

Factors Affecting Open Unemployment in Sumbawa District In 2012 – 2021

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Abstract: The purpose of this study is to find out and analyze the factors that influence open unemployment in Sumbawa Regency in 2012-2021. The research method used in this study is a quantitative method. Analysis of the data used is the multiple regression method. The results of the study show that inflation, the economic growth rate of Sumbawa Regency and the HDI (Human Development Index) in Sumbawa Regency together have a significant effect on the open unemployment rate in Sumbawa Regency in 2012 - 2021. This can be seen in the F Test where the significance value is smaller than 0.05 ($0.001 < 0.05$). Then the magnitude of the influence on each of the independent variables mentioned above varies. The highest influence is found in the variable rate of economic growth of 2.100% then inflation of 0.193% and the HDI (Human Development Index) of 0.160%. So the variable rate of regional economic growth in Sumbawa Regency has a big impact on changes in the open unemployment rate in Sumbawa Regency.

Keywords: Open Unemployment, Sumbawa Regency

I. INTRODUCTION

Unemployment is one of the main employment problems faced by several regions in Indonesia. So that unemployment is a very complex problem because it affects and is influenced by many factors that interact with each other following a pattern that is not always easy to understand. Therefore, the unemployment rate is one measure of efficiency in the economy. When unemployment occurs, some of the available labor inputs are not used, which means a loss of production. Growing unemployment in development is a more complicated and more serious problem than the problem of changes in income distribution that are less favorable to low-income people. The situation in various regions in Indonesia in the last few decades shows that the development that has been created is unable to provide employment opportunities that are faster than population growth. Therefore, the unemployment problem faced from year to year is getting more serious.

Increasing the number of job opportunities and types of job opportunities for local communities is the main goal in any economic development. Mean while, smaller jobs than the labor force will cause unemployment. High unemployment is included in economic and social problems. Unemployment will become an economic problem because wasting valuable resources and high unemployment means wasting the production of goods and services that are actually capable of being produced by unemployment (Samuelson and Nordhaus, 2004).

On the other hand, increasing inflation accompanied by a decrease in the rate of economic growth has caused the proportion of the population who are not yet mature to be higher with the number of family members increasing, causing an unbalanced population growth. The higher the rate of economic growth, the production of goods and services will also increase thereby increasing the standard of living. A high rate of economic growth will usually expand employment opportunities and reduce the unemployment rate. A study conducted by Amir (2007) on the effect of inflation and economic growth on unemployment in Indonesia in 1980-2005, concluded that there was a significant negative effect between economic growth and the unemployment rate, while inflation had no significant effect on unemployment. Meanwhile, a study conducted by Pitartono and Hayati (2012) which uses quantitative analysis with descriptive statistical analysis methods and correlation analysis, it is concluded that the population variable shows a significant positive relationship with the unemployment rate. The inflation rate variable is not significantly related to the unemployment rate. The district/city minimum wage variable shows a positive and significant relationship with the unemployment rate. Meanwhile, the variable GRDP growth rate shows an insignificant relationship with the unemployment rate.

Then other factors that affect open unemployment are the Human Development Index which is an important indicator to measure success in efforts to build the quality of human life (community/population), the Human Development Index explains how the population can access development outcomes in obtaining income, health, education, and so on. . The Human Development Index is formed by three basic dimensions, namely a long and healthy life, and a decent standard of living. The human development index is influenced by many factors, especially socio-economic factors.

For Sumbawa Regency itself, the amount of the open unemployment rate in the Regency in the last five years, namely 2017-2021 is influenced by several factors including Sumbawa Regency's economic growth, inflation and the amount of education. As an initial description of the open unemployment rate in Sumbawa Regency, it can be seen in table 1 as follows:

Table 1: Statistics of Sumbawa Regency Open Unemployment Rate 2017 - 2021

Year	Total Population	Open Unemployment Rate (%)
2021	509.753	4.01
2020	457.671	3.10
2019	453.797	3.45
2018	449.680	3.98
2017	445.503	4.20

Source: Central Bureau of Statistics of Sumbawa Regency

Based on the explanation above and the description of table 1 above, open unemployment in Sumbawa Regency is inseparable from the factor of low job opportunities obtained by the community. The low population aged 15 years and over who work is due to the lack of employment opportunities and the low quality of human resources so that they are unable to work and are unable to create jobs. Another factor that influences the open unemployment rate is education. Education relates to the development of knowledge and expertise and skills of humans and workers in the development process. Due to its enormous contribution to economic development, education is said to be human capital. Education is an investment in human resources in order to get a better life (Mulyadi, 2012). With the low quality of human resources in the labor market in Sumbawa Regency, this will clearly have an impact on the bad effect of unemployment, namely reducing people's income which in turn reduces the level of prosperity achieved by a person. The decline in people's welfare due to unemployment will certainly increase poverty. If unemployment in an area is very bad, political and social chaos always prevails and has a bad effect on people's welfare and prospects for economic development in the long term.

From the description above, the researcher is interested in raising issues specifically related to the important causes that cause open unemployment to occur in Sumbawa Regency during the period 2021 - 2021. So that the final results will be expected to be a reference in the description of policy making in Sumbawa Regency, especially those related to employment.

II. RESEARCH METHODOLOGY

This research is quantitative and the data in this research 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 the open unemployment rate data in Sumbawa Regency as the dependent variable (Y) and the independent variable, namely the amount of inflation in Sumbawa Regency (X1), Sumbawa Regency's economic growth rate (X2) and index data. human development (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 amount of investment in the MSME Sector (X1), the number of working people (X2) and the human development index data (X3) that affect the rate of economic growth in Sumbawa Regency for 10 years, the regression equation is used as follows:

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

Description:

Y = Open Unemployment in Sumbawa Regency.

X1 = Inflation in Sumbawa Regency.

X2 = Sumbawa Economic Growth Rate.

X3 = Human development index.

Bo = Constant coefficient.

$\beta_1, \beta_2, \beta_2$ & β_3 = Regression Coefficient

μ_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).

III. RESEARCH FINDINGS AND DISCUSSION

Findings

Based on the data processing that has been carried out using the SPSS 2.0 program, the value of the Coefficient of Determination (R²) is obtained as follows:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.964 ^a	.930	.895	24.185

a. Predictors: (Constant), Human Development Index, Sumbawa Economic Growth, Inflation. Source: Processed Data 2022

Based on Table 2. it can be seen that the value of the coefficient of determination obtained is 0.930. This means that X1 (Inflation), X2 (Economic Growth Rate) and X3 (Human Development Index) have an effect on Open Unemployment in Sumbawa Regency (Y) by 90.3% while the remaining 9.7% is influenced by other contributing factors. not investigated in this study. In other words, the magnitude of the influence of Inflation, Economic Growth Rate and Human Development Index on open unemployment in

Sumbawa Regency is 90.3% while the remaining 9.7% is influenced by other factors outside this regression model.

To determine the effect simultaneously or jointly on the three variables (Inflation, Economic Growth of Sumbawa Regency and the Human Development Index) on the analysis that affects open unemployment in Sumbawa Regency for the 2012-2021 period, the F test is used to determine whether the independent variables are included. in the regression model has a 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 (α) used or (α) 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 3 below:

Table 3. F Test Results on Factors Affecting Open Unemployment in Sumbawa Regency 2012 – 2021.

ANOVA*					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	46729.479	3	15576.493	26.631	.001 ^b
Residual	3509.421	6	584.903		
Total	50238.900	9			
a. Dependent Variable: open unemployment.					
b. Predictors: (Constant), Human Development Index, SumbawaEconomic Growth, Inflation. Source: Processed Data 2022					

Based on Table 3 above, the significance value obtained from the F test table above is smaller than the significance value = 0.05 or $0.001 < 0.05$ so that H_a is declared accepted. So it can be concluded that H_a is accepted, which means that inflation, the rate of economic growth in Sumbawa Regency and the Human Development Index simultaneously have a significant effect on the open unemployment rate in Sumbawa Regency. The results of this study are in accordance with research conducted by I Made Tony Wirawand and Sudarsana Arka (2015), Muhammad Shun Hajji and Nugroho SBM (2013), Shinta Setya Ningrum (2017), Nursiah Chalid and Yusbar Yusuf (2014), Ayu Noviatamara, Tiffany Ardina and Nurisqi Amalia (2019) and Ronny Pitartono, Banatul Hayati (2012) which state that there is a significant influence on the independent variables analyzed in influencing unemployment in the selected research area. As in the research reviewed by Ayu Noviatamara, Tiffany Ardina and Nurisqi Amalia (2019) entitled "Analysis of the Effect of Economic Growth and Open Unemployment Rates in the Special Region of Yogyakarta" which states that From the results of the analysis it is known that economic growth and the Human Development Index have a significant effect on the Open Unemployment Rate in the Special Region of Yogyakarta.

Likewise with the results of research reviewed by Muhammad Shun Hajji and Nugroho SBM (2013) regarding the Analysis of GDP, Inflation, Provincial Minimum Wage, and Literacy

Rate on Open Unemployment Rates in Central Java Province in 1990-2011. The results of this study also indicate several factors that affect the open unemployment rate. Of the four factors studied (GDP, Inflation, Provincial Minimum Wage and literacy rate), it is evident that the Provincial Minimum Wage and literacy rate have a positive and significant effect on the open unemployment rate. This is understandable considering that the wage level set by the government above the market balance is considered to be very burdensome for the company in its production costs, and the high quality of education makes the people of Central Java reluctant to work at a wage level that they feel is not commensurate with the sacrifices incurred in the process of pursuing a career. education.

IV. DISCUSSION

To find out the results of a partial analysis related to the factors that influence open unemployment in Sumbawa Regency for the 2012-2021 period. The following are the results of the processed data in a regression and discussion of the results shown in table 4:

Table 4. Results of Multiple Linear Regression on Factors Affecting Open Unemployment in Sumbawa Regency 2012 – 2021.

Variabel	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-2081.059	307.672		-6.764	.001
Inflation	.193	.149	.172	1.296	.242
Sumbawa Economic Growth Rate	2.100	.351	.648	5.986	.001
Human development index	.160	.038	.564	4.257	.005
Dependent Variable: Open Unemployment Source: Processed Data 2022					

Based on Table 4. above, the estimated model of the multiple linear regression equation in this study can be written as follows:

$$Y_{\text{Open Unemployment}} = -2081.059 + 0.193(X1_{\text{Inflation}}) + 2.100 (X2_{\text{Sumbawa Economic Growth}}) + 0.160 (X3_{\text{Human Development Index}}).$$

The constant value of the regression equation model is -2081.059. This means that if the inflation variable, Sumbawa economic growth and the Human Development Index are zero or there is no change in inflation or economic growth in Sumbawa Regency and there is no change in the Human Development Index in the open unemployment sector in Sumbawa Regency, it will result in open unemployment in Sumbawa Regency will not experience a decrease of -20.81%. The results of this study are in accordance with research conducted by Mohammad Rifqi Muslim (2014) in his research entitled open unemployment and its determinants.

The value of the inflation regression coefficient is 0.193. This shows that there is a significant effect of inflation on open unemployment in Sumbawa district, which means if inflation increases by 1% while other independent variables remain or are constant, then open unemployment in Sumbawa district will increase by 0.193%. On the other hand, if inflation decreases by 1%, then open unemployment will decrease by 0.193%. This shows that the greater the inflation in the open unemployment sector in Sumbawa Regency, the greater will be. The results of this study are in accordance with research conducted by Muhammad Alvianto Putra Arizadi and Eny Rochaida (2017) which states that inflation has a direct significant effect on open unemployment in East Kalimantan.

The regression coefficient value of the regional economic growth rate of Sumbawa Regency is 2,100. This shows that there is a positive influence between the regional economic growth rate of Sumbawa Regency on the growth rate of open unemployment in Sumbawa Regency, which means that if the Sumbawa Regency's regional economic growth rate increases by 1% while other independent variables remain or are constant, then the open unemployment rate will decrease by 2,100. %. On the other hand, if the economic growth rate of the Sumbawa district decreases by 1%, then the open unemployment rate will increase by 2.100%. This shows that as the regional economic growth rate in Sumbawa Regency increases, the open unemployment rate in Sumbawa Regency will also be lower. The results of this study are in accordance with research conducted by Ridho, Hernowati and Nenek Woyanti (2018) which states that the results show that the variable GDP growth rate has a positive and significant effect on unemployment in Central Java.

The regression coefficient value of the Human Development Index rate in the Sumbawa Regency area is 0.160. This shows that there is a positive influence between the growth rate of the Sumbawa Regency Regional Human Development Index on the growth rate of open unemployment in Sumbawa Regency, which means if the growth rate of the Sumbawa Regency Regional Human Development Index increases by 1% while the other independent variables remain or are constant, then the unemployment rate open will decrease 0.160%. Conversely, if the growth rate of the Sumbawa district's human development index decreases by 1%, then the open unemployment rate will increase by 0.160%. This shows that the higher the Human Development Index in the Sumbawa Regency area, the higher the open unemployment rate in Sumbawa Regency will also be. The results of this study are in accordance with research conducted by Muhammad Nurcholis (2014) which states that the Human Development Index makes a significant contribution in explaining the variable of open unemployment in East Java Province.

From the results of the explanation above, it shows that the sector or variable of Sumbawa's economic growth has the highest value on the effect of the rate of change in open unemployment in Sumbawa Regency for the 2012-2021

period. This is due to several things, including the economy in Sumbawa Regency is still dominated by the agricultural sector, namely crop farming, food, livestock, fisheries and forestry. So that the development of this sector will affect the rate of regional economic growth in Sumbawa Regency and have an impact on the open unemployment rate in Sumbawa Regency.

Then what affects the economic growth rate of Sumbawa Regency, namely the potential in the tourism sector, this is caused by the condition of the landscape that is still very supportive for the development of the agricultural sector, especially livestock because there is still a lot of land. The tourism potential of Sumbawa Regency is no less interesting than tourism in Bali and in Lombok. So far, the best known tourist spot in Sumbawa is Moyo Island. Moyo Island is very famous because of the late. Lady Diana had been to this island. The attraction of Moyo Island, among others, is the beauty of the underwater world. While on land, two-thirds of Moyo Island is a nature reserve that is home to herds of deer, wild cattle, wild boars and charred birds (megapodius).

So that the two sectors above will affect the pace of the regional economy in Sumbawa Regency during the 2012-2021 period and will also directly affect the rate of change in open unemployment during the 2012-2021 period. Therefore, these two sectors are the mainstay sectors of Sumbawa Regency in influencing the regional economy.

V. CONCLUSIONS

Based on the results of the research and discussion above that have been discussed previously, the conclusions obtained from this study are: inflation, the economic growth rate of Sumbawa Regency and the Human Development Index in Sumbawa Regency together have a significant effect on the rate of change in open unemployment in Sumbawa Regency in the period 2012 - 2021. This can be seen in the F test where the significance value is smaller 0.05 ($0.001 < 0.05$). Then the magnitude of the influence on each of the independent variables mentioned above varies. The highest influence is found in the variable rate of economic growth of 2.100% then inflation of 0.193% and the Human Development Index of 0.160%. So the variable rate of regional economic growth in Sumbawa Regency has a big impact on changes in the open unemployment rate in Sumbawa Regency. Then the condition of the rate of reduction in open unemployment will have a strong effect if inflation and the Human Development Index are involved in supporting the emphasis on reducing open unemployment in Sumbawa district.

Based on the conclusions above, it can be suggested in the form of an increase in the open unemployment rate in Sumbawa Regency which is supported by the regional economic growth rate, inflation and the Human Development Index. Then the hope of future researchers is that future researchers can raise issues related to employment that have an impact on the regional and national economy.

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