



Unemployment and Poverty Determinants in Central Java

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Info Artikel

Article History:

Received April 2017

Accepted June 2017

Published August 2017

Keywords:

Poverty, Unemployment,
Factors affecting poverty
/ unemployment.

Abstract

This study aims to obtain information and results that can be run in programs of poverty alleviation and unemployment in a more effective and efficient in accordance with the expectations of all parties including the people who are still categorized as marginal. This study uses primary data sources derived from secondary data from Susenas and Sakernas for Macro and other related data such as Supas data, and SP 2010, ST2013 and PBDT 2015 for micro data and PODES data for regional support data. The method of analysis in this research is descriptive and explorative analysis of various data and information available. In addition, there will also be some statistical model calculations relevant to this study. The results of the study indicate that the main drivers of poverty reduction are economic factors, including accessibility, for those who do not work to work or those who are already working or trying to earn adequate income, other factors are demography, social, education and skills and environment. Based on the simulation of inflation data also greatly affect the poverty rate, including for some basic commodities such as rice, when inflation is enough large then the poverty rate will tend to increase.

INTRODUCTION

Poverty and unemployment are fundamental problems faced nationally and regionally as well as globally and needs serious attention. The high rate of poverty and unemployment has a big impact on people's lives, especially in social and economic life. Obviously, social and economic life have implications for the life of nation and state in reaching a just and prosperous society in accordance with the five principles of the State of Indonesia namely Pancasila. Constitutionally, the Government of Indonesia has mandated the efforts to be made in the 1945 Constitution on the issue of poverty and unemployment as described in Article 27 paragraph 2 which reads "Every citizen is entitled to decent work and livelihood for humanity". This constitutional foundation shows that citizens' rights, namely the need of fulfilling basic needs that should be a priority and attention for government in alleviating poverty and unemployment. In addition, the current era of government also has emphasized poverty and unemployment alleviation through the program of *Nawa Cita*. The implementation of *Nawa Cita* has been done by the government in the form of development programs and various policies that have been made in accordance with the medium and long term development plan either at the national or regional level. High unemployment and poverty rate is one of the sorest social and economical problems those interfere relevant application of advantages provided for women by economics (Kiausiene, 2015)

Central Java Province, a province that has a strategic position seen from the potential of the territory and the number of residents has a vision that is in line with the constitution and *nawa cita* that is "Towards Prosperous and Independent Central Java, *Mboten Korupsi* (no corruption), *Mboten Ngapusi* (no lies)". Such vision is supported by several missions. One of its missions is the 2nd mission that reads "Creating community prosperity for the Justice of People, Alleviating Poverty and Unemployment". Moreover, the Central Java Province Regional Medium Term Development Plans (RPJMD)

Year 2013-2018 state that in achieving the second mission covering goals and targets, there is a need to see the target indicators achievements that have been compiled from 2013 until 2018. Specifically, the goals and targets in decreasing poverty and open unemployment rate can be seen in table 1 below:

Table 1. The Targets Indicators of Poverty and Open Unemployment rate of Central Java Year 2013-2018

Years	Target Indicators	
	Poverty Rate	Open Unemployment Rate (%)
[1]	[2]	[3]
2013	14.44	6.02
2014	11.58 – 11.37	5.31 – 4.77
2015	9.05 – 8.75	4.93 – 4.62
2016	8.60 – 8.35	4.66 – 4.43
2017	8.25 – 8.00	4.49 – 4.27
2018	7.80 – 7.60	4.32 – 4.20

Furthermore, there has been an evaluation of the linearity of policy of Local Government Development Plans (RKPD) of 2014 and 2015 with RPJMD policy of 2013-2018 in Central Java Province. In relation to the 2nd mission, there found several priorities changed, especially the target of poverty figure. Moreover, the 2nd mission has already described the detailed project plans in an effort to reduce poverty and unemployment which cover several large groups of activities and descriptions of each possible activity that can be done. Additionally, in efforts to achieve targets against poverty and unemployment alleviation, RPJMD have made various programs and activities as well as policies which are directly related to efforts to reduce poverty and unemployment. Specifically, in relation to these efforts, there has been made Governor Regulation Number 72 of 2015 on Strategy for Poverty Alleviation in Central Java Province Year 2015-2018. It is expected that this governor regulation (pergub) can be used as a guide in accelerating poverty alleviation efforts in

developing the region from 2015 until 2018 in the form of policy direction, program strategy and activities and indicative of budgeting. This regulation does not explicitly mention the problem of unemployment rather implicitly is also associated with the problem of unemployment. Unemployment state dependence varies across workers (Plum & Sara, 2015). Again, this Pergub also mentions more detail descriptions of some strategies in relation to programs and activities accompanied by performance indicators of the activity (output) starting with the achievement data at the beginning of the planning year (2015) and the target of the activity performance (output) and the funding framework starting from the year 2016 until 2018, which also includes performance conditions at the end of the period and the person in charge of Local Government Work Unit (SKPD). The effective liquidity supply of the economy—the weighted-sum of all assets that serve as media of exchange—matters for interest rates and unemployment (Rocheteau & Antonio, 2014)

Furthermore, the development policy which is used as the guideline for the implementation of Community consultation on development planning (Musrembang) in the framework of preparation of Regional Government Work Plan (RKPD) Year 2017 for Province and Regency / Town throughout Central Java also mentions the acceleration of poverty reduction from 11.30 - 10.83% in 2017 and 10, 40 - 9.93% by 2018 through strategies: (i) reducing the burden of expenditure on the poor; (ii) increasing community incomes; (iii)

empowerment of micro and small economic enterprises. In addition, program synergies and funding for poverty alleviation are developed through the sharing and funding programs between central, provincial and regency / town governments (covering access to education, health and infrastructure) and the development of thematic activities (thematic Indonesian Manunggal National Army in the Village (TMMD)), thematic field work / cooperation with Higher Education and thematic (CSR) with priority focus on locations in areas with high levels of poverty. Furthermore, the next achievement is in the decrease in the Open Unemployment Rate from 4.49 - 4.27% in the Year 2017. Such conditions are realized by the use of well-managed instruments used both at the central and regional levels. For more, poverty reduction programs and the handling of unemployment issues have also been pursued at the national and regional level as well as at local levels in accordance with available resource and regulatory plans. Additionally, the national poverty condition in March 2016 was 10.86 percent or the same as 28.01 million poor people in Indonesia. Meanwhile, Central Java Province had relatively higher rate than the national's, namely 13.27 percent or in absolute, there were as many as 4.51 million poor people. Alternatively, Central Java province population development in the last 5 years showed a decline. Although the decline that occurred also tends to slow, even in the final conditions, it tends to stagnate. The detail of the development of those information can be seen in Figure 1.

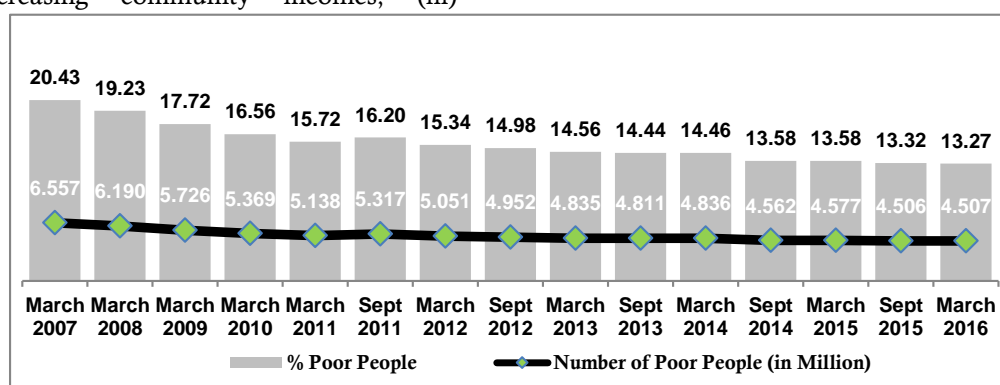


Figure 1. The Number and Percentage of Poor People of Central Java, March 2007 - March 2016

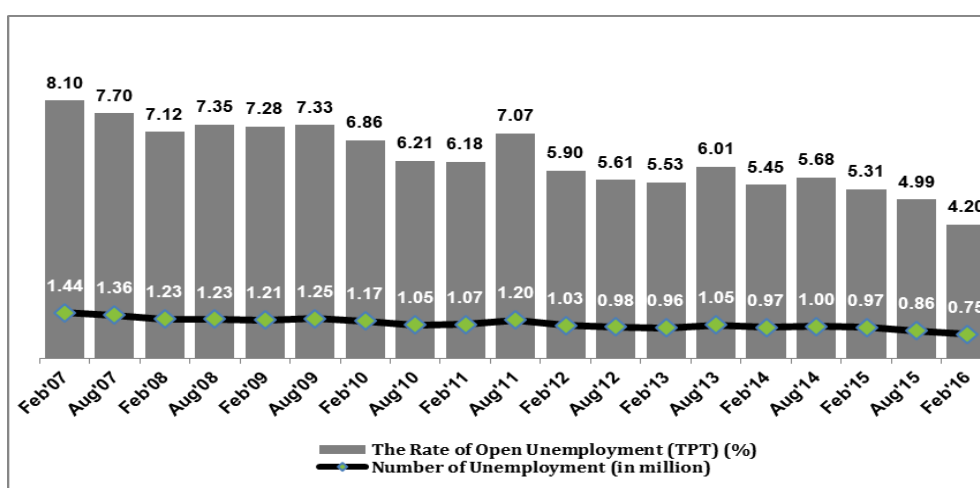


Figure 2. The Number and Percentage of Unemployment (TPT) of Central Java, February 2007 - February 2016

On the one hand, the national unemployment rate on February 2016 showed that the Open Unemployment rate of 5.50 percent or there were as many as 7.02 million unemployed people in Indonesia. Meanwhile, Central Java Province showed lower unemployment rate of 4.20 percent or 0.75 million unemployed people in Central Java. During the last three years, the unemployment rate in Central Java showed a slight decrease, although in the August period there is usually a fluctuation in the rise of the unemployment rate which may be influenced by the seasonal factors in, namely the dominating agricultural absorption of Central Java's labor force (30.07 percent). Further description of the development of employment in Central Java Province can be seen in Figure 2. For more, the magnitude of poverty and unemployment in the effort of their overcome requires various information and studies so that the handling can run effectively and efficiently. Even though so far the efforts have been done, it still seems not optimal, so the expectation of the program and policy on poverty alleviation and unemployment still not as expected and there is a need to do various improvement and maximum effort to alleviate poverty and unemployment. Hence, it is necessary to do further study to answer all problems that exist.

Several studies and analyses as well as discussions on some formal forums have been undertaken to identify the existing problems. However, such findings are still not measurable in statistical analysis. Thus, there is a need to conduct a more specific study in determining the factors, aspects, variables, indicators and categories that most affect the poverty. The study of poverty and unemployment issues is expected to provide a measurable picture of the problem of poverty and unemployment empirically from the available data and information. It surely will lead on the macro issue of the problem. The importance of the study and statistical analysis of macro indicators of poverty and unemployment is an attempt to address the problems that arise in poverty and unemployment alleviation given that the current era implements evidence-based policy. Thus, the regional government, in this case Central Java Province plans to conduct research activities of Poverty and Unemployment Determinants in Central Java implemented in fiscal year 2016. This activity is expected to get information and results that can be run in programs of poverty and unemployment alleviation more effectively and efficiently in accordance with the expectations of all parties including the people who are still categorized as marginal

RESEARCH METHOD

This research was done through several stages, starting from preparation and readiness, data collection, data processing, data analysis, presentation of data and the dissemination of results which have been made. Further, this study used secondary data from National socio-economic survey (Susenas) and National workforce survey (Sakernas) for the macro data, while the micro data were derived from other related data such as Intercensal Population Survey (Supas), and Population Census (SP) year 2010, Survey of Plantation Households (ST) 2013 and Integrated Database Update (PBDT) 2015 as well as Village Potentials (PODES) data for regional supporting data. Furthermore, other related and relevant data sources were used as supporting and complementary materials. The use of data sources in this study were sought at the most current and available data sources and more on data at the provincial level.

The method of analysis in this study was multiple linear regression analysis. It is a linear relationship between two or more independent variables (X_1, X_2, \dots, X_n) with the dependent variable (Y). This analysis is aimed at knowing the direction of the relationship between independent variables with dependent variable and deciding whether each independent variable is positive or negative and to predict the value of the dependent variable when the value of the independent variable increases or decreases.

The multiple linear regression equation in this study is described in the following:

$$Y = a + b_1 X_1 + b_2 X_2 + \dots + b_n X_n \dots \dots \dots (1)$$

Notes:

Y	= Dependent Variable (predicted values)
X_1, X_2, \dots, X_n	= Independent Variables
A	= Constants (Y value if $X_1, X_2, \dots, X_n = 0$)
b	= regression coefficient (increase or decrease value)

This model was used to obtain a variable that greatly affects the size of the poor people and the amount of unemployment. In this model, the dependent variable was the number of poor

people at the village level, while the independent variables were variables derived from Development of underdeveloped region (Pdt) data year 2015 and PODES data year 2014 related to poverty and unemployment and other supporting available data. This model was expected to obtain a picture of the dominant related aspects of the magnitude of poverty or unemployment. The multiple linear regression model was validated from the statistical test relevant to this model.

RESULTS AND DISCUSSION

Before performing further analysis, some of the classical assumptions of multiple linear regression analysis must be met, i.e. the data must be normally distributed and have got no multicollinearity and free of heteroscedasticity.

Furthermore, to answer the problems, this study used the following formula:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + \beta_{13} X_{13} + \beta_{14} X_{14} + \beta_{15} X_{15} + \beta_{16} X_{16} + \beta_{17} X_{17} + \beta_{18} X_{18} + \beta_{19} X_{19} + \beta_{20} X_{20} + \beta_{21} X_{21} + e$$

In this study, 21 variables were added with significance value > 0.05 (not significant) which were poverty, namely Drinking Water Source (X_5), Graduate (X_{12}), Work (X_{13}), and Number of Health Personnel (X_{21}). In addition, there found 2 (two) variables with VIF value > 10 , namely Sex (X_9) and Marital Status (X_{11}). It means there is multicollinearity between these variables and poverty. Thus, to get better results, those variables were removed from the model.

After doing further processes by eliminating the non-significant variables, the variables experienced multicollinearity, and the unnecessary variables, apparently there was still a non-significant variable found which was the Number of Health Facility (X_{20}) with a significance value of 0.222. In addition, there were also unexplained variables in the model which was the Number of School variables (X_{19}) with the value of β (+) of 0.261. This means that the more schools available in a village, the more likely the number of poor households will be. Supposedly, the more number of schools in a

village, the easier access to get education in the process of improving the level of education that village. Therefore, it is expected to accelerate the ultimately can reduce the level of poverty..

Table 2. Preliminary Variables Affecting Poverty

Variables	Coefficient	Standard Error	t	Sig	VIF
(1)	(2)	(3)	(4)	(5)	(6)
Constant	-3.988	0.416	-9.588	0.000	
Building Status (X ₁)	0.261	0.012	21.718	0.000	7.640
Floor area of the capita (X ₂)	-0.027	0.009	-2.939	0.003	4.052
Type of Floor (X ₃)	0.249	0.004	59.249	0.000	9.229
Ratio of the Number of Rooms (X ₄)	-0.182	0.008	-23.708	0.000	8.813
Source of Drinking Water (X ₅)	0.000	0.003	0.168	0.866	2.859
Fuel (X ₆)	0.021	0.004	4.998	0.000	6.676
Movable Assets (X ₇)	0.194	0.009	22.477	0.000	3.122
Non-Movable Assets (X ₈)	0.139	0.009	14.945	0.000	6.734
Sex (X ₉)	0.318	0.007	44.893	0.000	186.593
Age Group (X ₁₀)	0.292	0.009	32.592	0.000	8.995
Marital Status (X ₁₁)	0.129	0.013	9.755	0.000	14.446
Graduate (X ₁₂)	-0.005	0.003	-1.493	0.136	52.347
Work (X ₁₃)	-0.005	0.003	-1.593	0.111	45.502
Business field (X ₁₄)	-0.007	0.002	-3.088	0.002	4.473
Business Status (X ₁₅)	0.037	0.003	12.608	0.000	14.896
Working Hour (X ₁₆)	0.012	0.002	4.928	0.000	2.723
Social Protection Cards (KPS) (X ₁₇)	0.010	0.005	2.146	0.032	8.162
Number of Buildings (X ₁₈)	0.030	0.004	7.046	0.000	1.077
Number of Schools (X ₁₉)	-0.119	0.047	-2.522	0.012	1.651
Number of Health Facilities (X ₂₀)	-0.156	0.038	-4.089	0.000	1.166
Number of Health Personnel (X ₂₁)	-0.040	0.042	-0.957	0.339	1.429
R Square	0.991				
Std. Error of the Estimate	19.487				

Source: Village Potential (PODES) 2014, Integrated Database Update (PBDT) 2015

Re-running was done by removing the variables that were considered disturbing by entering 12 final variables. As a result, this process produced the following equation:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + e$$

After passing the normality test by looking at the distribution of data from the scatter plot residual results, it is concluded that the model has met the normal assumption.

To see the indication of having multicollinearity, the researcher looked at the results of Collinearity Statistics, namely the value of tolerance and Variance Inflation Factor (VIF).

The processing results of the 14 selected variables were free from multicollinearity problems because all variables had a VIF value of less than 10.

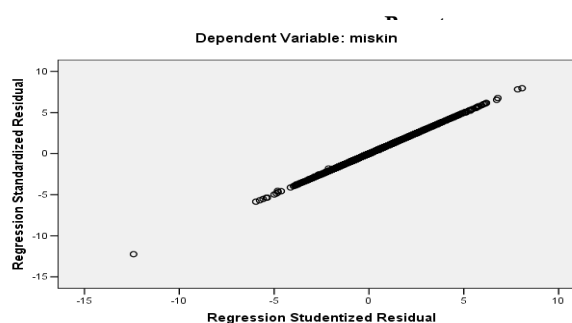
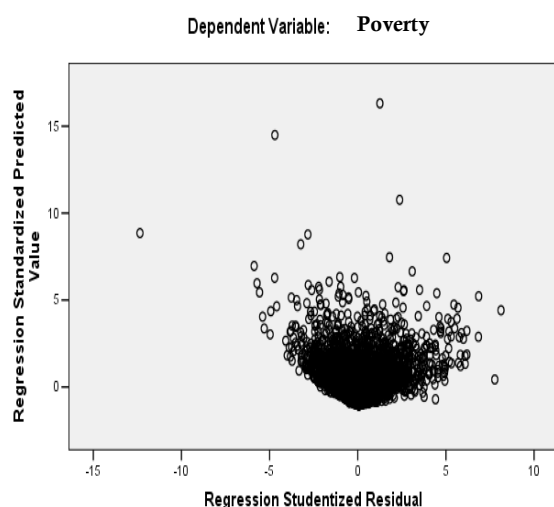
**Figure 3.** Scatter Plot Test Normality Variable Povert

Table 3. The Improvement Variables that Affect Poverty

Variables	Coefficient	Standard Error	t	Sig	VIF
(1)	(2)	(3)	(4)	(5)	(6)
Constant	-1.295	0.542	-2.387	0.017	
Building Status (X ₁)	0.276	0.019	14.154	0.000	7.294
Floor area of the capita (X ₂)	0.156	0.015	10.521	0.000	3.693
Type of Floor (X ₃)	0.314	0.007	46.318	0.000	8.801
Ratio of the Number of Rooms (X ₄)	0.172	0.011	15.182	0.000	7.000
Fuel (X ₅)	0.057	0.006	9.489	0.000	5.099
Movable Assets (X ₆)	0.069	0.014	5.024	0.000	2.858
Non-Movable Assets (X ₇)	0.034	0.015	2.219	0.027	6.515
Age Group (X ₈)	0.575	0.011	50.600	0.000	5.268
Business Status (X ₉)	0.217	0.003	74.386	0.000	5.482
Working Hour (X ₁₀)	0.015	0.004	3.937	0.000	2.272
Social Protection Cards (KPS) (X ₁₁)	0.226	0.008	30.109	0.000	7.008
Number of Buildings (X ₁₂)	0.032	0.007	4.604	0.000	1.070
R Square	0.974				
Std. Error of the Estimate	32.302				

Source: Village Potential (PODES) 2014, processed Integrated Database Update (PBDT) 2015

**Figure 4.** Scatterplot Heteroskedasticity Test of Poverty Variables

The heteroscedasticity test aimed to find out whether there is a variance inequality of the residual of one observation to the other in the regression model. By detecting the predicted value of the dependent variable with its residual, the model formed of these variables did not form a clear pattern and the spots spread above and

below the number 0 on the Y axis. Thus, it can be concluded that the model does not experience heteroscedasticity.

After passing the classical assumption test, the coefficient of determination test (R²) was conducted to see the magnitude of the effect of independent variables on poverty. From the analysis results, the obtained coefficient of determination was 0.974, which means jointly the status of building occupancy, the floor area per capita, the type of floor ratio of the number of rooms, cooking fuel, movable assets, non-movable assets, age group, KRT business status, KTR working hour, ownership of KPS program cards and the number of slum buildings provide almost all the information needed to predict variations of poverty variables. To find out whether the generated regression equation is good to estimate the value of the independent variable, it is required to verify the hypothesis. After being tested on F statistical test, it can be known whether all the independent variables included in the model have a mutual influence on the dependent variable (Ghozali, 2001).

The multiple linear regression analysis gained information that the F test with $\alpha = 0.05$

obtained a significance value of 0.000. It means that the variables included in the model (building occupancy status, per capita floor space, floor type, room number ratio, cooking fuel, movable assets, non-movable assets, age group, business status of household head, working hours of KRT, KPS and the number of slum buildings) affect the poverty level.

The Influence of the Variables of Building Occupancy Status, Floor Area, Floor Type, Room Number Ratio, and Fuel Cooking (Housing) on Poverty, The t-test result of the variable of building occupancy status obtained significance value of 0.000. This means that the status of buildings occupancy affect poverty. Alternatively, housing is one component that greatly affected the welfare of the family. The ownership of assets owned by poor families includes land tenure (farmland), residential ownership (occupied house status), and ownership of vehicles (vehicles or means of transportation owned) (Salim, 1997).

Poor households tended not to have their own homes. Most of them might still rent or ride with other households. This is possible because poor households still tend to prioritize food needs compared to their housing needs.

The implication of this condition is that poverty reduction policies related to housing are not only concerned with the feasibility of housing but also the ownership of the occupied buildings.

The variable of floor capacity per capita, floor Type and room number ratio significantly influenced and had a positive relationship to poverty. Based on those findings, the researcher reflected to the indicator of poor families, namely their per capita floor area of residential building is less than 8m². Meanwhile, the characteristics of the type of floor of the residential building are made of land / rumbia / low quality wood / wall without plaster (BPS, 2005). The Greater Jakarta Transition to Adulthood Survey uses the variable of numbers of people per one larger bedroom or equal to three people (ratio of number of rooms > 0.5) as one of the potential poverty indicators.

The results of this study showed that the more poor households own floor area per capita less than 8m² with the inappropriate kind of

flooring components (Cement / red brick, Bamboo, Wood / Low quality boards, Soil, Other), the more poverty rate they will have. Similarly, when viewed from the number of people per bedroom, the greater number of people per bedroom indicates the inability of the household to provide a decent room in accordance with the number of family members.

This condition is implied in government policy related to uninhabitable house (RTLH program) for poor families. This assistance is already in line with the characteristics of poor households. Also, this assistance should consider to get no misplacement and is used in accordance with the purpose.

Fuel cooking of the households in the form of firewood had a significant effect on poverty. Daily cooking fuel used by poor families is firewood / charcoal / kerosene (BPS, 2005). Poor households may not be able to afford fuel for cooking like gas, even though there is already a 3kg gas subsidy. In addition, many households, due to lack of knowledge do not dare to switch from firewood to other fuels. This is due to the fear of accident risks such as the presence of exploding gas cylinders, etc.

The Influence of the Variables of Asset Occupancy, Employment Status, and Working Hour (Economy) to Poverty, the variable of movable assets such as gas cylinders 5.5 kg or more, refrigerator / fridge, air conditioning, water heater, home telephone, television, gold / jewelry and savings (worth 10 grams of gold), computers / laptops, bicycles, motorcycles, cars, boats, outboard motors, motor boats, and boats) and immutable variables (land ownership, homeownership elsewhere) had a significant effect on poverty. This is consistent with one of the criteria of poor family indicators that a poor household is indicated by the unavailability of savings / goods, such as motorcycles (credit or non-credit), gold, livestock, or other capital goods (BPS, 2005).

On the one hand, asset indicator can also be used to measure poverty because poor households condition may not have enough money to buy valuable assets such as televisions, motorcycles, cars, land and so on.

The working statuses of the head of poor households are mostly as workers / laborers or free workers in both the agricultural and non-agricultural sectors. This variable had a positive effect on poverty level. This is likely to occur because the level of education of poor families is still low, so it cannot meet the available job opportunities. Accordingly, they can only work as laborers or manual laborers who do not need education or skills. In addition, another problem encountered was wage / employee income issues for groups of workers with status as workers / staffs, free workers or family workers. The labor wages for free workers and family workers are still very low (less income than Province Minimum Wage (UMP)). Meanwhile, even though UMP has been applied, workers' groups with status as laborers / employees / staffs still receive a lot of wages under the UMP.

Another variable related to the economy is working hours. This variable had a significant effect to poverty. Alternatively, poor households heads work less than 35 hours (part time workers).. The number of poor households heads who works less than 35 hours is possible because the hallmark of part-time workers is to work as casual laborers. It is a condition where they cannot get a decent permanent job so they tend to accept whatever work is offered to earn an income. In addition, the increase of the difficult economic conditions sometimes force someone to get around to earn additional income to cover the needs of daily life by adding time working hours (overtime).

Influence of Age Group Variables (Demographics) on Poverty, the age group of KRT had a significant influence on poverty. It is related to the age level which becomes the determinants of the productivity of a person by which age will affect the amount of the number of working hours and the amount of revenue generated.

The Effect of Program Acceptance Variables (KPS) on Poverty, the Program Admission Variables (KPS) is closely related to the government's poverty alleviation program. The distribution of the Social Protection Program

Card (KPS) that fits the target through this program will help reduce poverty.

The Effect of Variable Number of Buildings in Slums on Poverty, The variable of the number of buildings in slums had a significant effect on poverty. UNHCR and the World Bank in 2005 stated that tens of millions of urban poor communities of the world, including Indonesia, just having a place to stay in place on the fringes of the city dirty and environmentally vulnerable to various health threats. Further, the most prominent variables affecting poverty were the KRT Age group. This is closely related to the productivity of work that can be generated by poor households. Households with KRT in non-productive age will likely be easier to be poor because of the limitations of their ability to meet the needs of family life.

Results of Multiple Linear Regression Analysis on Unemployment, to know the variables that affect unemployment in Central Java, the researcher used multiple regression analysis model with the following equation:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Moreover, to find out whether the model is well used for further analysis process, it was further tested in the classical assumptions first. From the results of processing, this model obtained 2 (two) variables with VIF value > 10, namely Graduate (X1) and Age Group (X3). As a result, this model did not meet the classical assumption due to multicollinearity.

To get better results, the variables with the largest VIF value were omitted from the model.

After further processing by eliminating those variables, hence the model gained the improvement as follows:

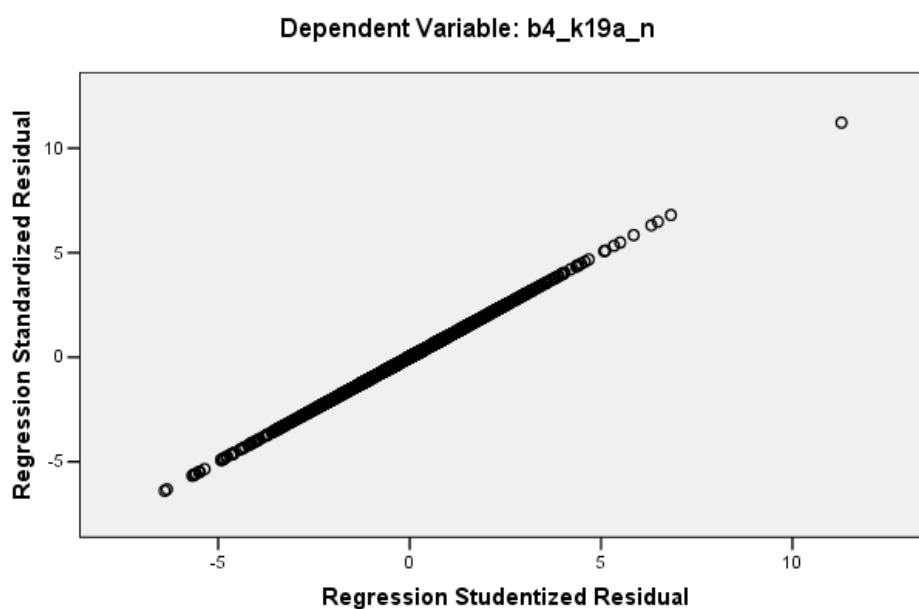
$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Once the normality test has been done, a regression model was free from multicollinearity problems if the VIF value is less than 10. In conclusion, the above model of unemployment variable is free from multicollinearity problems because all variables have a VIF value of less than 10.

Table 4. Initial Variables Affecting Unemployment

Variables	Coefficient	Standard Error	t	Sig	VIF
(1)	(2)	(3)	(4)	(5)	(6)
Constant	-50.684	3.408	-14.870	0.000	
Graduate (X ₁)	0.134	0.011	11.949	0.000	16.829
Illness (X ₂)	0.357	0.035	10.205	0.000	1.465
Age Group (X ₃)	1.342	0.022	62.366	0.000	17.875
Number of Industry (X ₄)	-0.294	0.017	-17.791	0.000	1.026
R Square	0.921				
Std. Error of the Estimate	186.012				

Source: Village Potential (PODES) 2014, processed Integrated Database Update (PBDT) 2015

**Figure 5.** Scatterplot of Unemployment Variable Normality Test**Table 5.** The Improvement Variables that Affect Unemployment

Variables	Coefficient	Standard Error	t	Sig	VIF
(1)	(2)	(3)	(4)	(5)	(6)
Constant	-0.436	3.993	-0.109	0.913	
Graduate (X ₁)	0.806	0.004	207.539	0.000	1.382
Illness (X ₂)	0.960	0.041	23.655	0.000	1.353
Number of Industry (X ₄)	-0.314	0.020	-15.756	0.000	1.026
R Square	0.885				
Std. Error of the Estimate	224.256				

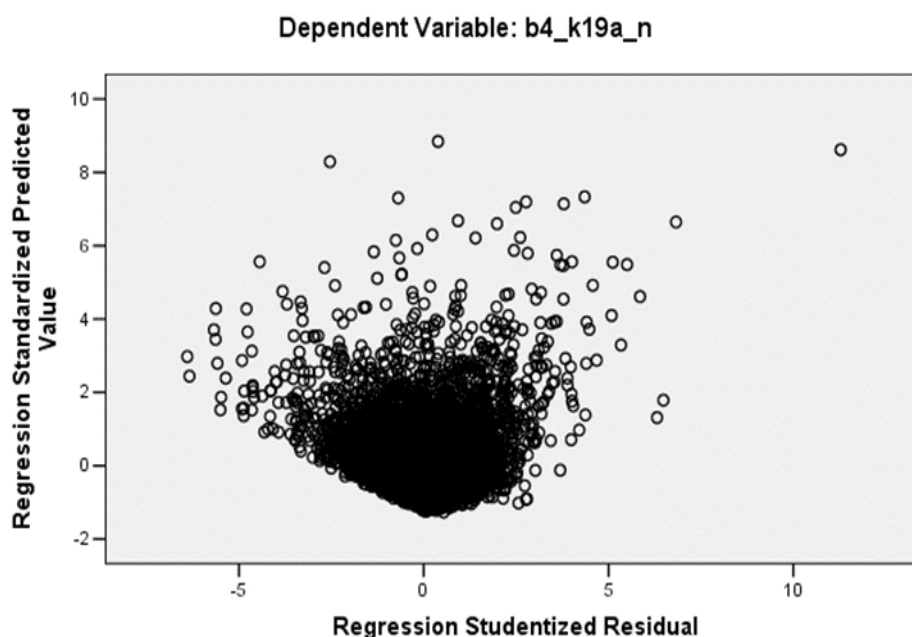


Figure 6. Scatterplot Heteroskedasticity Test of Unemployment Variables

The heteroscedasticity test of the above model shows the presence of spots that spread above and below the number 0 on the Y axis. Thus, it can be concluded that the model does not experience heteroscedasticity.

After passing the classical assumption test, the model was having coefficient of determination (R^2) test to see the magnitude of the effect of independent variables on poverty. From the analysis results of this test, the magnitude of the coefficient of determination obtained score of 0.885, meaning that together the variables of graduate, illness and the amount of industry jointly provide almost all the information needed to predict variations in unemployment.

The results of regression analysis showed the significance value of unemployment variable less than 0.05. This is in accordance with the theory that simultaneously independent variable of graduate, illness and the number of industries have a significant effect on the unemployment rate.

The variable of education completeness significantly affected unemployment. Education can be positioned as a means to improve welfare

through the utilization of existing job opportunities. Thus, with increasing levels of education, it is expected that one can meet the needs of available jobs. In this way, education is expected to help reduce the unemployment rate. The results of Basic Health Researches (Risksdas) in 2007 show that people with chronic illness have a risk of psychiatric disorders. The results also show that the lower the education of people the higher the risk of experiencing mental emotional disturbance, so it will make them difficult to get a job. This is in accordance with the results of regression analysis showing a positive and significant relationship between illness variables with unemployment. Apparently, the actual condition of chronic disease should be detected beforehand through medical tests, not only based on the recognition of respondents.

The number of micro and small industries in a region also had a significant effect on unemployment. The growing number of micro and small industries that develop in a village will open employment so that they can reduce the number of unemployment.

CONCLUSIONS

From the above discussion of the results of multiple linear regression analysis, some conclusions are drawn in the following:

The results of multiple linear regression analysis of poverty obtained information that the F test with $\alpha = 0.05$ obtained a significance value of 0.000. It means that the variables included in the model (building occupancy status, per capita floor space, floor type, room number ratio, cooking fuel, movable assets, non-movable assets, age group, business status of household head, working hours of KRT, KPS and number of slum buildings) simultaneously affect the poverty level.

Partially, the variable of building occupancy status affects poverty. The variables of Floor Capacity per Capita, Floor Type and Room Number Ratio significantly influence and have a positive relationship to poverty. Further, fuel cooking households in the form of firewood and asset variables also have a significant effect on poverty. Additionally, the working status of poor households heads are mostly as workers / laborers or free workers in both the agricultural and non-agricultural sectors. This variable has a positive effect on poverty level. The same thing also goes to the variables of working hour and age group of KRT. The Program Admission Variables (KPS) is closely related to the government's poverty alleviation program. At last, the variable of the number of buildings in slums has a significant effect on poverty.

From the results of regression analysis, it is known that the significance value of unemployment variable is less than 0.05. This is in accordance with the theory that simultaneously, independent variables of graduate, illness and the number of industries have a significant effect on the unemployment rate.

While the partial variable of education completeness has a significant effect on unemployment. Similarly, the number of micro and small industries in a region also has a significant effect on unemployment.

Based on the previous description, some suggestions are given in the following:

For the achievement of RPJMD, the program of poverty alleviation can be organized into several phases, namely short-term and long-term. The short-term poverty alleviation is a strengthening in the increase in people's incomes and maintain price stability in order to avoid a decline in purchasing power. This term can be done more on clusters 1, 2 and 3 by taking into account local conditions. Furthermore, the Long Term Program is primarily focused on the capacity building of human resources both formally and informally with the support of social and environmental life such as education and health and the regulation of population dynamics in suppressing population growth.

Every program of poverty and unemployment alleviation must be measurable and evaluated as well as followed-up quickly and accurately. It also needs to be monitored through the updated integrated database system. It is supposed to be done given that the Poverty Alleviation Program is expected not only to target the poor but also to keep the vulnerable poor population from becoming poor, as the vulnerable population is quite large. The same thing also goes to unemployment in order to anticipate changes in the population of underemployment is large enough.

To further refine the results of the analysis, it is necessary to conduct follow-up studies at the grass root level or information directly from the poor, such as the FGD implementation with the poor from various aspects and sharpen the program and do parallel discussion with all stakeholders. Furthermore, the existing data in this study can also be utilized for further studies to sharpen the results obtained.

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