

The Influence of Population Size, Economic Growth, and Regional Minimum Wage on the Unemployment Rate in the Regencies and Cities of Bakorwil 1 Madiun

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ABSTRACT

A resident is someone who has lived in a country for a long time. The problem that often occurs in a country is about unemployment. Unemployment is a problem that has not yet been resolved. The role of the government is urgently needed in reducing the unemployment rate. Population numbers that are not resolved properly can cause economic development goals to not be achieved. Economic success is seen from improving economic growth and decreasing inequality in a region. This study aims to examine the effect of Population Number, Economic Growth and Regional Minimum Wage on Unemployment Levels in the Regency/City of the Bakorwil 1 Madiun Region. This study uses quantitative methods, where the required data is obtained from BPS. The results showed that the Independent Variable Population (X1) had no partial and significant effect on the unemployment rate, economic growth (X2) had a partial and significant effect on the unemployment rate, and the regional minimum wage (X3) had no partial and significant effect on the unemployment rate. the unemployment rate in the Regency/City of the Bakorwil 1 Madiun Region.

Keywords: Population, Economic Growth, Regional Minimum Wage, Unemployment Rate.

INTRODUCTION

Population refers to individuals who reside in a particular area for a long period of time. Population size is a dominant factor used to describe various conditions. When the population increases, the supply of labor will also increase, which can minimize wage levels. An uncontrolled increase in population can lead to constraints on economic development. Economic growth reflects the existence of activities within the economy that result in increased production of goods and services produced by society and is accompanied by improvements in public welfare. Monetary development has long been used as an indicator of the achievement of economic circulation (Nuraini, 2017). If economic growth is unable to develop properly, unemployment will emerge. Rapid economic growth is able to suppress unemployment rates and improve public welfare. The lowest wage permitted by law is the minimum monthly wage consisting of basic wages and fixed allowances. The legally permitted minimum wage has an impact on the youth labor market.

The Central Statistics Agency of East Java Province recorded that the economy of East Java in the second quarter of 2019, as measured based on Gross Regional Domestic Product, amounted to Rp 585.29 trillion, while GRDP at constant prices reached Rp 410.69 trillion. In the second quarter of 2019, positive growth occurred in all economic



categories. The accommodation and food and beverage provision category grew by 7.89 percent. The corporate services category grew by 7.69 percent, and the health services and social activities category grew by 7.32 percent.

According to data from the East Java Central Statistics Agency, unemployment rates in the Bakorwil 1 Madiun region increased significantly in all areas from 2019 to 2020. In Pacitan Regency, the unemployment rate in 2019 was 0.95 percent and increased to 2.28 percent in 2020. In Trenggalek Regency, the unemployment rate was 3.43 percent in 2019 and increased to 4.11 percent in 2020. In Tulungagung Regency, the unemployment rate in 2019 was 3.36 percent and increased to 4.61 percent in 2020. In Ponorogo Regency, the unemployment rate in 2019 was 3.58 percent, while in 2020 it increased to 4.45 percent. In Kediri Regency, the unemployment rate in 2019 was 3.68 percent and increased to 5.24 percent in 2020. In Madiun Regency, the unemployment rate in 2019 was 3.62 percent and increased to 4.80 percent in 2020. In Ngawi Regency, the unemployment rate in 2019 was 3.70 percent and increased to 5.44 percent in 2020. In Magetan Regency, the unemployment rate in 2019 was 3.08 percent and slightly increased to 3.74 percent in 2020. The unemployment rate in Madiun City experienced a fairly high increase, where in 2019 it was only 4.01 percent and increased to 8.32 percent in 2020. The unemployment rate in Kediri City in 2019 was 4.22 percent and reached 6.21 percent in 2020. Based on these data, it can be seen that unemployment rates from year to year remain high as reflected in Central Statistics Agency data.

Population growth in a country tends to follow a geometric progression, doubling every 30 to 40 years. Meanwhile, food availability grows only according to an arithmetic progression. As a result, food supply has limited capacity to address problems arising from increasing population. According to Mainer in Kuncoro (2012), a high rate of population growth does not adversely affect food supply, but constraints arise in foreign exchange reserves, savings development, and human resources.

Population plays an important role in economic development. More specifically, in terms of demand, the population acts as consumers, and in terms of supply, the population functions as producers. Rapid population growth is not an obstacle to economic development if the population has maximum capacity to produce and absorb the outputs generated. Thus, population growth that is not accompanied by high income levels will hinder the course of economic development in a region (Dumairy, 2016).

High population growth will also disrupt the realization of improved living conditions. An excessively large population will reduce already limited government funds needed to provide various health, social, and economic services for national development. Economic growth is one of the indicators of success in a country's economic development. Progress in the economy is indicated by changes in national output. Economic growth represents a long-term transition that occurs gradually and consistently alongside increases in population and savings (Schumpeter, 2014). Economic growth originates from processes of increasing production of goods and services within societal economic activities (Sanusi, 2004). Indicators of economic growth include income inequality, structural transformation of the economy, growth of employment opportunities, levels and distribution of public access to meeting needs, and Gross Regional Domestic Product.

Based on the description above, the main problem examined in this study is how population size, economic growth, and regional minimum wage influence the

unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region. Previous research supporting this study includes research by Yulia Pangastuti (2015) entitled *Analysis of Factors Affecting Labor Absorption in Central Java Province*. The results show that the impact of Gross Regional Domestic Product on employment has a negative relationship. Meanwhile, the impact of the Regency Minimum Wage on business activity has a positive effect. The effect of unemployment on labor absorption is positive. The effect of Regional Original Revenue on labor absorption also has a positive relationship.

The minimum wage is intended to achieve the fulfillment of Decent Living Needs. In determining the minimum wage, it must be adjusted to the process of achieving minimum wage parameters that are aligned with Decent Living Needs, as regulated by the Minister of Finance. The objective of Decent Living Needs must be implemented in a planned manner because minimum living needs are determined by the capacity of the business sector (Rusli, 2011). The minimum wage consists of the following components:

1. The minimum wage based on the provincial or regency and city level.
2. The minimum wage based on sectoral classifications at the provincial or regency and city level. If a company is unable to pay the sector-based minimum wage to workers, it may submit a request for wage postponement. This provision is regulated in the Decree of the Minister of Manpower and Transmigration of the Republic of Indonesia Number KEP-226/MEN/2000, which is also stipulated in Article 19 paragraph (2).

Unemployment is a condition in which an individual who is included in the labor force seeks employment but has not yet obtained a job (Sukirno, 2016). According to the Central Statistics Agency, unemployment refers to residents who are not working but are actively seeking employment, preparing a business, or not working while waiting to be called for a job. In internationally established standards, unemployment is defined as individuals who are classified as part of the labor force and are actively seeking employment at a certain wage level but have not yet been able to obtain the desired job. Unemployment is classified into three types:

1. Frictional unemployment, which refers to temporary difficulties in matching job seekers with available job vacancies.
2. Structural unemployment, which occurs due to structural or compositional problems within the economy.
3. Cyclical unemployment, which occurs due to excessively high natural unemployment and arises as a result of fluctuations in aggregate demand.

The open unemployment rate indicates the proportion of the working age population that experiences unemployment. The unemployment rate is defined as the ratio of the number of unemployed individuals to the total labor force. Open unemployment refers to members of the labor force who genuinely do not have employment. According to the Badan Pusat Statistik, open unemployment consists of the following categories:

1. Residents who are actively seeking employment.
2. Residents who are preparing to establish a business.
3. Residents who feel it is impossible to obtain employment.
4. Residents who already have a job but have not yet started working.

Open unemployment generally occurs among younger age groups who have recently completed additional training or higher education. There is a tendency for individuals to complete their education before seeking the type of employment they desire. Those with lower levels of education tend to accept available jobs more readily, whereas individuals who have completed higher education are more selective in their job search.

Research by Mimi Hardini (2017) in a study entitled "*Pengaruh Pertumbuhan Ekonomi dan Kesempatan Kerja Terhadap Tingkat Pengangguran di Kabupaten Sidoarjo*" used a quantitative research method and found that economic growth and employment opportunities influence unemployment rates. Economic development affects unemployment levels, and job vacancies also affect unemployment rates.

Research by Imam Buchari (2016) in a study entitled "*Pengaruh Upah Minimum dan Tingkat Pendidikan terhadap Penyerapan Tenaga Kerja Sektor Industri Manufaktur di Pulau Sumatera Tahun 2012-2015*". The results show that based on simultaneous analysis, minimum wages and education levels significantly influence labor absorption in the manufacturing industry on Sumatra Island. Minimum wages have a negative effect on labor absorption in the manufacturing industry on Sumatra Island, while education levels have a significant effect on labor absorption in the manufacturing industry on Sumatra Island. From several previous studies, some are related to the present research, while others are not fully relevant. Previous studies are used to strengthen this research, making it appropriate to examine whether there are comparative relationships with the data processing model used.

The objectives of this study are as follows. First, to determine whether there is a partial and significant influence of population size on the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region. Second, to determine whether there is a partial and significant influence of economic growth on the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region. Third, to determine whether there is a partial and significant influence of the regional minimum wage on the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region. Fourth, to understand the simultaneous influence of population size, economic growth, and regional minimum wage on the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region.

METHODS

This study employs quantitative research with a time series method. The data collection technique used in this study was documentation of data obtained from the Central Statistics Agency of the Bakorwil 1 Madiun region. The period of observation in this study consists of unemployment data in the regencies and cities of the Bakorwil 1 Madiun region for the years 2019 and 2020. The objects of this study are 10 regencies and cities in the Bakorwil 1 Madiun region, namely Madiun City, Madiun Regency, Ngawi Regency, Magetan Regency, Kediri Regency, Kediri City, Ponorogo Regency, Trenggalek Regency, Tulungagung Regency, and Pacitan Regency. The variables in this study consist of three independent variables and one dependent variable. The independent variables are Population Size (X1), Economic Growth (X2), and Regional Minimum Wage (X3). The dependent variable is the Unemployment Rate (Y).

Multiple Linear Regression is used to determine the extent to which the independent variables influence the dependent variable:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

Description:

Y = Unemployment Rate

X1 = Population Size

X2 = Economic Growth

X3 = Regional Minimum Wage

b1, b2, b3 = Regression Coefficients

a = Constant

To determine the magnitude of variation in the unemployment rate variable explained by the variables Population Size, Economic Growth, and Regional Minimum Wage, the coefficient of determination analysis is used. Hypothesis testing using the t test is applied to determine whether there is a significant partial effect between the independent variables and the dependent variable. The null hypothesis (H0) and alternative hypothesis (Ha) are defined as follows:

H0: $\beta_1 = \beta_2 = \beta_3 = 0$, which means that Population Size, Economic Growth, and Regional Minimum Wage do not have a significant effect on the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region.

Ha: $\beta_1 \neq \beta_2 \neq \beta_3 \neq 0$, which means that Population Size, Economic Growth, and Regional Minimum Wage have a significant effect on the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region.

The level of significance used is $\alpha = 0.05$.

Meanwhile, the F test is used to examine whether there is a joint relationship between the independent variables and the dependent variable. The null hypothesis (H0) and alternative hypothesis (Ha) are formulated as follows:

H0: $b_1 = b_2 = b_3 = 0$, which means that there is no significant relationship between the independent variables Population Size (X1), Economic Growth (X2), and Regional Minimum Wage (X3) and the dependent variable Unemployment Rate (Y).

Ha: $b_1 \neq b_2 \neq b_3 \neq 0$, which means that there is a significant relationship between the independent variables Population Size (X1), Economic Growth (X2), and Regional Minimum Wage (X3) and the dependent variable Unemployment Rate (Y).

RESULTS AND DISCUSSION

Results

East Java Province has 229 islands with a land area of 47,130.15 square kilometers. Bakorwil 1 Madiun consists of 8 regencies and 2 cities, namely Madiun Regency, Madiun City, Ngawi Regency, Kediri Regency, Kediri City, Magetan Regency, Ponorogo Regency, Trenggalek Regency, Tulungagung Regency, and Pacitan Regency.

The Bakorwil 1 Madiun region is directly bordered to the west by Central Java Province, where Magetan Regency is located adjacent to Central Java Province.

The normality test indicates that the variables in this study are normally distributed. The multicollinearity test shows that there are no multicollinearity problems in the study. The heteroscedasticity test indicates that there are no heteroscedasticity issues in the regression model. Meanwhile, the autocorrelation test shows that there is autocorrelation in the regression model; however, according to Imam Ghazali (2018), autocorrelation often occurs in time series data because disturbances in an individual or group tend to influence the same individual or group in subsequent periods.

Discussion

The data in this study were obtained from research respondents in the field using questionnaires. The questionnaire used was closed-ended, meaning that respondents only provided answers according to the available response options. Hypothesis testing was conducted to determine whether there is a significant influence of Population Size (X1), Economic Growth (X2), and Regional Minimum Wage (X3) on the Unemployment Rate (Y) in the regencies and cities of the Bakorwil 1 Madiun region. The t test shows that the t value for the Population Size variable is -1.179, which is greater than the t table value of -2.119, with a significance level of 0.256, indicating that there is no significant effect of Population Size on the unemployment rate at the 5 percent significance level in the regencies and cities of the Bakorwil 1 Madiun region. The t test for the Economic Growth variable (X2) shows a t value of -2.244, which is smaller than the t table value of -2.199, with a significance level of 0.039, indicating that there is an effect of Economic Growth on the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region. The t test for the Regional Minimum Wage variable shows a t value of 0.180, which is smaller than the t table value of 2.119, with a significance level of 0.859, indicating that there is no effect of the Regional Minimum Wage on the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region.

The F test or simultaneous test is used to examine the significance of the joint effect of the independent variables Population Size (X1), Economic Growth (X2), and Regional Minimum Wage (X3) on the dependent variable, namely the Unemployment Rate (Y), in the regencies and cities of the Bakorwil 1 Madiun region. It is known that the calculated F value is 9.790, while the F table value at the 95 percent confidence level is 3.238. Therefore, it can be concluded that simultaneously the variables Population Size (X1), Economic Growth (X2), and Regional Minimum Wage (X3) have a significant effect on the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region, because the calculated F value is greater than the F table value at the 95 percent confidence level.

CONCLUSIONS

Based on the data analysis and discussion presented above, it can be concluded that Population Size does not have a partial and significant effect on the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region. Economic Growth has a partial and significant effect on the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region. The Regional Minimum Wage does not have a partial and significant effect on the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region. Population Size, Economic Growth, and the Regional Minimum Wage

simultaneously and significantly affect the unemployment rate in the regencies and cities of the Bakorwil 1 Madiun region.

The recommendations of this study are expected to be beneficial for the governments of the regencies and cities in the Bakorwil 1 Madiun region. Local governments are expected to create employment opportunities for the labor force each year in order to address the unemployment problem, which continues to increase annually. To reduce unemployment rates, regency and city governments should pay greater attention to existing economic sectors in their regions in order to promote economic development, as these sectors are expected to be able to reduce unemployment and ultimately improve public welfare.

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