THE EFFECT OF EDUCATION, PERCAPITA INCOME, AND UNEMPLOYMENT ON POVERTY (CASE STUDY KABUPATEN MALANG 2001-2016)

Minor Thesis

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THE EFFECT OF EDUCATION, PERCAPITA INCOME, AND UNEMPLOYMENT ON POVERTY (CASE STUDY KABUPATEN MALANG 2001-2016)

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ABSTRACT

Welfare is the purpose of the national development. To achieve national welfare, government should reduce poverty by developing education, increasing per capita income and razing unemployment. This study aims to to know the effect of education, per capita income and unemployment on the poverty in Malang district. The analysis used multiple linear method. The results of multiple linear regression found that the education variable has no significant effect on poverty. This indicates that a change in the level of education would not affect the level of poverty. The education variable takes a long period of time to take effect. The per capita income variable had a significant negative effect and the unemployment variable has a significant positive effect, meaning an increase in unemployment will increase the level of poverty.

Key words : education, per capita income, unemployment, poverty

INTRODUCTION

Background of Study

National development aims to promote justice and prosperity for all of countryman. The regions development is conducted sustainably and effectively in accordance to the needs and priorities of each region following the national development plan determined for long term and short term project. The main indicators of successful national development is the decrease of poor population rate.

One of the main criteria for the selection of national development is the mainstay of the sector's effectiveness in decreasing the number of poor population (Pantjar, 2003). By definition, poverty is the inability to meet the minimum standard of living (Kuncoro, 1997).

This research aims to identify issues the cause of poverty and propose solution for poverty, so this research is entitled “The Effect of Education, Per capita Income and Unemployment on Poverty (case study Malang District 2001-2016)”. 
LITERATURE REVIEW

Education

Education, in general, is any planned attempts to influence others both individuals, groups or communities, so they did what was expected by the principals of education (Notoadmojo, 2003).

Per capita Income

According to Kuncoro (2004), per capita income is an indicator to see the purchasing power of an area. Per capita income can be defined as the sum of the value of the goods and services an average of available to residents of a country in a given period (Bibi, 2006).

Unemployment

Unemployment is a resident who does not work but is looking for work or preparing for a new venture or residents who are not looking for jobs because it feels may not get jobs or residents who do not find work because already received work/have a job but have not yet begun work (Abdilaah, 2016).

Poverty

According to Andre Bayo (1981) in Arsyad (2004), poverty is multidimensional as human needs are varied, then poverty has many aspects. Judging from the general policy, the primary aspects of poverty include poor assets, political social organization, knowledge as well as skills; and secondary aspects of the poor will be social networks, financial resources and information. The poverty dimensions are outlined in the form of malnutrition, water, healthy housing, health care, and education.

The Relationship of Education on Poverty

The relation of poverty with education is enormous because education provides people with the ability to thrive through the mastery of knowledge and skills. Education also instills an awareness of the importance of human dignity. It should be a spirit to continue to educate the Nations. The poor population in the context of social education had been systematically developed through empowerment, participation, democratization, confidence, and independence.

The Relationship of Per Capita Income on Poverty

The level of GDP is also determined by its population growth. Where the rate of uncontrolled population growth greatly affects the value of the GDP. Per capita income of the locals gives an overview of the level of welfare (Arsyad, 1999). The person's income will affect a person's ability to pay a variety of charges set by the Government. The higher the GDP per capita of an area, the greater the potential source of the acceptance of the area. The high acceptance of the region, the regional Government is expected to resolve the problem of poverty his territory well.
The Relationship of Unemployment on Poverty

According to Abdillah (2015), Indonesia has a fairly high unemployment faced by young workforce aged 15 to 24 years which is far higher than average unemployment nationwide. Students who just graduated from university and vocational and secondary school students having a hard time finding a job in the national job market. Almost half of the total workforce in Indonesia only have elementary school certificate only. However, in recent years, the trend shows higher diploma unemployment is getting bigger.

RESEARCH METHODOLOGY

The Type of Research

This type of research using quantitative data.

The Scope of Research

To focus on the research on the object to be studied, the author gives the scope of the research that conducted in Kabupaten Malang. This study focuses on the fields of education, per capita income and unemployment.

Dependent Variable

The dependent variable is a variable that affected by independent variable. The dependent variable in this research is poverty (Y).

Independent Variable

- Education (X1)
- Per Capita Income (X2)
- Unemployment (X3)

Type and Source of the Data

This study uses secondary data. The data on education, per capita income and unemployment are obtained from the publication of the Central Bureau of Statistics (BPS) in Malang district. The data used for this study includes data for sixteen years from 2001 to 2016 in Malang District. The dependent variable in this research is poverty while the independent variable in this research is education, per capita income and unemployment.

Method of Data Analysis

Regression Analysis

Here is the estimation of equation model in this study:

\[ Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e \]
Note:
\( Y \) : Variable of poverty
\( X_1 \) : Variable of education
\( X_2 \) : Variable of per capita Income
\( X_3 \) : Variable of unemployment
\( a \) : The number of constant
\( b_1 \) : The regression coefficient variable the level of education
\( b_2 \) : The regression coefficient variable the level of per capita income
\( b_3 \) : The regression coefficient variable the level of unemployment

**Classical Assumptions Test**

In this study, we will use multicollinearity test, heteroscedasticity test, normality test and autocorrelation.

**Normality Test**

Normality test aims to test whether in regression models, the independent and dependent variable have a normal distribution or not (Gozali, 2006). A good regression model has a normal data distribution or close to normal. The basis of decision making is if the data spread around the diagonal line and follow the direction of the diagonal lines indicating patterns of a normal distribution, then the regression models satisfy the assumption of normal.

**Multicollinearity Test**

Multicollinearity is a condition in which between the independent variables in the regression equation are related to each other perfectly. Multicollinearity test is intended to determine whether there is a perfect linear relationship or certainly among all variables in the regression model. To find out multicollinearity in a regression model, it can be seen from the following conditions that must be met (Gozali, 2006):

- Multicollinearity occurs when the value of the VIF (Variant of Inflating Factor) is greater than 10.
- Multicollinearity occurs when the value of the tolerance calculation results obtained is less than 0.1

**Test Heteroscedasticity**

Test heteroscedasticity aims to test whether in regression models has residual variance of inequality from one observation to other observations (Gozali, 2006). Good regression model is the homoscedasticity or heteroscedasticity does not occur

**Test Autocorrelation**

Autocorrelation is used to determine whether the linear regression model has a correlation between error in the period \( t \) with error at period \( t-1 \) (earlier). According to Gozali (2006), the classic model assumes that the element of distraction-related observation is not affected by items disturbance or disorders
associated with other observations. To test autocorrelation in an equation, the value of DW is located between the upper limit (du) and (4-du), then the result shows no autocorrelation positive/negative. Good regression model is a regression that is free of autocorrelation.

**Hypothesis Test**

**Partial Regression Test (t test)**

Partial regression test is the test of partial regression relationship, in order to determine whether there is partial significant influence between the dependent variable with the independent variable in the study.

**Simultaneous test (F Test)**

F test is the testing of regression relationship simultaneously or synchronously between the independent variables on the dependent variable.

**Multiple Determination Coefficient Test (R²)**

Multiple Determination Coefficient Test (R²) could be used to determine the amount of contributions of independent variables (X₁, X₂, and X₃) on the dependent variable (Y).

### RESULT AND DISCUSSION

**Regression Estimation Result**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>β (beta)</th>
<th>t count</th>
<th>Sig.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>9.046</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level Education (X₁)</td>
<td>0.048</td>
<td>0.032</td>
<td>0.313</td>
<td>0.759</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Per capita Income (X₂)</td>
<td>-0.621</td>
<td>-0.584</td>
<td>-4.699</td>
<td>0.001</td>
<td>Significant</td>
</tr>
<tr>
<td>Unemployment (X₃)</td>
<td>0.091</td>
<td>0.486</td>
<td>4.672</td>
<td>0.001</td>
<td>Significant</td>
</tr>
</tbody>
</table>

R = 0.966
R Square = 0.934
F count = 56.718
Sig F = 0.000
α = 0.05

Multiple linear regression model based on multiple regression analysis of the results in the table above can be arranged as follows:
\[ Y = 9.046 + 0.048 X_1 -0.621 X_2 + 0.091 X_3 \]

The regression can be explained as follows:

1. The regression coefficient of education level is positive at 0.048, which means that education levels variable has an effect on the extent of poverty is directly proportional. This means that if an increase in the level of education one unit it will be followed by an increase in the level of poverty by 0.048. For example, if an increase in the educational level is at 10%, then poverty levels will increase by 0.48% or the shortfall of education level by 10%, then poverty levels will decrease by 0.48%.

2. The regression coefficient of per capita income is negative at – 0.621, which means that per capita income variable varies inversely influence on the level of poverty. This means that if per capita income variable increases by one unit, it will be followed by a decrease in the poverty rate by 0.621. For example, if per capita income variable increase by 10%, then poverty levels will decline by 6.21% or if there is a decrease in per capita income variable by 10%, then poverty levels will increase by 6.21%.

3. The regression coefficient of unemployment rate is positive 0.091, it means that unemployment rate variable influence is directly proportional on the level of poverty. This means that if the unemployment rate variable rises by one unit, it will be followed by an increase in the level of poverty by 0.091. For example, if the unemployment rate variable increase by 10%, then the poverty level will increase by 0.91% or if there is a decline in the unemployment variable rate by 10%, then poverty levels will experience increase by 0.91%.

**Partial Regression Test (t Test)**

1. The effect of education level on poverty levels
   The results of statistical tests in table 4.6 shows that t count the education level variable is at 0.313 on sig. t = 0.0759. This indicates that Ho is accepted and Ha is rejected with a significant level at 5%. This means that at partial (individual), level of education variables has no effect on poverty levels. Thus, level of education influential has negative against poverty levels and is rejected.

2. The effect of per capita income against poverty levels
   The results of statistical tests in table 4.6 shows that t count value variable per capita income is - 4.699 on sig. t = 0.001. This indicates that Ho is accepted and Ha is rejected with a significant at 5%. This means that per capita income partial (individual) variable is negative significant on poverty levels. Thus, the negative per capita income level effect on the poverty rate can be accepted.

3. The effect of unemployment rate against the poverty level
   The results of statistical tests in table 4.6 shows that t count value variable of unemployment rate is 4.672 with sig. t = 0.001. This indicates that Ho is rejected and Ha is accepted with significant level at 5%. This means that unemployment rate variable partially (individual) has significant positive effect on poverty levels. Thus, H3: unemployment rate (X 3) has a positive effect on poverty levels (Y) is accepted.
Simultaneous Regression Test (F Test)

F count value is 56,718 with sig. t = 0000. This indicates that Ho is rejected and Ha is accepted with significant levels at 5%. This means that educational level, per capita income and the unemployment rate variable has simultaneous significantly effect to poverty levels.

Multiple Determination Coefficient Test (R²)

To measure the education levels, per capita income and unemployment rate variable on the poverty level is done through multiple determination coefficient test (R²). Based on the results of the calculation as in table 4.7, the value of R² is 0.934 this means that education level, per capita income and unemployment rate variable simultaneously is 93.4% that can affect poverty, while other 6.6% are influenced by other variables not examined.

CONCLUSION AND SUGGESTION

Conclusion

Based on the analysis, the conclusions are as follow:

1. The partial analysis result includes:
   a. Education level have no effect on poverty level; the change on education level will not affect the level of poverty.
   b. Per capita income variable is significantly negative effecting poverty level which means that increment of variable income per capita will lower the level of poverty.
   c. Unemployment rate variable is significant positive effecting poverty levels which means that the increment rate of unemployment will increase the level of poverty.

2. The simultaneous analysis results, it is found that education, income per capita and unemployment rate variable affect significantly to poverty levels in Malang 2001-2016 year.

3. The effect of educational level, income per capita and unemployment rate on poverty in Malang 2001-2016 year amounted to 93.40 percent while the rest of 6.60 percent is explained by other factors not discussed in this research model.

Suggestion

Based on the results of the discussions, there are several suggestions formulated in this study:
1. Although education level does not influence on poverty levels in the near future, but efforts to improve education in the county remains important concern for the unfortunate because the District Government with adequate and quality education can enhance the capabilities and skills to boost welfare.

2. In relation to the per capita income, the effort to improve productivity, particularly in rural communities and the increasing economic empowerment at the family level. The family is an important part in an attempt to increase revenue because, in general, people in Malang run family business (father, mother & children).

3. One of the problems the local Government District of Malang is the job opportunities that often does not suffice the needs. Working abroad is still the choice of most job seekers in Malang. Therefore, efforts to open labor-intensive jobs should be a concern for the Poor as well as to optimize the District agriculture and gardening that requires more human labor.

4. For future researchers interested in the same issues, it is expected and recommended to uncover, and add factors that affect the level of poverty particularly in Malang.
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