Social and Economic Factors Determining the Unemployment Rate in the Bregasmalang Region 2010-2020

By
Rima Eka Kurnia, Yustirania Septiani*
Faculty of Economics, Tidar University

*Corresponding Authors: yustirania_septiani@untidar.ac.id

Submission: May 17, 2021; Accepted: July 1, 2021

ABSTRACT
The research objective was to analyze the social and economic factors that affect unemployment in the development area of Central Java, namely in Brebes Regency, Tegal City, Tegal Regency, and Pemalang Regency (BREGASMALANG) in 2010-2020. The determinants of unemployment used in this study include the human development index, district/city minimum wage, and gross regional domestic product. The data used in this study are secondary data obtained from the Central Statistics Agency (BPS). The research method used in Panel Data Regression Analysis with Fixed Effect Model (FEM). The result of this study indicates that the human development index & district/city minimum wage means that it has no significant effect on the open unemployment rate in Bregasmalang. Meanwhile, the gross regional domestic product has a negative and significant effect on the open unemployment rate in Bregasmalang. With the influence of regional gross domestic product on the open unemployment rate, therefore the government is expected to be able to maximize the sub-sectors contained in the GRDP so that the sub-sector is able to increase employment so that it can suppress the high unemployment rate in the Regency/City concerned, namely the Brebes Regency, Tegal City, Tegal Regency, and Pemalang Regency.

Keywords: Open Unemployment Rate, HDI, District/City Minimum Wages, and GRDP.

Social and Economic Factors..... (Kurnia & Septiani)
INTRODUCTION
A process that causes the per capita income of the population in a country to increase over a long period can be interpreted as economic development. Central Java’s GRDP in 2012 is ranked 4th in Indonesia compared to other provinces with a GRDP value of IDR 210,848.42 billion at constant prices with base year 2000 (Firmansyah, 2014). Meanwhile, in 2020 Central Java’s GRDP at constant prices with base year 2010 reached IDR 965,629.09 billion. Producing development and enhancing human resources (HR) is one of the main objectives of economic development, where hiddenly Indonesia has sufficient human resource expertise to be advanced and in different sections is also competed by various cases, especially in the labor aspect such as unemployment (Kuncoro, 2010). According to Novalia (2015) when assessing the success of economic development, the amount of unemployment is very significant because unemployment is a marker to reflect the level of welfare resulting from economic development.

Unemployment is an undesirable problem that can occur in every country around the world and if this unemployment problem is not resolved immediately, the contribution of unemployed graduates, nation, society and even state will increase (Hossain et al., 2018). Budhi (2008) states that countries anywhere in the world, whether grouped as developed or developing countries, still experience unemployment problems, the only difference is that developing countries are unable to distribute benefits to people in their countries who are unemployed, on the other hand developed countries are able to share the guarantee. Indonesia is one of the developing countries, in the classification of the country it is rooted in the quality of the welfare of its population, where one of the cases experienced in developing countries, including Indonesia, is the problem of unemployment. In some developing countries the problem of unemployment, especially for young people, has become a threat to social, economic and political stability (Msigwa & Kipesha, 2013).

According to Eita and Ashipala (2013) a person who does not have a job, is available for work and is actively looking for work is called unemployment which is defined according to the definition of international statistics. A macroeconomic problem that directly affects humans and is very serious is unemployment (Lini & Sasana, 2019). Central Statistics Agency (BPS) explains that in the employment indicator, unemployment is defined as citizens over 15 years of age who are not working but are looking for work or are planning a new business or citizens who are not looking for work because they have been accepted to work in a place but have not started work. Unemployment is an element of the workforce who are currently unemployed and are serious about looking for work (Mantra, 2009). This thinking is often interpreted as a condition of open unemployment. In general, the types of unemployment when viewed from the causes are divided into four, namely structural, seasonal, cyclical unemployment, and frictional unemployment.

Unemployment can be said to apply if the level of labor supply exceeds demand, and the growth in labor supply is determined by population growth and population participation in the total workforce (Azeez & Akhtar, 2019). The term unemployment refers to the powerlessness of the government of a region when presenting job vacancies for each community within the control of its government. The incidence of unemployment will only occur when there is a disparity between the total labor force and the total job opportunities (job vacancies), that is, if the total workforce in a country is much higher than the total job opportunities or job vacancies in that country. As a result, half of the workforce becomes unable to work and is forced to be unemployed for some time or until new job opportunities are available and that match the classification they have. A high unemployment rate reflects that people do not get income according to their wishes and expertise (Aqil et al., 2014).

The Open Unemployment Rate is a parameter that can be used to measure unemployment. The value of open unemployment rate can indicate the size of the working-age community who are listed as unemployed (Mahroji & Nurkhasanah, 2019). According to Indonesian Central Statistics Agency (2016) open unemployment includes those who have no job, are looking for work, are setting
up a business as well as those who are not job hunting because it seems impossible to get a job as well as those who already have a job but have not started work yet.

In the Central Java Regional Regulation No. 6/2010 Pasal 11 the Regional System as defined in Article 11 letter C Central Java has a development area which includes Kedungsepur (Kendal Regency, Demak Regency, Semarang Regency, Semarang City, Salatiga City, & Grobogan Regency), Wanarakuti (Juwana, Jepara, Kudus, & Pati), Subosukawonosraten (Surakarta City, Boyolali Regency, Sukoharjo, Karanganyar, Wonogiri, Sragen, & Klaten), Bregasmalang (Brebes Regency, Tegal City, Tegal Regency, & Pemalang Regency), Petanglong (Regency Pekalongan, Batang Regency, & Pekalongan City), Barlingmascakeb (Banjarnegara, Purbalingga, Cilacap, & Kebumen Regencies), Puwomanggung (Purworejo Regency, Wonosobo Regency, Magelang City, Magelang Regency, & Temanggung Regency), and Banglor (Rembang Regency & Blora Regency).

Of the 7 existing development areas, the Bregasmalang area is the area that will be used as the study area for this research because it has the largest open unemployment rate compared to other development areas. This matter can be observed from the information on the level of open unemployment in development areas in Central Java in Figure 1 below.

![Open Unemployment Rate in the Central Java Development Area Year 2010 to 2020 (%)](image)

**Figure 1. Information on the Open Unemployment Rate in the Central Java Development Area from 2010 to 2020. Source of the Central Statistics Agency (BPS) Central Java, data is processed.**

In connection with the chart above, it can be seen that the information on the level of open unemployment in the development area of Central Java is fluctuating. When compared to open unemployment in other Central Java development areas, Bregasmalang has a higher open unemployment rate, with the average open unemployment rate in 2010 to 2020 amounting to 8.26%. This is caused by the total employment that is not balanced with the total workforce, which is always increasing every year. On the other hand, this is also caused by the existence of fierce competition that exists between fresh graduates and experienced graduates, thus creating new symptoms that show that the imbalance has occurred.

The Human Development Index (HDI), whether observed from the aspect of the impact on people’s physical condition (Health & Welfare) or non-physical (intellectual) nature, is often used as a measure to measure the quality of human development. According to Utami (2020) the Human Development Index is a combined parameter which includes 3 fundamental chapters of human development, namely length of life, education, and living standards used to calculate the average gain achieved by a country. These three fundamental matters are measured using life expectancy, educational attainment, and per capita expenditure. If you want to look at the progress of the economic status of a region or a country based on annual income, that is, only by looking at the per
capita expenditure side, but if you look at a broader size related to the quality of life of the community, it can be seen from the social side (education and health).

The values used to calculate the human development index are in the range of 0-100. The high level of workforce health, knowledge, and getting a decent life will result in optimal and quality work, on the other hand, low labor conditions will result in poor and quality work results. This shows that the three issues in the HDI are indispensable in human development and as a parameter to measure the skills of human resources who are ready to work so that they can reduce the unemployment rate in a region. This is supported by research that has been carried out by Mahihody et al. (2018) which results suggest that HDI has a significant negative relationship to the level of unemployment. But in contrast to the results of research conducted by Nurcholis (2014), the result is that the human development index has a significant positive effect on the level of unemployment.

Wages or salaries are compensation for services provided by the company to employees, the amount of which has been agreed upon in advance by both parties, either from the company or the employee. Wages are determined to be sourced from the regional minimum wage (UMR) which includes the minimum wage (MW) sourced from the regions and sourced from the provincial or district / city sectors. Entrepreneurs or industry implementers who distribute wages to employees in the business or work area using the minimum standard can be called the minimum wage. In the Regulation of the Minister of Manpower, the definition of minimum wage is the lowest minimum wage including the basic wage including fixed allowances. This is a certain amount of compensation received by employees in an orderly manner and in an orderly way, which is related to the acquisition of certain achievements or in connection with attendance.

With the implementation of the minimum wage in each district / city, the level of labor demand will decrease, which in conclusion can have an impact on increasing total unemployment, this is what explains that wages always have an impact on the level of job opportunities and unemployment. When the government sets the MW high, the unemployment rate will decrease. This is due to the fact that when the MW increases, people will be excited to compete to find work, but if the MW level is low it causes people who want to work to become lazy because their income decreases, which in turn will actually increase the burden on their lives. This issue has been researched by Carolina and Panjawa (2020) whose results confirm that the minimum wage has a negative & unemployment. But in contrast to the results of research conducted by (Albab Al Umar et al., 2020) the results explain that the minimum wage has a negative and insignificant effect on unemployment and also research conducted by (Kurniawan, 2013) which states that MW have a positive and significant effect on open unemployment.

The definition of GRDP according to Sukirno (2014), is the total gross value added that grows from all sectors of the economy in a province or region. The interpretation of gross value added is the reduction between the production value (output) and the intermediate cost. The elements of gross value added include aspects of income (wages & salaries, interest, land rent, and profits), depreciation, and net indirect taxes. So by adding up the gross added value from each sector, it can create a gross regional domestic product (GRDP). By exploring certain patterns based on the results of a selective study of the conditions and conditions affecting the Gross Regional Domestic Product (GRDP) to the region, it can always be sustainable. In order for optimal development targets to be achieved, a comprehensive and thoroughly implemented development must be carried out.

According to Todaro and Smith (2014), the total value of all final outputs that are realized by an economy at the regional level, whether implemented by regional communities or from other regional communities living in the area, is called Gross Regional Domestic Product (PDRB). GRDP is also defined as the total added value obtained from all business components within an area, as well as the total value of the final goods & services obtained from all economic components in an area. To measure the economic growth contained in an area, usually use GRDP. The increasing economic growth in an area reflects the better economic activity in that region. When the economy is growing, more job opportunities are created so that people are hired to take part in the production of output demand (Alrayes & Abu Wadi, 2018). Because the economic growth which continues to rise means
that the production of goods or services produced will also increase, so the large number of workers
that will be absorbed will then reduce the magnitude of the unemployment rate. Based on the results
of research conducted by Laksamana (2016) the results explain that GRDP has a negative and
significant effect on unemployment. This situation is different from the results of research conducted
by (Zahroh, 2017) which explains that GRDP has a positive and insignificant effect on unemployment.

Based on the study of the above problems, it indicates that Brebes Regency, Tegal City, Tegal
Regency, & Pemalang Regency (Bregasmalang) have a higher UNEMP rate than other development
areas in Central Java which is due to the comparison of social and economic factors in the Regencies /
Cities concerned. Therefore, this study conducted an analysis of "Social And Economic Factors
Determining The Unemployment Rate In The Bregasmalang Region 2010-2020". The factors analyzed
in this research are both social and economic factors, namely the Human Development Index (HDI),
District and City Minimum Wages (MW), & Gross Regional Domestic Product (GRDP). This study is
different from other studies, where the concept of the variables studied has never been carried out,
namely related to unemployment in the Bregasmalang area, where unemployment in the Bregasmalang
area has the highest level compared to other development areas in Central Java. Meanwhile, the GRDP
in Central Java from year to year tends to increase and in 2012 the GRDP of Central Java is ranked 4th
in Indonesia, which should be able to reduce the unemployment condition. So it can be concluded that
the research being carried out is still new and has not been widely studied by previous researchers.

METHODS

The type of data used in current research are secondary data. The analytical method used in current
research is panel data regression analysis. Panel data is a combination of time series data (t) & cross
section data (i), so the total panel data observations are as much as the number of time series data
times the number of cross section data. The form of panel data used in research is now in the form of
time series data in the period 2010-2020 as well as cross section data obtained from 4 districts / cities
in development areas in Central Java Province, namely Bregasmalang (Brebes Regency, Tegal City,
Tegal Regency, & Pemalang Regency).

The data collection method in current research is to use the documentation method, the
researcher collects information from data released by the Central Java Statistics Agency (BPS) in
various years of publication. In order to obtain data on the open unemployment rate, human
development index, district / city minimum wages, and gross regional domestic product from 2010 to
2020. In order to determine the effect of the human development index, district / city minimum wages,
and gross regional domestic product on the unemployment rate. Opened at Bregasmalang during
2010-2020, Panel Data Regression Analysis was used with an econometric model which generally had
the following equations:

\[
UNEMP_{it} = \beta_0 + \beta_1 HDI_{it} + \beta_2 \ln MW_{it} + \beta_3 \ln GRDP_{it} + \epsilon_{it}
\]  

(1)

Where, (i) is the development area in Central Java, namely BREGASMALANG, (t) is the time
(2010-2020), \( \beta \) is the parameter (constant and coefficient), UNEMP is the open unemployment rate,
HDI is the human development index, \( \ln MW \) is the district / city minimum wage, \( \ln GRDP \) is the gross
regional domestic product, and \( \epsilon \) is the error term.

Panel data regression has 3 models that are usually used properly in a research. The three
models are Common Effect Model (CEM), Fixed Effect Model (FEM), & Random Effect Model (REM). In
fact, the three panel data regression models are not used all in a study. When determining the selected
prediction model from the estimation results of the Common Effect Model (CEM), Fixed Effect Model
(FEM), and Random Effect Model (REM), it is mandatory to pass the Chow Test and the Hausman Test
first. If the Chow Test model selected is a Common Effect Model (CEM) and if the Hausman Test model
selected is a Random Effect Model (REM), then the next step is to perform the Langrange Multiplier
(LM) Test to ensure the estimation model is selected between the CEM & REM estimation results.

After performing the stages of analyzing panel data regression, the next step is selecting the
right model to use, so it is necessary to improve the regression model for selected panel data or test
support. There are several supporting tests used in current research, including the panel data regression estimation Fixed Effect Model (FEM), and statistical tests which include the coefficient of determination ($R^2$), partial test (t test), and simultaneous significance test (f test). In the panel data regression model classical assumption test is not needed, for Gujarati (2012) classical assumption test is not needed in panel data analysis, panel data can minimize bias that may arise in the analysis results.

RESULTS AND DISCUSSIONS

Model Fit Test
The model suitability test is the initial test that is carried out to ensure the most suitable model for use. This model can be searched through the following tests:

Chow test
The Chow test is a test used for the first time to determine the most suitable model for use between the Fixed Effect Model (FEM) and the Common Effect Model (CEM).

| Table 1. Chow Test Results |
|---------------------------|
| Effects Test             |
| Cross-section F          | 2.888735 (3.37) 0.0484 |
| Chi-square cross-section | 9.259386 3 0.0260 |

Based on Table 1 it can be seen that the Chi-square cross-section probability value is 0.0260 which means that the Chi-square cross-section probability value <0.05. Then it can be concluded that the most suitable model to use is the Fixed Effect Model (FEM).

Hausman Test
The Hausman test is a test that is carried out to determine the appropriate model to use between the Fixed Effect Model (FEM) or the Random Effect Model (REM).

| Table 2. Hausman Test Results |
|-------------------------------|
| Test Summary                  |
| Random cross-section          | 8.666204 3 0.0341 |

Based on Table 2 it can be seen that the probability value of random cross-section is 0.0341 <0.05. So it can be explained that the right model for use in current research is the Fixed Effect Model (FEM).

Estimation Results of Panel Data Regression Fixed Effect Model (FEM)
Based on the model suitability test, the selected regression estimation is the Fixed Effect Model (FEM). The estimation results were found as follows.

| Table 3. Fixed Effect Model (FEM) Panel Data Regression Estimation Equation |
|-----------------------------|
| Variable | Coefficient | Std.Error | t-Statistic | Prob. |
| C        | 574,1400    | 244.5975  | 2.347285   | 0.0244 |
| HDI      | -0.636288   | 0.583891  | -1.089737  | 0.2829 |
| MW       | -8.609206   | 6.079373  | -1.416134  | 0.1651 |
| GRDP     | -24.33591   | 10.61530  | -2.292532  | 0.0277 |

Source: Data processed with Eviews 10
From the results of the Fixed Effect Panel (FEM) Panel Data Regression Estimation, the regression equation is obtained as below:

\[ UNEMP_{it} = 574.1400 - 0.636288 \cdot HDI_{it} - 8.609206 \cdot \ln MW_{it} - 24.33591 \cdot \ln GRDP_{it} + \varepsilon_{it} \] (2)

Based on Table 3 it can be seen that the constant value is 574.1400, which means that if the Human Development Index variable, Regency / City Minimum Wage, Gross Regional Domestic Product is zero, then the Open Unemployment Rate will be 574.1400.

Based on Table 3 shows that the regression coefficient value of the Human Development Index (HDI) variable is -0.636288 which means that if every increase in the Human Development Index is 1 index, it will be followed by a decrease in the open unemployment rate of 0.636288 percent with the assumption that the other independent variables are constant.

Based on Table 3 it can be seen that the Regency / City Minimum Wage (MW) coefficient is -8.609206, it means that if the Regency / City Minimum Wage has increased by 1 percent then the Open Unemployment Rate will decrease as much as 8.609206 percent.

Based on Table 3 it is known that the regression coefficient value of the Gross Regional Domestic Product (GRDP) is -24.33591, which means that if each increase in Gross Regional Domestic Product is 1 percent, it will be followed by a decrease in the Open Unemployment Rate of 24.33591 percent.

**Statistic test**

*Coefficient of Determination (R^2)*

The coefficient of determination (R^2) is a test used to determine the relationship or correlation to the independent variable. The coefficient of determination (R^2) shows the strength of the influence of the independent variable with the dependent variable.

The results of this study indicate the R-squared value of 0.409481. The current situation means that the Human Development Index (HDI) variable, Regency / City Minimum Wage (MW), Gross Regional Domestic Product (GRDP) affects variable Y, namely the Open Unemployment Rate (UNEMP) of 40.95% and the remaining 59.05% is affected by variables other outside the model.

*Partial Test (t test)*

The t test is used to find out whether each of the independent variables individually has a significant effect on the dependent variable. In current research, the t test is used to determine the effect of the variable Human Development Index, Regency / City Minimum Wage, and Gross Regional Domestic Product on the variable Open Unemployment Rate. The results of the t coefficient test in research can now be observed in Table 4.

| Variable | Coefficient | t-Statistic | Prob. | Conclusion          |
|----------|-------------|------------|-------|---------------------|
| HDI      | -0.636288   | -1.089737  | 0.2829| Not significant     |
| MW       | -8.609206   | -1.416134  | 0.1651| Not significant     |
| GRDP     | -24.33591   | -2.292532  | 0.0277| Significant at α = 5% |

*Source: Data processed with Eviews 10*

*Simultaneous Significance Test (Test F)*

The F test is a test that functions to observe whether all the independent variables of the Human Development Index (HDI), District / City Minimum Wages, and Gross Regional Domestic Product (GRDP) simultaneously have an influence on the dependent variable on the Open Unemployment Rate.
Table 5. F Test Results

| F-statistic | Prob (F-statistic) | Significance Level | Conclusion     |
|-------------|-------------------|-------------------|----------------|
| 4.276132    | 0.002274          | <0.05             | Existing model |

*Source: Data processed with Eviews 10*

The results of the t test through the Fixed Effect Model (FEM) testing model in this study can be stated as follows:

Based on Table 4 explains that the Human Development Index (HDI) variable has a probability value of 0.2829 which is greater than the significance at the level of α = 1%, α = 5%, or α = 10%. This means that the Human Development Index has no significant effect on the open unemployment rate. This matter does not fit with the initial hypothesis which states that the Human Development Index has an effect on the open unemployment rate. The insignificant result means that if there is an increase in the human development index, it will not significantly affect the open unemployment rate. This is in accordance with the conditions at this time where unemployment is not only caused by the quality of the human resources itself, the number of university graduates who are still unemployed due to limited employment opportunities or it could be that the existing jobs do not match their interests or desires, thus making educated unemployed increased. This matter is not compatible with the theory described by Todaro (2000) which explains that with an increase in human capital development and being developed to increase human productivity through investment in learning, it is desirable to be able to improve the quality of Human Resources (HR) shown. with the increase in someone's knowledge and expertise, then it will push for an increase in his work productivity. An increase in productivity can affect employment opportunities, namely by increasing productivity and then reducing the cost of production per unit of goods. The decrease in the cost of production per unit of goods can reduce the price of the goods per unit. If the price of goods decreases, then the demand for objects increases, this matter can force entrepreneurs to increase the demand for labor, then by absorbing the labor which continues to become large, it can reduce the high level of unemployment.

Based on Table 4 by using a significance at the level of α = 1%, α = 5%, or α = 10% the results show that the Regency/City Minimum Wage (MW) variable is not significant because it has a probability value of 0.1651. This means that the Regency / City Minimum Wage has no significant effect on the Open Unemployment Rate. This matter does not fit with the initial hypothesis which explains that the district / city minimum wage has an effect on the level of open unemployment. The insignificant result means that if there is an increase in the district / city minimum wage, it will not have a significant effect on the open unemployment rate. The minimum wage in Central Java Province is normalized but the value is not too large, causing unemployment in Central Java Province, especially in the Central Java development area, namely BREGASMALANG, which is still a lot because workers still perceive that wages are the result of their work. So if the minimum wage is not what they expect, the workers will reject it and eventually cause unemployment. However, the current minimum wage is considered less attractive in the eyes of the community to work primarily for those with high school education and above. The results of this research are in line with the research conducted by Latifah et al. (2017).

Based on Table 4 the result show that the Gross Regional Domestic Product (GRDP) variable has a probability value of 0.0277 which is smaller than the significance level of α = 5%. This means that the gross regional domestic product has a significant effect on the level of open unemployment. This matter fits with the initial hypothesis which confirms that the GRDP variable has an effect on the level of open unemployment. When the GRDP faces an increase then the open unemployment rate can be faced with a decrease & the opposite is also true if the GRDP has decreased then the open unemployment rate will be faced with an increase. The results of this research are in accordance with Okun's legal theory which explains that there is a negative correlation between GRDP and unemployment. The increase in GRDP will increase the number of existing jobs, so that it will cause an
increase in labor demand and reduced unemployment. On the contrary, if the GRDP decreases, it can cause producers to reduce their production, then the number of workers will be reduced which in turn causes unemployment to increase. The results of this study were supported by Priastiwi and Handayani (2019).

Based on the results of the panel data regression in the current research, the F-statistic value is 4.276132 with a probability value of 0.002274 smaller than 0.05, meaning that there is a significant influence on the Human Development Index (HDI), District / City Minimum Wages (MW), and Gross Regional Domestic Product (GRDP) simultaneous against the Open Unemployment Rate.

CONCLUSIONS

This study analyzes the variables that affect unemployment in the development area in BREGASMALANG from 2010 to 2020. The analytical method used in current research is panel data regression with the Fixed Effect Model (FEM). Based on the results of research that has been carried out in this study, the conclusion can be drawn that the variable Human Development Index (HDI$_{it}$) and District / City Minimum Wage (lnMW$_{it}$) have a negative and insignificant effect on the Open Unemployment Rate variable (UNEMP$_{it}$). This matter means that the increase in HDI and MW in Bregasmalang has no effect on the level of open unemployment in Bregasmalang. Meanwhile, the Gross Regional Domestic Product (lnGRDP$_{it}$) variable has a significant negative effect on the Open Unemployment Rate (UNEMP$_{it}$) variable. This matter means that the increase in PDRB in Bregasmalang can reduce the Open Unemployment Rate in Bregasmalang.

Sourced from the results of research and studies that have been carried out, then suggestions can be given such as the following:

1. With the influence of the gross regional domestic product on the open unemployment rate, therefore the government is expected to be able to maximize the sub-sectors contained in the GRDP so that the sub-sector is able to increase employment so that it can suppress the high unemployment rate in the Regency/City concerned, namely the Brebes Regency, Tegal City, Tegal Regency, and Pemalang Regency. For example, is a kind of holding a training to become independent and creative entrepreneurs.

2. The results of this research indicate that there is no significant effect between the Human Development Index on the level of open unemployment due to conditions at this time where unemployment is not only caused by the quality of human resources, but also due to the availability of the number of jobs that are not proportional to the number of the workforce. For example, university graduates who are still unemployed due to limited job opportunities or available job vacancies are not in accordance with their interests and abilities, thereby increasing the unemployment rate. Although HDI does not have a significant influence on the level of open unemployment, the government in Bregasmalang must still pay attention to human development. Because it is hoped that the increased human development can improve the quality of humans so that in conclusion it can reduce the high level of unemployment in Bregasmalang.

3. Although the results of this research indicate that there is no significant influence between the district / city minimum wage on the level of open unemployment, the district / city minimum wage for each region must be determined and reviewed carefully in accordance with the prevailing laws and regulations.

4. For future research, this research is expected to be used as a reference for further research on the condition of the open unemployment rate on the Human Development Index (HDI), Regency/City Minimum Wage and Gross Regional Domestic Product (GRDP) and it is recommended that further researchers make observations on the variables-variables and other methods that can be used to discuss the open unemployment rate.
REFERENCE
Albab Al Umar, A. U., Lorenza, L., Nur Savitri, A. S., Widayanti, H., & Lutfi Mustofa, M. T. (2020). Pengaruh Inflasi, PDRB, dan UMK Terhadap Tingkat Pengangguran di Provinsi Jawa Tengah Tahun 2017-2019. Jurnal Ekonomi Balance, 16(1), 1–12. https://doi.org/10.26618/jeb.v16i1.3292
Alrayes, S. E., & Abu Wadi, R. M. (2018). Determinants of Unemployment in Bahrain. International Journal of Business and Social Science, 9(12), 64–74. https://doi.org/10.30845/jibss.v9n12p8
Aqil, M., Qureshi, M. A., Ahmed, D. R. R., & Qadeer, S. (2014). A Study On Determinants Of Unemployment in Pakistan. International Journal of Physical and Social Sciences, 4(4), 676–682. https://doi.org/10.1007/978-3-642-40081-0_114
Azeez, A. E. P., & Akhtar, J. S. (2019). Educated Unemployment: A Case Study of Kerala. International Journal of Education for the 21st Century, 1(1), 93–120.

Badan Pusat Statistik. (2020a). Indeks Pembangunan Manusia Kabupaten Kota Provinsi Jawa Tengah Tahun 2010-2020. Semarang: Badan Pusat Statistik Jawa Tengah. https://jateng.bps.go.id/indicadat/26/83/1/indeks-pembangunan-manusia-metode-baru.html
Badan Pusat Statistik. (2020b). Produk Domestik Regional Bruto Kabupaten Kota Provinsi Jawa Tengah Tahun 2010-2020. Semarang: Badan Pusat Statistik Jawa Tengah. https://jateng.bps.go.id/staticatable/2017/02/13/1411/-seri-2010-pdrb-atas-dasar-harga-constan-2010-menurut-kabupaten-kota-di-jawa-tengah-juta-rupiah-2010---2020.html
Badan Pusat Statistik. (2020c). Tingkat Pengangguran Terbuka Kabupaten Kota Provinsi Jawa Tengah Tahun 2010-2020. Semarang: Badan Pusat Statistik Jawa Tengah. https://jateng.bps.go.id/indicadat/6/64/1/tingkat-pengangguran-terbuka-tpt.html
Badan Pusat Statistik. (2020d). Upah Minimum Kabupaten Kota Provinsi Jawa Tengah Tahun 2010-2020. Semarang: Badan Pusat Statistik Jawa Tengah. https://jateng.bps.go.id/staticatable/2017/02/27/1454/kebutuhan-hidup-merupakan-upah-minimum-kabupaten-kota-menurut-kabupaten-kota-di-jawa-tengah-tahun-2000---2018-rupiah.html

Budhi, S. M. (2008). Mengelola Sumber Daya Manusia Menyongsong Millenium Development Goals (MDGs). Jurnal Ekonomi Dan Sosial, 1(2), 82–85. https://jateng.bps.go.id/indicadat/6/64/1/tingkat-pengangguran-terbuka-tpt.html

Corolina, N. N., & Panjawa, J. L. (2020). Determinan Tingkat Pengangguran: Studi Kasus Wilayah Pengembangan Purwomanggung, Jawa Tengah. Jurnal Ekonomi Pembangunan, 9(1), 45–55. https://doi.org/10.23960/jep.v9i1.77

Eita, J. H., & Ashipala, J. M. (2010). Determinants of Unemployment in Namibia. International Journal of Business and Social Sciences, 5(10), 92–104. https://doi.org/10.1111/1467-8268.12037

Firmansyah. (2014). Perkembangan Ekonomi Kabupaten/Kota Dan Kinerja Keuangan Daerah Di Jawa Tengah Pada Era Otonomi. Jurnal Bisnis Dan Ekonomi (JBE), 21(1), 1–17.

Gujarati. (2012). Dasar-Dasar Ekonometrika. Jakarta: Salemba Empat.

Hossain, M. I., Yagamaran, K. S. A., Afrin, T., Limon, N., Nasiruzzaman, M., & Karim, A. M. (2018). Factors Influencing Unemployment among Fresh Graduates: A Case Study in Klang Valley, Malaysia. International Journal of Academic Research in Business and Social Sciences, 8(9), 1494–1507. https://doi.org/10.6007/ijjarbss/v8-i9/4859

Kuncoro, M. (2010). Masalah, Kebijakan, Dan Politik Ekonomika Pembangunan. Jakarta: Erlangga.

Kurniawan, R. C. (2013). Analisis Pengaruh PDRB , UMK , dan Inflasi Terhadap Tingkat Pengangguran Terbuka di Kota Malang Tahun 1980-2011. Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya Malang, 1(1), 1–24.

Laksamana, R. (2016). Pengaruh PDRB terhadap Pengangguran di Kabupaten/Kota Kalimantan Barat. Jurnal Audit Dan Akutansi Fakultas Ekonomi Dan Bisnis Universitas Tanjungpura, 5(2), 111–134.

Latifah, N., Rotinsulu, D. C. ., & Tumilaar, R. L. . (2017). Pengaruh Pertumbuhan Ekonomi Dan Indeks Pembangunan Manusia Terhadap Tingkat Pengangguran Terbuka Dan Dampaknya Pada Jumlah Penduduk Miskin Di Kota Manado. Jurnal Berkala Ilmiah Efisiensi, 17(02), 106–117.

Lini, Z. Z., & Sasana, H. (2019). Pengaruh Tingkat Globalisasi Terhadap Pengangguran Di Asean. Jurnal
**REP (Riset Ekonomi Pembangunan),** 4(1), 13–26. https://doi.org/10.31002/rep.v4i1.1338

Lusi Novalia. (2015). Faktor-Faktor Yang Mempengaruhi Tingkat Pengangguran Di Kabupaten Kuantan Singingi Provinsi Riau. **JOM Fekon,** 2(1), 1–17.

Mahihody, A. Y., Engka, D. S. M., & Luntungan, A. Y. (2018). Pengaruh Upah Dan Indeks Pembangunan Manusia (IPM) Terhadap Pengangguran Di Kota Manado. **Jurnal Berkala Ilmiah Efisiensi,** 18(3), 24–34.

Mahroji, D., & Nurkhasanah, I. (2019). Pengaruh Indeks Pembangunan Manusia Terhadap Tingkat Pengangguran Di Provinsi Banten. **Jurnal Ekonomi-Qu,** 9(1), 51–72. https://doi.org/10.35448/jequ.v9i1.5436

Mantra, B. I. (2009). **Demografi Umum.** Yogyakarta: Pustaka Pelajar Offset.

Msigwa, R., & Kipesha, E. F. (2013). Determinants Of Youth Unemployment in Developing Countries : Evidence From Tanzania. **Journal of Economics and Sustainable Development,** 4(14), 67–77.

Nurcholis, M. (2014). Analisis Pengaruh Pertumbuhan Ekonomi, Upah Minimum dan Indeks Pembangunan Manusia Terhadap Tingkat Pengangguran di Provinsi Jawa Timur Tahun 2008-2014. **Jurnal Ekonomi Pembangunan,** 12(1), 46–57.

Priastiw, D., & Handayani, H. R. (2019). Analisis Pengaruh Jumlah Penduduk, Pendidikan, Upah Minimum, dan Pdrb Terhadap Tingkat Pengangguran Terbuka di Provinsi Jawa Tengah. **Diponegoro Journal of Economics,** 1(1), 159–169. https://ejournal2.undip.ac.id/index.php/dje

Puspadjuita, E. A. R. (2018). Factors that Influence the Rate of Unemployment in Indonesia. **International Journal of Economics and Finance,** 10(1), 140–147. https://doi.org/10.5539/ijef.v10n1p140

Sukirno, S. (2014). **Makro ekonomi Teori Pengantar. Edisi ke-3 (Terjemahan Bahasa Indonesia).** Raja Grafindo Persada. Jakarta.

Todaro, M. P., & Smith, S. C. (2014). **Pembangunan Ekonomi/ Edisi Kesembilan, Jilid 1 (Alih Bahasa: Haris Munandar dan Puji A.L.).** Jakarta: Penerbit Erlangga.

Utami, farathika putri. (2020). Pengaruh Indeks Pembangunan Manusia, Kemiskinan dan Pengangguran terhadap Pertumbuhan Ekonomi. **Jurnal Samudra Ekonomika,** 4(2), 101–113.

Zahroh, S. (2017). Analisis Pengaruh Pdrb, Angkatan Kerja, Dan Upah Minimum Terhadap Pengangguran Di Kota Malang. **Ilmiah,** 5(2), 1–11. https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/3670