IJEFI 9214 darma



International Journal of Economics and Financial Issues, 2020, 10(2), 1-7.

Why are Unemployment and Poverty Still Happening in Borneo Island, Indonesia?

Dian Wahyuningsih¹, Ani Yunaningsih², Muhammad Sidik Priadana³, Dio Caisar Darma^{4*}, Purwadi Purwadi⁵

¹Management Science Doctoral Program, Postgraduate, Pasundan University, Bandung, Indonesia, ²Department of Management, Langlangbuana University, Bandung, Indonesia, ³Management Science Doctoral Study Program, Pansundan University, Bandung, Indonesia, ⁴Department of Management, Samarinda High College of Economics, Samarinda, East Borneo, Indonesia, ⁵Department of Management, Faculty of Economics and Business, Mulawarman University, Samarinda, East Borneo, Indonesia. *Email: diocaisar09@gmail.com

Received: 13 January 2020

Accepted: 01 March 2020

DOI: https://doi.org/10.32479/ijefi.9214

ABSTRACT

Efforts to alleviate unemployment and poverty must be done comprehensively, cover various aspects of community life, and be implemented in an 32 integrated manner. The research aims to explain the relationship between variables directly, indirectly, and as a whole, to find out how much influence 33 the minimum wages, education, and inflation rates on unemployment and poverty. The analytical approach through panel analysis based on the panel-common effect in 2015-2019 in 5 regions (West, Central, South, East, and North Borneo Island). Empirical findings state that minimum wages have a negative and significant effect on unemployment, while education has a positive and significant effect on unemployment, and inflation rates have a positive and not significant effect on unemployment. Unemployment has a positive and insignificant effect on poverty. Minimum wages have a negative and insignificant effect on poverty through unemployment, while education and inflation rates are both positive and not significant effects on poverty through unemployment. An increase in the informal sector is needed to reduce unemployment and poverty because the informal sector is the main solution to address this problem.

Keywords: Minimum Wages, Education, Inflation Rates, Unemployment, Poverty JEL Classifications: E24, E31, I3

1. INTRODUCTION

The terms unemployment and poverty arise when a person or group of people are unable to meet the level of economic prosperity which is considered as a minimum requirement of a certain standard of living. In the sense of proper, unemployment and poverty are understood as a state of lack of money and goods to ensure survival. In broad terms, Survawati (2005) said that poverty is an integrated concept that has five dimensions, namely: poverty (proper), powerless, state of emergency, dependence, and isolation (both geographically and sociologically). Someone qualifies as poor if his income is below the unemployment rate and poverty line.

Over the years, the relationship between poverty and unemployment have been seemingly unclear, since being unemployed usually result to fall in one's living standard due to the absence of income, and it is as well possible for one to be employed and still be poor. Even with the policy of unemployment reduction and poverty alleviation being the core goals in many developing countries, attaining this objective have relatively defeated with the high incidence of both poverty and unemployment (Agenor, 2004).

Poverty is one of the fundamental issues which become a major concern of the Indonesian government. One of the poverty causes is inevitable unemployment. Unemployment indicator

This Journal is licensed under a Creative Commons Attribution 4.0 International License

selection based on the fact that the indicator is directly related to
 income levels. The world Poverty Commission also noted that
 unemployment is a major cause of poverty (Saunders, 2002).

4

14

5 Theoretically, the poverty rate will move to follow the rate of 6 unemployment. In this case when the unemployment rate increase 7 then the poverty level will automatically increase. The positive 8 relationship between poverty and unemployment are found in 9 several countries. In Korea, for example, Park et al. (2002) found a 10 very strong relationship between poverty levels and unemployment 11 rates. When the unemployment rate increases, the poverty rate also 12 rose and when the level of unemployment inclined, the poverty 13 levels also fell.

15 Akwara et al. (2013) examine the relationship between 16 unemployment, poverty, and insecurity in Nigeria. The study 17 thus discovered that unemployment causes poverty, while poverty 18 causes insecurity. In contrast to the above findings, Ogbeide and 19 Agu (2015) investigates the causal relationship between poverty 20 and inequality in Nigeria with the use of Granger causality and 21 time-series data from 1980 to 2010, which thus revealed the 22 absence of Granger causality running from unemployment to 23 poverty, instead the existence of one-way causality from poverty 24 to unemployment. 25

26 Can be concluded that relationship between education level 27 and poverty are not mutually independence or influence, 28 the relationship between poverty and unemployment is not 29 independence or influence each other, the relationship between 30 unemployment and income is interdependence or mutual 31 influence, the relationship between income and education level 32 is interdependence or mutual influence, the relationship between 33 education level and unemployment are not mutually independence 34 or influence, the relationship between income and poverty is 35 interdependence or mutual influence. Furthermore, there is a very 36 interesting finding of the relationship interdependence is negative 37 between education level and income, especially higher education 38 level and income (Kurniawan et al., 2015). 39

40 The focus of the study is on several models that affect 41 unemployment and poverty between regions on Borneo Island. 42 The unemployment rate for the region experiences different 43 characteristics. Broadly speaking, the special magnitude in North 44 Borneo as the newest (34th) Province in Indonesia has consistently 45 decreased over time. This is indicated by unemployment in 2015 46 reaching 6.47% and continuing to decrease to 5.22% (2019). 47 On the other hand, the other four regions (West Borneo, South 48 Borneo, Central Borneo, and East Borneo) tend to fluctuate in 49 reducing the population classified as unemployment. Based on 50 the records of the Indonesian Central Statistics Agency (2019), for 51 comparison over the past 5 years, East Borneo Province holds the 52 largest unemployment rate among others, namely 7.38 for 2015, 53 in 2016 at the level of 7.50%, 7.95% (highest unemployment) in 54 2017, the period after that is 2018 is 6.91%, and the last is 2019 55 through 6.60%. 56

From 2015 to 2019, the characteristics of the population classified as poor between these regions were quite different. This is marked by the success to reduce poverty pockets quite successfully. On the 1 other hand, the development of poverty in the Provinces of West 2 Borneo and North Borneo is still uneven. When making comparisons 3 in 5 years, West Borneo is the province with the most dominant 4 poverty rate among others, with each 2015 achievement of 8.07%, 5 2016 being 8.44%, 2017 reaching 8.00%, slightly decreasing to 6 7.68% (in 2018), and finally in 2019 poverty is at 7.37%. 7

9 Furthermore, it is hoped that in the future the regional government will focus on strategic policies, such as increasing minimum 10 11 wages, encouraging the education sector through compulsory education (12 years), and scholarships, to controlling inflation 12 13 because most of the population classified as unemployed and poor are in the countryside or earn a living as farmers and fishermen. 14 15 Expectations for a variety of strategic steps will accelerate the 16 decline in unemployment and the number of poor people on the island of Borneo because it directly leads to a central area that is 17 18 a major milestone in the problem, so, for example, this program 19 can continue to be sustainable. 20

From some of the data presented previously, it can be seen that 21 22 the development of unemployment and the poor population 23 of 5 Provinces in Borneo over a period of time has different 24 characteristics, but in general, tends to be unstable. The 25 government and various parties realize that regional development 26 is an effort to achieve the goals of a just and prosperous society. 27 In line with these objectives, various development activities have been directed towards regional development, especially areas that are relatively underdeveloped. Therefore, various key indicators of the success of the development are the determination of adequate wages, improvements in education, and inflation control in the field. Effectiveness in reducing unemployment and poverty rates is the main goal in choosing a development strategy or instrument.

The research aims to explain the relationship between the independent variables with the dependent variable directly, indirectly, and overall. So, to find out how much influence the minimum wages, education, and inflation rates on unemployment and poverty using two models.

2. LITERATURE REVIEW

In the labor market, it is very important to determine the number of wages that companies must pay to their workers. Various regulations regarding minimum wage set the lowest price of labor to be paid (Mankiw, 2006). The main objective of setting a minimum wage is to meet minimum living standards such as for the health, efficiency, and welfare of workers. Wages are efforts to raise the level of low-income populations, especially poor workers.

The level of education has a role in unemployment but also foreign research as conducted by Voss et al. (2004) states that unemployment is associated with an increased risk of suicide and other death cases. By using interview methods through information on unemployed experiences, and one's social behavioral health and personality. Low levels of education, personal characteristics, use of sedative drugs, and prolonged illness have a strong relationship between unemployment and mortality.

8

57

According to Dernburg and Muchtar (1992), if the desired 2 inflation rate is low, there will be a very high unemployment 3 rate. Conversely, if the desired inflation rate is high, a relatively 4 low unemployment rate will occur. The relationship between the 5 inflation rate and unemployment is illustrated by Phillip's Curve. 6 There is a tendency that the inflation and unemployment rates rise 7 or direct relationship (there is no trade-off) then it shows that there 8 is a difference with the Phillip's Curve where there is a trade-off 9 between low inflation or low unemployment rates. 10

1

53

54

55

56

57

58

11 The concept of poverty involves multidimensional, multi-12 definition and alternative measurement. Poverty is one of the 13 problems that are difficult to define and explain. In general, 14 poverty can be measured in two dimensions, namely the income 15 or wealth dimension and the non-financial dimension. Poverty in 16 the income or wealth dimension is not only measured by the low 17 income received because low income is usually temporary, but is 18 also measured through the ownership of assets such as land for 19 small farmers and through access to public services. Meanwhile, 20 from the dimension of non-financial factors, it is characterized by 21 hopelessness or helplessness which can also affect various low-22 income households (Bellinger, 2007). 23

24 Education in many countries is a way to save yourself from 25 poverty. Where described by a poor person who expects good 26 work and high income, that person must have a high level of 27 education. However, higher education can only be achieved by the 28 rich. Meanwhile, the poor do not have enough money to pay for 29 education to a higher level such as high school and university. The 30 education is a fundamental development goal. Where education 31 plays a key role in shaping a country's ability to absorb modern 32 technology and to develop capacity, to create sustainable growth 33 and development (Todaro, 2000). 34

35 Poverty in a country is partly caused by inflation as a consequence 36 of the economic development process. Inflation describes an 37 imbalance of the money supply with the volume of goods and 38 services available in the economy. Thus, inflation will be marked 39 by an increase in the price of most of the goods that occur. The 40 trigger for inflation whether in terms of demand or cost is strongly 41 influenced by the type of economic crisis that befell the country 42 (Tambunan, 2011). 43

44 The bad effect of unemployment is reducing people's income and 45 ultimately reducing the level of prosperity one has achieved. The 46 decline in people's welfare due to unemployment will certainly 47 increase their chances of being trapped in poverty because they 48 have no income. If unemployment in a country is very bad, political 49 and social chaos always prevails, thus having a bad effect on 50 the welfare of society and the prospect of long-term economic 51 development (Sukirno, 2004). 52

3. RESEARCH DESIGN AND METHODOLOGY

This research is based on descriptive and explanatory research. Said to be descriptive because this study describes the object under study (Ruslan, 2006). Furthermore, this study examines the relationship between variables, so this research is classified 2 3 as explanatory research, namely research that intends to test 4 and explain the relationship between independent variables 5 (exogenous) and dependent variables (endogenous). 6

7 There are 5 variables to be examined, namely: minimum wages, 8 education, inflation, unemployment, and poverty with path analysis 9 techniques through SPSS software. Secondary data-based research 10 originating from Government Agencies. With the 2015 panel-11 common effect data dead until 2019 in the Borneo region (West, Central, South, East, and North).

The type of data used is panel-quantitative data which has already been written and has been officially published in Government documents through a website (online) so that secondary data is following the needs of researchers. Quantitative data is data in the form of numbers and can be calculated by arithmetic units (Sugiyono, 2002). With panel data, here are the data details of each variable usage (Table 1).

Based on the analysis model used, it is divided into two forms of the structural equation as follows:

$$Y_{1} = \rho_{1} Y_{1} X_{1} + \rho_{2} Y_{1} X_{2} + \rho_{3} Y_{1} X_{2} + Y_{1} \varepsilon_{1}$$
(1)

$$Y_{2} = \rho_{4} Y_{2} Y_{1} + Y_{2} \varepsilon_{2}$$
 (2)

Where, Y₁ (Unemployment); Y₂ (Poverty); X₁ (Minimum Wages); X_2 (Education); X_3 (Inflation rates); $Y_1\epsilon_1, Y_2\epsilon_2$ (Error term); ρ_1Y_1 , $\rho_{_{2}}Y_{_{1}}$, etc (Parameters sought).

4. RESULTS AND DISCUSSION

36 The direct effect is calculated as in standardizing regression weight 37 (coefficient). From model-1, X₁, X₂, and X₃ have a direct influence 38 on Y₁. The total effect of each exogenous variable on Y₁ is the 39 same as the direct effect. Writing the model-1 in standard form is:

$$Y_1 = \rho_1 - 0.289 + \rho_2 1.035 + \rho_3 0.166 + \varepsilon_1 0.211$$
 (3)

Error-values that occur in each endogenous variable are as follows (Sambas and Maman, 2009):

$$\varepsilon_1 = \sqrt{1 - R^2} Y_1(X_1, X_2, X_3)$$
 (4) 46
47

$$=\sqrt{1-0.789} = 0.211$$
 (5) 48

The influence between exogenous variables (Unemployment) and endogenous variables (Poverty) can be explained by function-2, exogenous variables = Y_1 and endogenous variables = Y_2 . The direct effect is calculated as in standardizing regression weight (coefficient). From the models, Y_1 has a direct influence on Y_2 . The total effect of each exogenous variable on Y₂ is the same as the direct effect. Writing the form equation function as follows:

$$Y_{2} = \rho_{4} 0.109 + \varepsilon_{2} 0.469$$
 (6)

The magnitude of the variable error Unemployment is 0.211. In the path analysis function (model 1), the following path model in Figure 1.

The error value that occurs in the poverty variable with the factors that influence it is described as follows:

$$\varepsilon_2 = \sqrt{1 - R^2 Y_2(Y_1)} \tag{7}$$

 $=\sqrt{1-0.531}=0.469$ (8)

The magnitude of error in the poverty variable is 0.469. Based on this function, for correlation values see the previous equation in Figure 2.

The total effect is the sum of direct and indirect effects with this provision, so the total effect of all research variables can be explained in Table 2.

It can be concluded that there is 1 exogenous variable, namely the minimum wage (model 1), to the endogenous variable is negative. Meanwhile, the exogenous variable (Unemployment) from model 2 directly has a positive effect on endogenous variables. Evidenced by the influence between Education on Unemployment has the highest path coefficient value of 1.035. Inversely when compared with the direct path coefficient between unemployment to poverty that is 0.109. Similar to the indirect effect, between education and the level of inflation which have positive coefficient values for poverty through unemployment with values of 0.112 and 0.018, respectively, compared to the minimum wage effect on poverty through unemployment with the lowest coefficient of -0.031. In more detail, each model path can be described as follows (Figure 3).

Based on the results of the analysis, it is known the magnitude of the influence of model 1 regarding the effect of the minimum wages (X_1) , education (X_2) , and inflation rates (X_3) as exogenous

Table 1: Recapitulation of data requirements

Variables	Objects (area)	Year	Panel data
Minimum wages	5	5	25
Education	5	5	25
Inflation rates	5	5	25
Unemployment	5	5	25
Poverty	5	5	25
Total	25	25	125

Source: Researcher design (2020)

Table 2: Dir	rect, indirect,	and total	effect re	sults
--------------	-----------------	-----------	-----------	-------

Relationship	Direct	Indirect effects	Total	
	influence		influenc	
X,>Y,	-0.289	-	-0.289	
$X_{2}^{'} > Y_{1}^{'}$	1.035	-	1.035	
$X_{2}^{2} > Y_{1}^{1}$	0.166	-	0.166	
$Y_{1}^{>}Y_{2}^{>}$	0.109	-	0.109	
$X_{1}^{1} > Y_{1}^{2} > Y_{2}$	-	-0.289×0.109=-0.031	-0.031	
$X_{1}^{'} > Y_{1}^{'} > Y_{2}^{'}$	-	1.035×0.109=0.112	0.112	
$X_{1}^{'} > Y_{1}^{'} > Y_{2}^{'}$	-	0.166×0.109=0.018	0.018	

Source: SPSS output, calculation. The probability level is 5%

variables on endogenous variables namely unemployment 1 (Y₁). Meanwhile, from model 2 there is a result of the effect of unemployment (Y_1) on poverty (Y_2) . Finally, the results of the 3 calculation of the accumulation of the three exogenous variables on poverty (Y_2) through unemployment (Y_1) as intervening variables. The results of path analysis and hypothesis testing are explained.



From Table 3, the results of hypothesis testing show that the pathway (model 1) was found to have a significant effect so that no pathway was removed. Meanwhile, from model 2, the path coefficient has a non-significant effect. Under the framework of the research concept, two linear functions can be produced, namely: structural models 1 and 2. Both functions produced simultaneously are combined into a path model. Exogenous variables are variables that affect endogenous variables.

Baron and Kenny (1986) state that a variable is called an intervening variable if the variable also influences the relationship between the independent variable and the dependent variable. Testing mediation hypotheses can be done with a

Table 3: Path coefficient and hypothesis testing

		v 1	0	
Hypothesis	Variables	Standardized coefficient (β)	t-test	Sig.
1	X ₁ >Y ₁	-0.289	-2.047	0.053
2	$X_{2}^{>}Y_{1}^{>}$	1.035	8.016	0.000
3	X ₃ >Y ₁	0.166	1.475	0.155
4	$Y_{1} > Y_{2}$	0.109	0.525	0.604
5	$X_1 > Y_1 > Y_2$	-0.031	-	0.578
6	$X_1 > Y_1 > Y_2$	0.112	-	0.584
7	$X_1 > Y_1 > Y_2$	0.018	-	0.588

Source: SPSS output, calculation. The probability level is 5%

procedure developed by Sobel (1982) and is known as the Sobel test.

By calculating the indirect effect of the Minimum Wages to Poverty 4 through Unemployment by multiplying the t-test path $X_1 - Y_1$ 5 (a) with t-test $Y_1 - Y_2$ (b) or tab (-0.289 × 0.109) of the multiple 6 tests. The indirect effect of the minimum wages on poverty through 7 unemployment is the path coefficient of -0.031 with a probability 8 of 0.578 (sig >0.05), or in other words a negative and insignificant 9 impact. Therefore, the hypothesis put forward was accepted (Figure 4).

Figure 5 explains the indirect effect of Education on Poverty 12 through Unemployment by multiplying the path t-test $X_2 - Y_1$ 13 (a) with t-test $Y_1 - Y_2$ (b) or tab (1.035 × 0.109) from the multiple 14 tests. The indirect effect of Education on Poverty through 15 Unemployment is the path coefficient of 0.112 with a probability 16 of 0.584 (sig >0.05), or in other words a positive and insignificant 17 impact. Therefore, the hypothesis put forward was rejected. 18

Referring to Figure 6, the indirect effect of the Inflation Rate to 20 Poverty through Unemployment by multiplying path t-test $X_3 - Y_1$ 21 (a) with t-test $Y_1 - Y_2$ (b) or tab (0.166 × 0.109) with the multiple 22 tests. The indirect effect of the inflation rate on poverty through 23 unemployment is a path coefficient of 0.018 with a probability of 24 0.588 (sig >0.05), or in other words a positive and insignificant 25 impact. Therefore, the hypothesis put forward was rejected. 26

Figure 4: Sobel test variable X₁ against Y₂ through Y₁

	Input:		Test statistic:	Std. Error:	p-value:
a	-0.289	Sobel test:	-0.55612245	0.056644	0.57812715
b	0.109	Aroian test:	-0.55612245	0.056644	0.57812715
sa	0.000	Goodman test:	-0.55612245	0.056644	0.57812715
sb	0.196	Reset all	Calculate		

Source: http://quantpsy.org/sobel/sobel.htm, calculation (2020)

Figure 5: Sobel test variable X_2 against Y_2 through Y_1

	Input:		Test statistic:	Std. Error:	p-value:
а	1.035	Sobel test:	0.54696403	0.20625671	0.58440344
b	0.109	Aroian test:	0.52018249	0.21687581	0.60293639
sa	0.342	Goodman test:	0.57835947	0.19506035	0.56302145
sb	0.196	Reset all	Calculate		

Source: http://quantpsy.org/sobel/sobel.htm, calculation (2020)

Figure 6: Sobel test variable X₃ against Y₂ through Y₁

	Input:		Test statistic:	Std. Error:	p-value:
а	0.166	Sobel test:	0.54143371	0.03341868	0.58820868
b	0.109	Aroian test:	0.50086603	0.03612543	0.61646541
sa	0.070	Goodman test:	0.59378238	0.03047244	0.55265768
sь	0.196	Reset all	Calculate		

Source: http://quantpsy.org/sobel/sobel.htm, calculation (2020)

51

57

58

1 It can be concluded, the two exogenous variables (Education and 2 inflation rates) indirectly have a positive and not significant impact 3 on endogenous variables (Poverty) through intervening variables 4 (Unemployment). Thus, unemployment (Y_1) is considered not 5 a mediating variable between education (X_2) and inflation rate 6 (X_3) . Meanwhile, the minimum wages (X_1) has a negative and 7 insignificant impact on poverty through unemployment. In this 8 regard, Unemployment is appropriate as an intervening variable. 9

Referring to the scope of the study, it aims to analyze how much
the direct and indirect influence of the minimum wage, education,
and inflation rate on unemployment and poverty between regions
in Borneo.

15 The observations of the research observations revealed several 16 things, including concerning unemployment, minimum wages had 17 a negative and significant effect, while education had a positive 18 and significant effect, and the inflation rate had a positive and 19 insignificant effect. About poverty, the minimum wage has a 20 negative and significant effect, while education has a positive 21 and significant effect, the inflation rate has a positive effect, and 22 unemployment has a negative effect. Towards poverty through 23 unemployment, minimum wages have a negative and insignificant 24 effect, while Education and Inflation Rate have a positive and 25 insignificant effect. 26

5. CONCLUSION AND FINAL REMARKS

The results of the study revealed that for unemployment, minimum wages had a negative and significant effect, while education had a positive and significant effect, while the Inflation Rates had a positive and not significant effect. Regarding poverty, unemployment has a positive and insignificant effect. For poverty through unemployment, minimum wages have a negative and insignificant effect, while education and inflation rates are both positive and insignificant.

The increase in minimum wages on Borneo Island which has an impact on reducing unemployment and poverty should be done by considering the conditions of workers and companies so that there is no reduction in workers' welfare and also does not harm the company.

Education, which is reflected in the high expectations of old schooling, has a negative influence on unemployment, so it is hoped that the government in 5 regions will again promote the eradication of school dropout programs, to reduce unemployment.

Stabilizing the inflation rate or adjusting wages for changes in the inflation rates. High inflation will not have a significant effect on unemployment or poverty if nominal wages always follow changes in the inflation rates. In this way, the population of Borneo Island can still meet their needs even though inflation continues to change.

Limitations and shortcomings of this study are in the period under study, due to special data North Borneo Province is still constrained (due to the new area of expansion). For future researchers, it is expected to use a longer period, so that it can obtain representative results, as well as adding other variables that affect unemployment 1 and poverty. 2

There has never been a study that discusses unemployment and 4 poverty with variables that affect it in the Borneo region. Borneo 5 Province is a region that is rich in natural resources (oil, gas, and 6 coal commodities), but there are still social inequalities, limited 7 population productivity, infrastructure, and economic instability 8 that makes the problem of this research. Besides, the period of 9 observation with the latest data, so this study is very interesting as a reference for other researchers in the future.

6. ACKNOWLEDGMENT

The authors owe deeply appreciation to Dr. Gun Gunawan Rachman, SE., Ak, MM (Dean of the Faculty of Economics and Business, Langlangbuana University), Dr. Atang Hermawan SE., MSIE., Ak (Dean of the Faculty of Economics and Business, Pasundan University), Drs. H. Muhammad Lutfi, M.T (Head of Samarinda High College of Economics), and Prof. Dr. Hj. Syarifah Hudayah, SE, M.Si (Dean of the Faculty of Economics and Business, Mulawarman University) for motivation and funding that has been given so that this research can be carried out.

REFERENCES

- Agenor, P.R. (2004), Unemployment-poverty Trade-offs. Policy Research Working Paper No. 3297. Washington DC: World Bank.
- Akwara, A.F., Akwara, N.F., Enwuchola, J., Adekunle, M., Udaw, J.E. (2013), Unemployment and poverty: Implications for national security and good governance in Nigeria. International Journal of Public Administration and Management Research, 2(1), 1-11.
- Anonymous. (2019), Calculation for the Sobel Test: An Interactive Calculation Tool for Mediation Tests. Available from: http://www.quantpsy.org/sobel/sobel.html.
- Baron, R.M., Kenny, D.A. (1986), The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51(6), 1173-1182.
- Bellinger, W.K. (2007), The Economic Analysis of Public Policy. New York: Routledge.
- Dernburg, T.F., Muchtar, K. (1992), Makro Ekonomi-Konsep, Teori dan Kebijakan (Edisi Ketujuh). Jakarta: Erlangga.
- Indonesian Central Statistics Agency. (2019), Statistical year book of Indonesia 2019. In: Subdirektorat Publikasi dan Kompilasi Statistik. Jakarta: Dharmaputra.
- Kurniawan, M.U., Soejoto, A., Soesatyo, Y. (2015), The causal relationship between education level, income, unemployment, and poverty in the District of sumenep period 2003-2012. Journal of Contemporary Issues and Thought, 5, 99-118.
 Mankiw, N.G. (2006). The macroeconomist as scientist and engineer 50
- Mankiw, N.G. (2006), The macroeconomist as scientist and engineer. Journal of Economic Perspectives, 20(4), 29-46.
- Ogbeide, E.N.O., Agu, D.O. (2015), Poverty and income inequality in 52 Nigeria: Any causality? Asian Economic and Financial Review, 53 5(3), 439-452. 54
- Park, A., Wang, S., Wu, G. (2002), Regional poverty targeting in China. 55 Journal of Public Economics, 86(1), 123-153. 56
- Ruslan, R. (2016), Manajemen Public Relations and Media Komunikasi. Jakarta: Raja Grafindo Persada.

Sambas, A.M., Maman, A. (2009), Analisis Korelasi, Regresi, dan Jalur

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

Wahyuningsih, et al.: Why are Unemployment and Poverty Still Happening in Borneo Island, Indonesia?

Dalam Penelitian. Bandung: Pustaka Setia.

- Saunders, P. (2002), The Direct and Indirect Effects of Unemployment on
- Poverty and Inequality. SPRC Discussion Paper No. 118. Sydney: The Social Policy Research Centre University of New South Wales.
- Sobel, M.E. (1982), Asymptotic confidence intervals for indirect effects in structural equation models. Sociol Methodol, 13, 290-312.
- Sugiyono. (2002). Metode Penelitian Administrasi. Bandung: Alfabeta. Sukirno, S. (2004), Makroekonomi Teori Pengantar, Edisi Ketiga. Jakarta: Raja Grafindo Persada.
- Suryawati, C. (2005), Memahami kemiskinan secara multidimensional. Jurnal Manajemen Pelayanan Kesehatan, 8(3), 121-129.

- Tambunan, T.H. (2011), Perekonomian Indonesia: Kajian Teoritis dan Analisis Empiris. Bogor: Ghalia.
- Todaro, M.P. (2000), Economic Development. New York: Longman.
- Voss, M., Nylen, L., Floderus, B., Diderichsen, F., Terry, P.D. (2004), Unemployment and early cause-specific mortality: A study based on the Swedish twin registry. Am J Public Health, 94, 2155-61.