only detrimental to the state, but the community will indirectly feel the impact of the decline in per capita income. Poverty is also one of the determinants of the success of a region's economic growth. Meanwhile, economic development is an effort to increase per capita income by processing potential economic power into a real economy through investment, use of technology, increasing knowledge, increasing skills, increasing organizational and management abilities (Sjafrizal, 2008). Meanwhile, as stated by (Christianto, 2013) that poverty that occurs in developing countries is a fairly complicated problem, but in some developing countries they have succeeded in carrying out development in terms of production and national income. The poverty condition of a country or region is a reflection of the level of welfare of the population living in that country or region.

Sumbawa Regency is one of the regencies on Sumbawa Island, West Nusa Tenggara Province. The economy in Sumbawa Regency is still dominated by the agricultural sector, namely food crop agriculture, animal husbandry, fisheries and forestry. It is undeniable that this condition still surrounds poverty in Sumbawa Regency, this is due to the fact that the income earned by the Sumbawa people is still dominated by the food crop agriculture, fisheries and forestry sectors. Poverty in Sumbawa Regency is a problem that has become one of the centers of attention. The problem of poverty in Sumbawa district can be viewed from the factors that influence it. These factors include slow economic growth, a low human development index, and an increasing number of unemployed. As we know that economic growth is one indicator of success in development. Meanwhile, the main objective of economic growth is to increase production capacity. Increasing production capacity requires additional labor so that the number of unemployed will decrease and the poverty rate will decrease (Arifin and Hadi, 2009).

The development of the Regency's gross regional domestic product from 2012 to 2021 experienced fluctuations which were influenced by various factors. Sumbawa Regency is an area that has not yet reached a steady state condition where an economy is already in a stable state and is not easily affected by shocks. In this case, the role of the central and local governments is very important in encouraging the progress of economic growth in Sumbawa Regency. Another indicator that we can look at is by using human development. Human development can be done by investing in areas such as education and health that provide benefits to the poor. Cheap education and health facilities are expected to increase productivity along with increased income. The quality of human resources can be known by looking at the quality of life index or human development index. The low human development index will result in a person's low work productivity. Low productivity has an impact on income and causes the number of poverty to increase.

The increase in the Human Development Index every year causes an increase in one's work productivity. Increased productivity has an impact on income and causes the poverty rate in Indonesia to experience a downward trend. If the Human Development Index has increased, it can be assumed that the level of community welfare will also increase. If welfare increases, the poverty level will decrease (Adi Widodo, 2011). Not only economic growth factors, the Human Development Index alone can affect the poverty level in Sumbawa Regency. Another factor that also affects the level of poverty is unemployment. In Lewis theory it is explained that the purpose of the development process is specifically aimed at countries facing the problem of excess labor. Lewis considers that in developing countries there is an excess of labor, but has a problem of lack of capital and limited land area (Sukirno, 2006).

Unemployment has a very close relationship in influencing poverty levels. Unemployment is a condition whose existence is inevitable. Unemployment has limitations that need to be considered because unemployment is very influential on the occurrence of problems of vulnerability to various crimes, social unrest, politics and poverty (Amalia, 2012). Then also said by Pangiuk (2018) explaining that with economic growth, people's welfare will be realized through various social developments and economic development in overcoming the problem of poverty. The limited number of available jobs is the main cause of unemployment and has a direct impact on high poverty (O'Campo et al., 2015).

Based on this background, a study is needed that aims to analyze the effect of unemployment, economic growth and the human development index on poverty levels in Sumbawa Regency for the 2012-2021 period.

## **2. Research Method**

This research is quantitative and the data in this study are secondary data. According to the collection of data in this study is periodic data (time series). The time series data used is annual data for 10 (ten) years, namely 2012-2021. The data is taken from BPS Sumbawa Regency which is related to the number of research variables which include data on the poverty rate in Sumbawa Regency as the dependent variable (Y) and the independent variable, namely the unemployment rate in Sumbawa Regency (X1), Sumbawa Regency's economic growth rate (X2) and human development index data (X3). The data processing uses Statistical Product and Service Solution 20 (SPSS 20) software. The data analysis method used is the multiple regression method with the Ordinary Least Square (OLS) technique. To determine the effect of the independent variables, namely the unemployment rate in Sumbawa Regency (X1), Sumbawa Regency's economic growth rate (X2) and human development index data (X3) which affect the poverty rate in Sumbawa Regency for 10 years, the following regression equation is used:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu_i \dots\dots$$

- Y = The Poverty Rate in Sumbawa Regency.
- X1 = Unemployment Rate in Sumbawa Regency.
- X2 = Economic Growth Rate in Sumbawa Regency.
- X3 = Human development index in Sumbawa Regency.
- Bo = Constant Coefficient.
- $\beta_1, \beta_2, \beta_2$  &  $\beta_3$  = Regression coefficient.
- $\mu_i$  = Error Term

In using regression analysis tools, it is necessary to test the classical assumptions, so that the results of this regression analysis show a valid relationship. Among them are: (1) Normality test, (2) Multicollinearity test, (3) Autocorrelation test and (4) Heteroscedasticity test. Then after the model is free from classical assumption testing, it is continued with statistical justification. Statistical justification is a test of giving goodness of fit model that concerns the accuracy of the sample regression function in estimating the actual value by looking at its Goodness of Fit. Statistically, at least this can be measured from the value of the coefficient of determination, the value of the F statistic and the value of the t statistic (Imam Ghozali, 2013).

## **3. Results and Discussion**

### **3.1. Results**

Based on the data processing that has been carried out using the SPSS 2.0 program, the value of the Coefficient of Determination (R<sup>2</sup>) is obtained as follows:

**Processed R Square Value**

Predictors: (Constant), Human Development Index, Economic Growth Rate, Unemployment Rate, Unemployment Rate.	R Square	Std. Error of the Estimate
	.997	19.256

*Sumber: Processed Data 2022*

Based on Table 1. it can be seen that the coefficient of determination obtained is 0.997. This means that X1 (Unemployment Rate), X2 (Economic Growth Rate) and X3 (Human Development Index) affect the poverty rate in Sumbawa Regency (Y) by 99.7% while the remaining 0.3% is influenced by factors other causes that were not investigated in this study. In other words, the magnitude of the influence of the unemployment rate, Economic Growth Rate and Human Development Index on open unemployment in Sumbawa Regency is 99.7% while the remaining 0.3% is influenced by other factors outside this regression model.

To determine the effect simultaneously or jointly on the three variables (unemployment rate in Sumbawa Regency, Sumbawa Regency's Economic growth rate and Human Development Index) on the analysis that affects the poverty rate in Sumbawa Regency for the 2012-2021 period, the F test is used. aims to determine whether the independent variables included in the regression model have a simultaneous (simultaneous) effect on the dependent variable. This test uses the F test, with an analysis based on a comparison between the significance value and the significance level ( $\alpha$ ) used or ( $\alpha$ ) 5%. If the significance of  $F < 0.05$  then  $H_a$  is accepted, meaning that the independent variable simultaneously has a significant effect on the dependent variable. The results of the F test analysis can be seen in Table 2 below:

**Table 2.**  
**F Test Results on the Variable Unemployment Rate, Economic Growth Rate and Human Development Index that Affect the Poverty Rate in Sumbawa Regency 2012 – 2021.**

<b>a. Dependent Variable: Poverty Rate</b>	<b>Sig</b>
<b>b. Predictors: (Constant), Human Development Indeks, Economic Growth Rate, Unemployment Rate.</b>	<b>.000<sup>b</sup></b>

*Sumber: Processed Data 2022*

Based on Table 2 above, the significance value obtained from the F test table above is smaller than the significance value = 0.05 or  $0.000 < 0.05$  so that  $H_a$  is declared accepted. So it can be concluded that  $H_a$  is accepted, which means the unemployment rate, the economic growth rate in Sumbawa district and the Human Development Index simultaneously have a significant effect on the poverty rate in Sumbawa Regency. The results of this study are in accordance with research conducted by Waseso Segoro and Muhammad Akbar (2016) which states that Gross Regional Domestic Product, Human Development Index and Unemployment are the benchmarks of a country, especially Indonesia, the increasing Gross Regional Domestic Product and Human Development Index, and the reduced unemployment will affect the percentage of poverty in Indonesia. Likewise with the results of research reviewed by R. Bambang Budhijana (2019) which states that the influence of economic growth, the human development index and unemployment have a positive effect on the poverty rate in Indonesia in 2000 – 2017.

### 3.2. Discussion

**Table 3.**  
**Multiple Linear Regression Results on Variables of Unemployment Rate, Economic Growth Rate and Human Development Index that Affect Poverty Rates in Sumbawa Regency 2012-2021.**

<b>Dependent Variable: Poverty Rate</b>	<b>Coefficients<sup>a</sup></b>	<b>Sig.</b>
(Constant)	10.054	.000
X1_ Unemployment Rate	2.191	.001

X2_ Economic Growth Rate	-.583	.454
X3_ Human Development Index	-.632	.000

*Sumber: Processed Data 2022*

Based on Table 3. above, the estimated model of the multiple linear regression equation in this study can be written as follows:

$$\mathbf{Y\_Poverty\ Rate = 10,054 + 2.191 (X1\_Unemployment\ Rate) + -.583 (X2\_Economic\ Growth\ Rate) + -.632 (X3\_Human\ Development\ Index).}$$

The constant value of the regression equation model is 10,054. This means that if the variables of the unemployment rate, Sumbawa economic growth and the Human Development Index are zero or there is no change in the unemployment rate and in economic growth in Sumbawa Regency and there is no change in the Human Development Index in the poverty rate in Sumbawa Regency, it will result in the rate of unemployment in Sumbawa Regency. poverty in Sumbawa district will increase by 10,054 people.

The regression coefficient value of the unemployment rate is 2.191. This shows that there is a significant effect between the unemployment rate and the poverty rate in Sumbawa district or the significant value of the unemployment rate variable is less than 0.05 ( $0.001 < 0.05$ ) so  $H_a$  is accepted. It also shows that if the unemployment rate increases by 1% while the other independent variables remain constant, then the poverty rate in Sumbawa will increase by 2.191%. On the other hand, if the unemployment rate decreases by 1%, the poverty rate will decrease by 2.191%. This shows that the greater the unemployment rate, the higher the poverty rate in Sumbawa Regency will also be. As it is known that unemployment will cause various problems such as economic and social, which results in the absence of income which in turn can cause the welfare of the community to decline. The decline in welfare due to unemployment can result in the opportunity to be trapped in poverty. This opinion is in accordance with Arsyad (2010) which states that there is a very close relationship between the unemployment rate, the extent of poverty, and the unequal distribution of income. Then also as research conducted by Amalia, Fitri. (2012) which states that the unemployment rate has a positive and significant effect on the poverty level. Then the research conducted by Mufid (2014) which shows that the unemployment variable is positive and has a significant effect on poverty. If we look at the individual, unemployment can cause chaos in the economic and social fields. If unemployment in a country is bad, it will cause political and social chaos. This causes adverse effects on life and long-term economic development. Likewise, research conducted by Bintang & Woyanti (2018), Ariasih & Yuliarmi (2021, Alit and Sudiana (2013) and Sukmaraga (2011) which states that an increase in unemployment will lead to an increase in the level of poverty in an area.

In line with the theory of Sukirno (2011) that the negative effect of unemployment is to reduce people's income and in the end there is a decrease in people's welfare which may fall into the poverty trap. The high unemployment rate, economically has the potential to reduce opportunities in increasing regional productivity, and socially reflects the greater burden on society.

The regression coefficient value of the Economic Growth Rate in table 3 above has a value of  $-.583$  with a negative sign. This means that for each additional unit of the variable Economic Growth, the poverty rate will decrease by 5.83%. Economic growth has a negative effect, however, it was found that the results of the analysis are not significant or not

significant to the poverty level variable so that hypothesis 2 in this study is not proven to have an effect. Economic growth has no effect on the poverty level variable, which can be explained because the economic growth has not been effective in reducing the poverty level. This means that this growth has not spread to every income group, including the poor. Directly, this means that growth has not occurred in sectors where the poor work, namely the agricultural sector or labor-intensive sectors so that economic growth does not affect the poverty level in Sumbawa Regency. This is also supported by Barika (2013) in the results of his research which explains that economic growth has no effect on poverty, indicating that existing economic growth is supported by consumption rather than investment or capital. This insignificant economic growth reflects the lack of quality of existing economic growth because it is still unable to reduce poverty levels. The results of the study are also from Fadila & Marwan (2020) which states that there is no significant effect between economic growth and poverty. Another study by Nainggolan (2020) also shows that there is no significant effect on poverty. It can be shown that economic growth does not automatically reduce poverty and there is often an inconsistency between economic growth and poverty.

The regression coefficient of the Development Index (X3) is in table 3. Above is negative -.632. This means that for every 1 percent increase in HDI, poverty will decrease by 6.32%. Then based on the significance value of 0.000 less than 0.05. This means that the human development index has a negative and significant effect on the poverty level. These results are in accordance with the new growth theory where in the new growth theory, it is emphasized the importance of the government's role, especially in increasing human capital development. Human development is synonymous with poverty reduction. Investments in education and health will be more meaningful for the poor than for the non-poor, because for the poor the main asset is their labor force. The existence of cheap education and health facilities will greatly help increase productivity and in turn increase income (Lanjouw, 2001). The human development index contains three important dimensions in development, which are related to aspects of meeting the needs for a long and healthy life, to gain knowledge (the knowledge) and have access to resources that can meet living standards. These results strengthen previous research conducted by Irham Iskandar (2011), Nurmainah (2013) and Noor Zuhdiyaty (2017) which said that the human development index had a negative and significant effect on poverty levels.

From the results of the explanation above, it shows that the sector or variable The unemployment rate and the Human Development Index have a significant value on changes in the rate of poverty in Sumbawa Regency for the 2012-2021 period. This is due to several things, including the Sumbawa Regency local government for less than 10 years proclaimed increasing human capital development with the hope of reducing poverty by investing in education and health. Because these two investments have been more meaningful for the poor in Sumbawa Regency for the last 10 years. With the realization of this, it will greatly help increase productivity and in turn increase income for the people of Sumbawa Regency.

#### **4. Conclusion**

Based on the results of the research and discussion above that have been discussed previously, the conclusions obtained from this study are: The unemployment rate, the economic growth rate in Sumbawa Regency and the Human Development Index in Sumbawa Regency together have a significant effect on the poverty rate in Sumbawa Regency in the period 2012 - 2021. This can be seen in the F Test where the significance value is smaller 0.00 (0.000 < 0.05). Then the sector or variable The unemployment rate and the Human

Development Index have a significant value on changes in the poverty rate in Sumbawa Regency for the 2012-2021 period. This can be seen from the significance value of the two independent variables which is less than 0.05. For the independent variable the unemployment rate is  $0.001 < 0.05$ . Then the significance value of the independent variable human development index is 0.000 or less than 0.05. This is due to several things, including the local government of Sumbawa Regency for less than 10 years launching an increase in human capital development with the hope of reducing poverty by investing in education and health. Because these two investments have been more meaningful for the poor in Sumbawa Regency for the last 10 years. With the realization of this, it will greatly help increase productivity and in turn increase income for the people of Sumbawa Regency.

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