



**Research Article** 

# Variables Affecting Young Unemployment in Indonesia

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#### Abstract.

The successive economic development can be seen from unemployment rate. The percentage of the unemployment rate to the labor force can be seen through the value of the open unemployment rate. From 2016 to 2019, young people have always been the highest contributor to Indonesia's open unemployment rate. This study discusses the variables that affect the open unemployment rate for rural and urban youth in Indonesia in 2016–2019. The variables are population growth rate, population per capita expenditure, average length of schooling, youth working based on the highest education completed are secondary school, provincial minimum wage, registered job seekers, foreign investment, and gross regional domestic product. This study uses panel data regression method with the Random Effect Model. The results showed that the variable that had a significant effect on the open unemployment rate of rural youth was the gross regional domestic product. Meanwhile, the variables that have a significant effect on the open unemployment rate of urban youth are registered job seekers and foreign investment.

Keywords: youth unemployment, rural–urban, random effect model

#### **1. Introduction**

A country's economic development can be seen from several economic indicators. The indicator that is usually used is the growth rate of income or income per capita. Besides these indicators, other indicators are also needed that can show the state of income distribution to the population and know who will benefit from this economic development, this indicator is the unemployment rate (Todaro, 1999). Unemployment itself occurs due to the inability of the labour market to absorb the number of available workers, or in other words, the number of job vacancies is less than the number of job seekers caused by a lack of labour absorption (Dwiputri, et al. (2019).

Unemployment itself is a very bad problem. Unemployment is bad for the economy, individuals, and society. The high number of unemployed will cause the community

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to be unable to achieve the level of maximum possible welfare. achieved, the level of productivity and community income will decrease, resulting in poverty, crime, and other social problems (Sukirno, 2004). The percentage of the unemployment rate to the labour force can be seen through the open unemployment rate. The higher the open unemployment rate indicates that there are many the labour force that is not absorbed by the labour market, usually occurs in the younger generation who have just completed secondary and tertiary education or in other words, the increase in the value of the open unemployment rate, the higher the number of unemployed (BPS, 2019).

Based on data reported by the Central Bureau of Statistics (BPS) (2019), the value of the Open Unemployment Rate in Indonesia from 2016 to the latest year, namely 2019 has always decreased, the value of the open unemployment rate in 2016 was 5.50% in 2017 to become 5.33%, in 2018 the value of the open unemployment rate fell to 5.13% again until 2019 the value of the open unemployment rate was 4.99%. The reduction in the open unemployment rate is a good thing for economic development because it shows that the number of unemployed is decreasing with the increasing number of labour forces in Indonesia that can be absorbed by the labour market. However, although the open unemployment rate has always decreased, the highest contributor to the open unemployment rate for young people compared to other age groups. The youth group in question is a population group aged 15-24 years, the determination of 15-24 years old as young age refers to the provisions of Central Bureau of Statistics (2019). In addition, internationally, the United Nations also defines the young population as those in the 15-24 year age group (ILO, 2004).

Based on the Central Bureau of Statistics (BPS) (2019), the open unemployment rate for youth itself indicates the large percentage of the workforce classified as young people who are unemployed. The unemployed youth here are young people who do not work and are looking for work, preparing a business, feel hopeless that it is impossible to get a job, or already have a job but have not started working yet. This youth open unemployment rate indicator is expected to be a reference for the formulation of manpower development policies and at the same time an evaluation of the ongoing development process.

The dominance of the open unemployment rate of youth in contributing to the value of Indonesia's open unemployment rate is evidenced by data in the State of Employment of Indonesia released by the Central Bureau of Statistics, namely with data on the open unemployment rate based on education level, from 2016 to 2019, the open unemployment rate for school education Vocational Intermediate always



occupies the highest position compared to other education levels. Vocational High School Education entirely consists of students who are still young. In 2016, vocational high school education had an open unemployment rate of 9.84%, in 2017 it was 9.27%, in 2018 it was 9.84%, and in 2019 it was 8.63%. Then based on the state of employment in Indonesia (2020), the higher the age of a person, the open unemployment rate tends to decrease. The open unemployment rate for young people (15-24 years) is in the position highest compared to other age groups. In 2018 the open unemployment rate for youth was 16.38% and in 2019 it was 15.38, this value is very different from the adult open unemployment rate (25-59 years) which in 2018 was 3.19% and in 2019 it reached 3, 14%. From these data, there is a fairly large imbalance between the open unemployment rate for young people, have not been able to be absorbed by the labour market in Indonesia. Whereas the younger generation belonging to the highly productive age group is the nation's next generation who is expected to become independent, resilient, and highly

competitive human resources.

The open unemployment rate data displayed by the Central Bureau of Statistics in the publication of Indonesian Youth Statistics are further divided into two types depending on the type of area, namely urban and rural areas, from 2016 to 2019, the value of the open unemployment rate for urban youth is always higher than the open unemployment rate for rural youth. . This situation is in accordance with the ILO's research (2018) which states that the status of the labour market varies greatly depending on the location of residence. This shows the importance of considering the differences in the nature of the labour market in both urban and rural areas. The difference in the level of economic development between rural and urban areas causes a gap between rural and urban areas. In cities there are wider economic opportunities than in villages. Whereas in the village most of the population is farmers (Kurniawan, 2015). This difference is what makes researchers interested in examining what variables affect youth unemployment in rural areas and youth unemployment in urban areas in Indonesia. This study uses variables adopted from several previous studies regarding youth unemployment. Based on previous studies, several differences or research gaps were found. In the first study written by Feriyanto (2018), the results of the study stated that the population variable had a positive and significant effect on unemployment. Whereas in Suyudi's research (2020), the results of the study state that the population variable has a positive but insignificant effect on unemployment. Then the variable per capita population expenditure in Putra and Iskandar's (2018) research shows that the per capita population expenditure has a negative and significant effect on youth

unemployment in rural areas. Meanwhile, Zahra and Djaja's research (2014) states that the variable per capita population expenditure has a negative but insignificant effect on youth unemployment, both who live in urban and rural areas. The variable average length of schooling in the study by Wardhana, et al. (2019), shows that the average length of schooling has a positive and significant effect on the opportunity for youth unemployment in West Java in 2017, the higher the education that is completed by the young workforce, the more likely it is to become youth unemployment is also greater. Meanwhile, Priastiwi and Handayani's research (2019) shows that the variable average length of schooling has a negative and significant effect on the open unemployment rate, each increase in the value of the education variable can reduce the unemployment rate. Then the variable percentage of working youth based on the highest education completed is senior high school/equivalent in Zahra and Djaja's research (2014), the number of youths with the highest education completed is senior high school/equivalent which has a positive effect on unemployment. Whereas in Puspadjuita's research (2017), the workforce with the highest education completed is senior high school/equivalent which has a positive but insignificant effect on unemployment. The provincial minimum wage variable in Zahra and Djaja's (2014) study was stated to have a positive but insignificant effect on unemployment. In contrast to the results of this study, research by Panjawa and Soebagiyo (2014) shows that wages have a positive and significant effect on the unemployment rate. Then the job seeker variables in Putra and Iskandar's (2018) research were able to have a negative and insignificant effect on unemployment. Whereas in Zahroh and Puspitasari's research (2017), job seeker variables that are proxied by labour force data show that these variables have a positive but insignificant effect on the unemployment rate. Furthermore, the foreign investment variable with previous research by Johnny, et al. (2017) shows that the foreign investment variable has a positive but insignificant effect on the unemployment rate. Meanwhile, research by Mucuk and Demirsel (2013) shows that foreign investment variables have a positive and significant effect on the unemployment rate. And the gross regional domestic product (GRDP) variable in Sarimuda RB and Soekarnoto's research (2014) shows a negative and significant effect on the open unemployment rate in East Java Regency / City. So any increase in the value of GRDP can have an effect on the decrease in the value of the open unemployment rate. Contrary to the results of Sarimuda RB and Soekarnoto's research, the results of Zahroh and Puspitasari's research (2017) state that GRDP has a positive but insignificant effect on the open unemployment rate. The existence of gaps in the results of previous research on the variables described above makes researchers interested in using these variables which consist of population growth rate, expenditure



per capita population, average length of schooling, youth employment based on the highest education attended is secondary school, wages provincial minimum, registered job seekers, foreign investment, gross regional domestic product in this study.

### 2. Literature Review

In supporting this research, this study uses the main theories related to unemployment, namely Classical Theory and Malthusian Theory. In classical theory it is stated that unemployment can be prevented by the supply side and the price mechanism in the free market that can guarantee the creation of demand that absorbs all supply (Gilarso, 2004). In Malthus's theory, Malthus's theory states that humans develop much faster than the production of agricultural products to meet human needs. Humans develop according to measurement series, whereas food production growth only increases according to arithmetic series. This theory can be linked to the economic problems experienced by modern society, namely the increasing number of populations will result in an increasing number of workers, but this increase is not matched by existing job opportunities. Finally, the small number of job opportunities makes people compete for work and those who are excluded in the competition become the unemployed group.

Some of the variables used are related to previous research that discusses unemployment. In previous research, there were also several research gaps that became the background for researchers to continue their research. The results of the first previous research written by Wardhana et al. (2019) show that the variables age, marital status, status in the household, and household size have a negative and significant effect on youth unemployment, then the education variable has a positive and significant effect on youth unemployment. opportunities for youth unemployment in West Java in 2017.

Priastiwi and Handayani (2019) research found that the variables of education, minimum wages, and gross regional domestic product had a negative and significant effect on the open unemployment rate, while the population variable had a positive and significant effect on the level of unemployment. unemployment opens in Central Java Province.

Mucuk and Demirsel's research (2013), which specifically examined the relationship between foreign investment and unemployment variables in 7 developing countries, including Argentina, Chile, Colombia, the Philippines, Thailand, Turkey, and Uruguay. This study shows that the variables of foreign investment and unemployment move together in the long run in all countries. However, foreign investment has the effect of



increasing unemployment in Turkey and Argentina, on the other hand, foreign investment has the effect of reducing the unemployment rate in Thailand. The results of this study only illustrate that there is a relationship between foreign investment and unemployment in the long run.

## **3. Research Method**

This study was conducted in Indonesia with research time from 2016 to 2019. The type of data used in this study is secondary data, where the data comes from statistical publications of BPS. This research uses panel data regression analysis method. By using two variables dependent rural youth open unemployment rate (Y1) and urban youth open unemployment rate (Y2), while the variables independent which will be used in this research are:

- Population Growth Rate (X1),
- Population Per Capita Expenditure (X2),
- Average Length of Schooling (X3),
- Youth Employment Based on the Highest Education Attended is Secondary School (X4),
- Provincial Minimum Wage (X5),
- Registered Job Seekers (X6),
- Foreign Investment (X7),
- Gross Regional Domestic Product at constant prices (X8)

The selection of panel data is because in this study it uses a time span of several years, namely from 2016-2019 and also uses all provinces in Indonesia as a research sample, totalling 34 provinces. By using the Eviews 9 tool, testing is carried out on three regression models, namely the common effect model (CEM), fixed effect model (FEM), and random effect model (REM) and after testing the model specifications, the best model applied in this study is random effect model. The panel data regression model equation can be formulated in the following model:

 $Y1 = \alpha + \beta 1X1it + \beta 2X2it + \beta 3X3it + \beta 4X4it + \beta 5X5it + \beta 6X6it + \beta 7X7it + \beta 8X8it + e(1)$ 

 $Y2 = \alpha + \beta 1X1it + \beta 2X2it + \beta 3X3it + \beta 4X4it + \beta 5X5it + \beta 6X6it + \beta 7X7it + \beta 8X8it + e (2)$ 



Y1 is the dependent variable in the form of rural youth open unemployment rate, while Y2 is the dependent variable in the form of urban youth open unemployment rate data.

# 4. Results and Discussion

This is the result of panel data regression using the random effect model method with Eviews 9.

Variable	Rural Youth Open Unemploy- ment Rate (Y1)	Urban Youth Open Unemploy- ment Rate (Y2)	
	REM	REM	
Population Growth Rate	0,0980* (1,074103)	0,6850 (1,225877)	
Log_Population Per Capita Expenditure	0,1012 (2,696960)	0,9259 (3,489655)	
Average Length of Schooling	0,1080 (0,841450)	0,5028 (0,886041)	
Youth Employment Based on the Highest Education Attended is Secondary School		0,2003 (0,043013)	
Log_Provincial Minimum Wage	0,6315 (2,195503)	0,8037 (2,520607)	
Log_Registered Job Seekers	0,5089 (0,161704)	0,0061*** (0,169345)	
Log_Foreign Investment	0,0810* (0,265100)	0,0002*** (0,291670)	
Log_Gross Regional Domestic Product	0,0263** (0,462176)	0,9428 (0,509282)	
$R^2$	0,135519	0,217691	
Ν	128	132	

TABLE 1: Estimation Results of Variables Affecting Youth Unemployment in Rural Areas of Indonesia.

Note: standard error is enclosed in parentheses. \*\*\* p <0.01, \*\* p <0.05, \* p <0.1. Source: Eviews 9 processed in 2020

After testing the selection of the best model through the Chow test, Hausman test, and the Lagrange multiplier test, it was found that the best model used in this study was the random effect model (REM). The dependent variable of rural youth open unemployment rate (Y1) is explained at 13,5% by the variables used in this study, while the remaining 86,5% is explained by other independent variables outside the model. Meanwhile, the dependent variable urban youth open unemployment rate (Y2) is explained by 21,7% by the variables used in this study, while the remaining 78,3% is explained by other independent.

Based on these results, the R-squared value is obtained at the rural youth open unemployment rate of 0.135519. The R-squared value of 0.135519 shows that the dependent

Classic Assumption Test	Result
Multicollinearity Test	The multicollinearity test results on the eight independent variables used in this study indicate that there is no correlation coefficient greater than 0.8 so it can be concluded that there is no multicollinearity symptom in this study.
Heteroscedasticity Test	The results of the heteroscedasticity test carried out on the eight independent variables in this study indicate that all the variables used have a probability value> 0.05 so it can be concluded that there is no heteroscedasticity problem in this study.
Autocorrelation Test	The results of the autocorrelation test on the dependent variable of the rural youth open unemployment rate obtained a Durbin-Watson value of 2.287982 and the urban youth open unemployment rate obtained a Durbin-Watson value of 2.059331. Both values are greater than 1.65 and less than 2.35, so it can be concluded that there is no autocorrelation problem in this study.
Normality test	The results of the normality test at the open unemployment rate for rural youth obtained a Jarque fall probability value of 0.176029, while at the open unemployment rate for urban youth the Jarque fall probability value was obtained at 0.493489. Both values are greater than 0.05, so it can be concluded that the data used in this study are normally distributed.

 TABLE 2: Classical Assumption Test Results.

Source: Eviews 9 processed in 2020

variable of the rural youth open unemployment rate can be explained by all independent variables in this study of 13.55%. While the remaining 86.45% is influenced by other variables outside the regression model. Meanwhile, the urban youth unemployment rate obtained an R-squared value of 0.217691. The R-squared value of 0.217691 shows that the dependent variable of the urban youth open unemployment rate can be explained by all independent variables in this study of 21.77%. While the remaining 78.73% is influenced by other variables outside the regression model.

From the results of the f significance test it is known that the p-value of the open unemployment rate for rural youth is 0.023115 and the p-value for the urban youth open unemployment rate is 0.000146, both values are smaller than the alpha level set at 5% or 0.05 so that H0 is rejected, which means that the independent variables in this study jointly affect the dependent variable of the rural youth open unemployment rate and the urban youth open unemployment rate.

To determine the effect of each independent variable on the dependent variable, a T test is carried out. If the p-value or probability <0.05, the result is significant, meaning that there is an effect of the independent variable on the dependent variable. The results of the statistical t test in this study are as follows.

Ν	

Variable	Rural Youth Open Unemployment Rate (Y1)		Urban Youth Open Unemployment Rate (Y2)	
	Coefisien	Prob	Coefisien	Prob
Population Growth Rate 1,791378		0,0980*	0,498485	0,6850
Log_Population Per Capita Expenditure	-4,455220	0,1012	-0,325362	0,9259
Average Length of Schooling	1,362645	0,1080	-0,595413	0,5028
Youth Employment Based on the Highest Education Attended is Secondary School	0 022672	0,3878	0,055380	0,2003
Log_Provincial Minimum Wage	1,055592	0,6315	0,627974	0,8037
Log_Registered Job Seekers	0,107137	0,5089	-0,472629	0,0061***
Log_Foreign Investment	0,466492	0,0810*	1.110761	0,0002***
Log_Gross Regional Domestic Product	1,040078	0,0263**	0,036645	0,9428
$R^2$	0,135519		0,217691	
Prob (F-statistic)	0,023115		0,000146	

TABLE 3: Regression Analysis.

\*\*\* p <0.01, \*\* p <0.05, \* p <0.1. Source: author's calculation

Based on the results in Table 2, it is known that the population growth rate variable has the same effect on the two dependent variables, having a positive but insignificant coefficient sign. The results of this study are in accordance with the results of research from Feriyanto (2018) which states that population has a positive effect on unemployment. This result is also supported by research by Dwiputri, et al. (2019) which states that generally the number of job seekers increases every year in line with the increase in the population. An increase in the population will increase the number of job seekers. The imbalance between the demand for labour and the number of job seekers will cause the unemployment rate to fluctuate as well. This result is also in accordance with the theory related to unemployment, namely the Malthusian theory. Malthus's theory is able to explain the phenomenon of economic problems experienced by modern society, namely that the increasing number of population will result in an increasing number of workers, but this increase in number is not matched by existing job opportunities. Finally, the small number of job opportunities makes people compete for work and those who are excluded in the competition become the unemployed group. However, this does not have a significant effect on the open unemployment rate of rural youth because in rural areas, available jobs are limited and only dominated by



the agricultural sector, making it difficult for youth with high education to find suitable jobs (Simanjuntak, 1998). The population growth rate also does not significantly affect the open unemployment rate of urban youth because the increasing number of labour force in urban areas is not only caused by the rate of population growth but also the level of urbanization is high (Setiawan, 2005).

The per capita population expenditure variable does not have a significant effect on the open unemployment rate for rural youth and the open unemployment rate for urban youth. This result is in accordance with Keynes's theory, expenditure for consumption is determined or influenced by income. Income is obtained from work if someone does not work then they will not have income. The value of spending or expenditures made by consumer households is used to purchase various needs in a certain year. The higher the level of income, the higher the level of consumption. However, per capita expenditure does not significantly affect the change between income and consumption is not proportional (Mankiw, 2003).

The variable mean length of schooling has a positive and insignificant coefficient sign against the open unemployment rate of rural youth. The results of this study are in accordance with previous research by Wardhana et al. (2019) which states that the average length of schooling has a positive effect on youth unemployment in West Java in 2017, the higher the education achieved by the young workforce, the more likely it is to become unemployed at young age. even bigger. The process of looking for work takes longer for educated job seekers because they are more aware of information developments in the labour market, and they are more able to choose jobs they are interested in and reject jobs they do not like (Simanjuntak, 1998). However, this does not have a significant effect on the open unemployment rate of rural youth because in rural areas, available jobs are limited and only dominated by the agricultural sector, making it difficult for youth with high education to find suitable jobs (Simanjuntak, 1998). Meanwhile, the open unemployment rate for urban youth, the variable average length of schooling has a negative but insignificant effect. The higher the average length of schooling, the lower the open unemployment rate for youth. However, this has no effect on the open unemployment rate of urban youth because the educated workforce in urban areas has a higher tendency to be unemployed than those in rural areas (Aryati, et al, 2014). This is in line with Todaro (2000), who states that one of the main consequences of increasing urbanization is the explosion in the number of job seekers, both in the modern or formal sector, as well as in the informal sector in the urban economy. Setiawan (2005) also states that cities are full of migrants who come from





rural areas. As a result, the level of labour supply far exceeds the existing demand level, so that the unemployment rate in urban areas becomes high.

The variable percentage of youth employment based on the highest education attended is secondary school which has a positive coefficient sign, but it does not have a significant effect on the rural youth open unemployment rate and the urban youth open unemployment rate. The results of this study are in accordance with previous research by Puspadjuita (2017) which states that the workforce with the highest education completed is secondary school which has a positive but insignificant effect on unemployment. So, if youth work only completing secondary school level education, it will have the potential to increase unemployment because their jobs will be easily replaced by others because they do not require special skills or skills. These results are in accordance with human capital theory, the assumption underlying the human capital theory is that someone can increase the income they receive through increased education (Kauffman and Hochikiss, 1999). However, this does not have a significant effect on the open unemployment rate of rural youth because in rural areas there are still many workers informal in the agricultural sector who do not need a lot of educated labour, so that a high school diploma is sufficient to get a job (Setiawan, 2005). This variable also does not have a significant effect on the open unemployment rate of urban youth because in urban areas unemployment is dominated by those who have high school education levels and diploma graduates (Setiawan, 2002).

The provincial minimum wage variable has a positive coefficient sign, but it is not significant for the two dependent variables. The results of this study are consistent with previous research by Zahra and Djaja (2014) entitled "Determinants of Youth Unemployment Status in Urban and Rural Areas" which states that the provincial minimum wage variable has a positive effect on unemployment. If the minimum wage set in a province increases, from the entrepreneur's point of view, if the wages increase and the costs incurred are high enough, it will reduce the efficiency of spending, so that a reduction in labour is needed to reduce production costs. This is what will lead to an increase in unemployment (Bowles and Gintis, 2018). However, this is not significant for the urban youth open unemployment rate because the minimum wage is only applied to the formal sector. If the minimum wage is only applied in the formal sector, then workers in that sector will retain their jobs for a fixed wage thereby reducing employment opportunities. Unregulated wages in the informal sector make workers in that sector get uncertain wages and find it difficult to meet the cost of living which tends to increase every year. This condition makes the minimum wage not affect the decline in the unemployment rate (Ramiayu, 2015).



The registered job seeker variable has a positive and insignificant effect on the open unemployment rate of rural youth. The results of this study are in accordance with previous research by Zahroh and Ajeng (2017) which found that the variable job seekers which is proxied by labour force data shows that this variable has a positive but insignificant effect on the unemployment rate. The increase in registered job seekers will increase the unemployment rate of open youth in rural areas. However, this is not significant for the open unemployment rate of rural youth because job opportunities are increasingly difficult to find, one of which is due to the fragmentation of agricultural land because the agricultural sector itself is the largest economic sector in rural areas. The narrower agricultural land, which causes an increase in job seekers without being matched by additional employment, ends in an increase in the number of unemployed (Setiawan, 2005). In addition, information related to job seeker identification cards for registered job seekers is not reachable in general and is widespread in all regions of Indonesia, especially rural areas, making the status of registered job seekers has no effect on reducing the number of unemployed (BPS, 2019). Meanwhile, the open unemployment rate for urban youth, the registered job seeker variable has a negative and significant effect. The results of this study are in accordance with previous research by Putra and Iskandar (2018) which found that registered job seekers were able to have a negative and significant effect on unemployment. This result is because job seekers who register their status officially with the Manpower Office as job seekers will receive a job seeker identification card or commonly known as a yellow card. One of the advantages of having a yellow card is that job seekers do not have to independently apply from one company to another because the labour office will contact job seekers if they fall within the criteria of a company. Besides being able to save time, money and effort, yellow cards also help job seekers find good job opportunities. (Kemnaker, 2020)

The foreign investment variable has a positive coefficient value but is only significant for the urban youth open unemployment rate. These results indicate that any increase in the value of foreign investment will increase the value of the open unemployment rate for youth in rural areas of Indonesia. The results of this study are in accordance with previous research by Mucuk and Demirsel (2013) which found that the variable foreign investment had a positive and significant effect on the unemployment rate. In addition, these results are also in accordance with research by Ehrenberg and Smith (2009), Layard and Nickell (1986), Magbool, Sattar, and Bhalli (2013) in Dwiputri, et al (2019), it can be observed that the unemployment rate can be influenced by wages and income. taxes on wages, labour associations, levels of employment in the public sector, income policy, population growth, inflation, gross domestic product, and foreign



investment. The increase in foreign investment will increase the open unemployment rate of youth. This contradicts Harrod Domar's theory that investment not only creates demand, but also increases production capacity. The users of labour, which is one of the factors of production, will automatically be increased so that it will automatically reduce the unemployment rate. This is because foreign investment comes from developed countries whose production factors are capital-intensive, so that the investment they invest in developing countries such as Indonesia is oriented towards the techniques applied in investor countries that tend to be capital intensive. Because this is what makes most of the level of foreign investment reduce the number of workers, because capital-intensive techniques with high technology tend to have better productivity and efficiency so that to produce the same output, less labour is needed (Sandika, et al., 2014).

The gross regional domestic product variable at constant prices has a coefficient value that is positive, which means that the gross regional domestic product has a positive effect on the open unemployment rate for youth but only significant for the rural youth open unemployment rate. The results of this study are in accordance with previous research by Zahroh and Ajeng (2017) which showed that the gross regional domestic product variable has a positive effect on the unemployment rate. This result is inconsistent with the theory that an increase in economic growth can also be seen through an increase in gross regional domestic product at constant prices. Increasing economic growth means that the production of the types of services and goods produced also increases, which can absorb large amounts of labour. So that unemployment decreases and poverty decreases (Todaro, 2000). This is because the increase in economic growth in rural areas is not accompanied by equality in every sector of the economy, causing a high unemployment rate. In addition, the increase in production capacity that occurs is capital-intensive, where production activities aim to spur output and generate increased income is prioritized over labour-intensive economic growth that can absorb more labour (Kurniawan, 2013).

#### **5.** Conclusions Conclusion and Recommendation

Based on the results of the research output, all independent variables consisting of population growth rate, expenditure per capita population, average length of schooling, youth employment based on the highest education attended is secondary school, wage provincial minimum, registered job seekers, and foreign investment. used in research simultaneously or together have a significant effect on the two dependent





variables, namely the rural youth open unemployment rate and the urban youth open unemployment rate in Indonesia during 2016 to 2019.

Partially, the population growth rate variable has a positive and insignificant effect on rural and urban youth open unemployment rates. The per capita population expenditure variable has a negative and insignificant effect on the open unemployment rate for rural and urban youth. The variable average length of schooling has a positive and insignificant effect on the rural youth open unemployment rate but has a negative and insignificant effect on the urban youth open unemployment rate. The variable youth employment based on the highest education attended is secondary school which has a positive and insignificant effect on the open unemployment rate of rural and urban youth. The provincial minimum wage variable has a positive and insignificant effect on the open unemployment rate for rural and urban youth. The registered job seeker variable has a positive and insignificant effect on the rural youth open unemployment rate but has a negative and significant effect on the urban youth open unemployment rate. The foreign investment variable has a positive and insignificant effect on the rural youth open unemployment rate but has a positive and significant effect on the urban youth open unemployment rate. The gross regional domestic product variable has a positive but only significant effect on the rural youth open unemployment rate.

The gross regional domestic product variable at constant prices has a significant effect in increasing the open unemployment rate of youth in rural areas, this is because economic growth in rural areas is not accompanied by equality in every economic sector, causing a high unemployment rate and an increase in production capacity. what happens is capital-intensive. Whereas in urban areas, the registered job seeker variable can reduce the open unemployment rate significantly because job seekers who register their status officially with the Manpower Office as job seekers will receive a job seeker identification card or commonly called a yellow card so that it makes job seekers benefit not necessarily. independently apply from one company to another because the labor office will contact job seekers if they fall within the criteria of a company. Besides being able to save time, money and effort, yellow cards also help job seekers find good job opportunities. Then, the variable that can increase the open unemployment rate of youth in urban areas is the foreign investment variable from the economic category due to the increase in foreign investment which is capital intensive.

From the research results, it is known that the foreign investment variable can increase the youth unemployment rate in urban areas and the GRDP at constant prices can increase the youth unemployment rate in rural areas. So, to overcome this, in the future the government is expected to be able to intensify more labour-intensive investments





so that they can absorb more workers. In addition, the government should make more efforts to help labour-intensive industries such as the process of injecting capital with a faster time and easier submission processes, helping to promote labour-intensive industrial products online and offline, examples of these efforts are aimed at making labour-intensive industries, able to compete during fierce competition in the business world as well as being able to create quality and highly competitive products.

The limitation of this research lies in the data used, the data used is in the form of time series data, which is only four years old, so it takes a longer time to present the results of the significance of the independent variables in influencing the dependent variable. In addition, there are empty cells in the 2016 UMP data because the provinces of Central Java, East Java, and DIY do not determine the UMP. And in 2016 in the province of North Kalimantan, there was no data on registered job seekers. This is what influences research in terms of data presentation.

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