The Effect Of Regional Gross Domestic Product, Human Development Index, And Open Unemployment Rate On Poverty
(Case Study East Java 2010-2016)

Pengaruh Produk Domestik Regional Bruto, Indeks Pembangunan Manusia, Dan Tingkat Pengaguran Terbuka Terhadap Kemiskinan
(Studi Kasus Di Jawa Timur 2010-2016)

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ABSTRACT
Poverty is a complex problem, therefore there is a need to suppress and to eradicate poverty that includes many life aspect of the society that have to be done altogether to achieve the optimal result. Regional Gross Domestic Product (GDRP), as one of the factors that affect poverty, whenever it increases, poverty rate should decrease. Not only GDRP, but there are also other factors that affect poverty, and that is health and education that are included into Human Development Index (HDI). HDI is what can be defined as the index that calculates the quality of human resources. And Open unemployment Rate (OUR) is also one of the problem that is directly proportional to the increasing number of poverty.

This study aims to determine how the influence of GDRP, HDI, and OUR as independent variables, and poverty as a dependent variable. This type of research is quantitative. Quantitative research emphasizes the testing of theories through measurement of research variables with numbers and performs data analysis with statistical procedures. The data used is secondary data, by analyzing panel data using panel data regression method. The results showed that GDRP and OUR had positive but not significant effect on poverty, while HDI had negative but significant effect on poverty in East Java.

Keywords : Poverty, Regional Gross Domestic Product (GDRP), Human Development Index (HDI), Open Unemployment Rate (OUR).

ABSTRAK
Kemiskinan merupakan masalah yang kompleks, maka dari itu upaya menekan dan menuntaskan kemiskinan mencakup berbagai aspek kehidupan masyarakat yang harus dilakukan secara bersama-sama agar mendapatkan hasil yang optimal. Produk Domestik Regional Broto (PDRB) merupakan salah satu dari beberapa hal yang mempengaruhi kemiskinan. Meningkatnya PDRB dapat mengurangi tingkat kemiskinan yang ada. Bukan hanya PDRB yang dapat menurunkan tingkat
kemiskinan namun ada juga berbagai faktor yang dapat mengurangi kemiskinan yaitu kesehatan serta pendidikan yang termasuk dalam indikator Indeks Pembangunan Manusia (IPM), IPM merupakan cerminan dari kualitas sumber daya manusia. Dan Tingkat Pengangguran Terbuka (TPT) merupakan salah satu masalah yang berbanding lurus dengan meningkatnya jumlah kemiskinan.

Penelitian ini bertujuan untuk mengetahui bagaimana pengaruh PDRB, IPM, dan TPT sebagai variabel independen, dan Kemiskinan sebagai variabel dependennya. Jenis penelitian ini adalah kuantitatif. Data yang digunakan adalah data sekunder, dengan menganalisis data panel menggunakan metode regresi data panel. Hasil penelitian menunjukan bahwa PDRB dan TPT berpengaruh positif tetapi tidak signifikan terhadap kemiskinan, sedangkan IPM berpengaruh negatif tapi signifikan terhadap kemiskinan di Jawa Timur.

Kata kunci : Kemiskinan, Produk Domestik Regional Bruto (PDRB), Indeks Pembangunan Manusia (IPM), dan Tingkat Pengangguran Terbuka (TPT).

1 INTRODUCTION

Poverty is a classic problem that arises in every country or developing country. Interactive and multidimensional poverty, which includes social, economics, cultural, and other aspects, and can economic growth. Poverty has made millions of children unable to receive education, health-financing issues, savings and investments, and other issues that lead to acts of violence and crime. Everyone, thriving and progressing, continues to fight against poverty.

According to the Central Bureau of Statistics (BPS), poverty is the inability to meet minimum standards of basic needs that include both food and non-eating needs. Meanwhile, according to the National Development Planning Agency (BAPPENAS), poverty is a deficiency situation because of the circumstances that can’t be avoided by someone with the strength they have. So that poverty can we mean someone who has low resources in meeting the needs of life.

Indonesia itself as a developing country actually continues to work in the fight against existing poverty. The government continues to enact all policies that reduce poverty by increasing the economic growth of all sectors ranging from Small and Medium Enterprises (SMEs), infrastructure, health, security, education, Human Development Index (HDI) and improving the quality of Human Resources.
According to the Central Bureau of Statistics (BPS) in 2013, the percentage of poverty in Indonesia reaches 11.47% lift, and decreases in 2014 to 10.96. While from 2015 - 2016 the percentage of poverty in Indonesia continues to decline from 11.13% and 10.70% by the end of 2016. (bps.go.id).

In September 2017, the number of poor people in Indonesia reached 26.58 million people (10.12 percent), decreased by 1.19 million people compared to March 2017 conditions of 27.77 million people (10.64 percent). The percentage of poor people in urban areas in March 2017 of 7.72 percent fell to 7.26 percent in September 2017. While the percentage of rural poor in rural areas in March 2017 of 13.93 percent decreased to 13.47 percent in September 2017. (bps.go.id).

<table>
<thead>
<tr>
<th>Poverty in Indonesia 2013 - 2017</th>
</tr>
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<tbody>
<tr>
<td>Year</td>
</tr>
<tr>
<td>Indonesia</td>
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</tbody>
</table>

If you see Java Island, East Java Province is a province that has a fairly rapid rate of economic growth. In the fourth quarter of 2017, the province with a population of 39 292,972 people is able to achieve economic growth rate of 5.72%. This figure is almost close to the value of national economic growth which reached 5.07%. These results indicate that economic growth in East Java has a good and positive trend.

If you look at Table 1.1, we can see that the percentage of poor people in East Java is in a pretty good trend. In the last 6 years the percentage of poverty has always declined in a fluctuating manner, only in the period of September 2013 and the period of March 2015 that has increased, although its value does not increase far enough. In the period of September 2017 the percentage of poor people in East Java reached the number of 11.20% decreased by 3.07% from March 2011 period.

When compared with the national, East Java province is also fairly good figures. This can be seen in Table 1.1 where the percentage of poor people in Indonesia has a figure of 11.12%, while East Java Province...
has a figure of 11.20% (Graph 1.1) at the end of 2017.

Therefore, the researcher is interested to examine the factors that influence Poverty in East Java using panel data regression analysis from 2010 to 2016. So hopefully the results of this study can provide empirical data in considering the development investment appropriately and effectively. This study is entitled with THE EFFECTS OF REGIONAL GROSS DOMESTIC PRODUCT (GDRP), HUMAN DEVELOPMENT INDEX (HDI) AND OPEN UNEMPLOYMENT RATE (OUR) ON POVERTY (CASE STUDY EAST JAVA 2010-2016)

2. THEORETICAL FRAMEWORK

Poverty

Understanding poverty is generally understood by a problem associated with the economic sector of society, whereas if widely seen poverty can be seen from both social and cultural point of view of the community. Poverty is a problem that is often faced by people where there are conditions of inability to meet the needs of everyday life starting from the fulfillment of board, clothing, and food.

Regional Gross Domestic Product (GDRP)

Regional Gross Domestic Product (GDRP) according to BPS is defined as the amount of added value generated by all business units within a region, or represents the sum of all final goods and services produced by all economic units in a region within a period (Hadi Hasana, 2016).

At the calculation of Regional Gross Domestic Product (GDRP) can use two prices of regional Regional Gross Domestic Product (GDRP) of prevailing prices and Regional Gross Domestic Product (GDRP) at constant prices. Where Regional Gross Domestic Product (GDRP) prevailing price is the value of a good and the service is calculated using the prevailing price for that year, and the Regional Gross Domestic Product (GRDP) of constant prices is the value of a good and the service calculated by the price in a given year which serve as the reference year or base year.

GDRP is the total aggregate of output for the whole economic activity of a region for a certain period (usually per year) without calculating unprocessed sources. Meanwhile according to central bureau of statistic, GDRP...
is the gross value added which comes from economic sectors in each region.

2.3 Human Development Index (HDI)

Human Development Index (HDI) measures the overall achievement of a region or country in the three basic dimensions of human development, namely the length of life, knowledge and a decent standard of living. All three are measured by life expectancy, educational attainment, and per capita expenditure (Hakim, 2004).

If the Human Development Index (HDI) is only seen from per capita expenditure alone, it means only seeing the progress of the economic status of a region / country based on income per year whereas when looking at the social side (education and health), it will be seen a much more diverse dimension related to the quality of life of the community (Hidayat, 2008).

Thus, indirectly, HDI always correlates with people's welfare. In other words, the higher / better each component that make up the HDI also affects the welfare and life of the better society. According to the United Nations Development Program (UNDP), in the Human Development Index (HDI) there are three composite indicators used to measure the average achievement of a country in human development, namely: long life, as measured by life expectancy at birth; education measured by the average length of school and literacy rate letters population aged 15 years and over; living standards as measured by per capita expenditures that have been adjusted to purchasing power parity. The value of this index ranges from 0-100

Open Unemployment Index

Sukirno (2000) Unemployment is a situation in which a person belonging to the workforce wants to get a job but has not been able to get it. A person who does not work, but does not actively seek employment is not classified as unemployed. Unemployment can occur due to unbalance in the labor market. This shows the amount of labor offered exceeds the amount of labor demanded.

According to the Central Bureau of Statistics (BPS) in the employment indicator, unemployment is unemployed but is looking for a job or is preparing a new business or a resident who is not looking for a job because it has been accepted to work but has not yet started work. (Bps.go.id)
Mankiw (2003) Unemployment is a macroeconomic problem that affects people directly and is the most severe. For most people, job loss means a decline in living standards and psychological distress. So it is not surprising that unemployment is a topic that is often discussed in political debates and politicians often claim that the policies they offer will help create jobs.

Sukirno (2000) classify unemployment based on its characteristics, divided into four groups:

1. Open Unemployment
   This unemployment is a workforce that really does not have a job. Unemployment of this type quite a lot because it has not got a job when it has tried maximally and as a result of the increase of job vacancy is lower than the increase of manpower. The effects of this situation in a long period of time they do not do a job. So they are unemployed real and half the time, and therefore called open unemployment. Open unemployment can also manifest as a result of declining economic activity, from technological advances that reduce the use of labor, or as a result of the decline of an industrial development.

2. Hidden Unemployment
   Unemployment is a workforce that does not work optimally for a reason. One of them is because of the small companies with too much labor so to run their activities inefficient. The excess labor used is classified under hidden unemployment.

3 RESEARCH METHODOLOGY

The Scope of Research
Quantitative research is a much-demanded study using numbers, from data collection, data interpretation and analysis results (Arikunto, 2002). This type of research is used to see the factors that affect the Regional Gross Domestic Product (GDRP), Human Development Index (HDI), Open Unemployment Rate (OUR) on the East Java Province. Next step, data will be processed using the panel data regression model and in the process using Eviews 9.

Type and Data Source

In this research type of data used is secondary data. The secondary data source that can be in this research is the publication and the Central Bureau of Statistics (BPS). As well
as resources such as journals and other research that are still related to this research.

This study uses secondary data in the form of Poverty data rate, Regional Gross Domestic Product (GDRP), Human Development Index (HDI), Open Unemployment Rate (OUR) in East Java Province. In this study the researchers used journals and articles about the economy in conducting scientific studies.

In this study researchers used data with the time span of 2010 - 2016 to calculate the effect Of Regional Gross Domestic Product (GDRP), Human Development Index (HDI), Open Unemployment Rate (OUR) towards Poverty in East Java Province from 2010-2016.

Data Collect Method

The method used in this study is the method of documentation is supporting data collection technique that could be taken from journal, letter, report, theories and books. Those forms of documentation can help the author to find out related data. Some references book were obtained from Central Library of University of Brawijaya, meanwhile, other sources were taken from online source.

Oprational Definition and Variable Measurement

Dependent Variable

Dependent variable is influenced by the other variables. It is influenced by independent variables (Gujarati, 2007). It is also known as criteria variable. In this research, The Dependent Variable is Poverty Rate (Y), the data obtained from Central Bureau of Statistics (BPS) which is viewed by percentage.

Independent Variables

Independent variable is not influenced by other variables (has certain value). It influences or causes the value of dependent variables (Gujarati, 2007). Know as Variable Indicator. In this research, the independent variables are:

1. Regional Gross Domestic Bruto (PDRB) – (X1)

Regional Gross Domestic Bruto (PDRB) is defined as the amount of added value generated by all business units within a region, or represents the sum total of all goods and services end produced by all economic units in a region. All data of Gross Regional Domestic Product (GDP) obtained in
East Java Province, are issued in billion rupiah at constant prices.

2. Human Development Index (HDI) – (X2)

The definition of Human Development Index (HDI) is a comparative measurement of life expectancy, literacy, education and living standards for all countries around the world. HDI is used to classify whether a country is a developed country, a developing country and also measures the influence of economic policy on quality of life. All the HDI data obtained in East Java province in this study in percent (%).

3. Open Unemployment Rate (OUR) – (X3)

The unemployment rate is the number earned from the number of unemployed people divided by the labor force at times by 100 percent. unemployment alone means the number of someone who has been classified in the active workforce in finding a job at a certain wage level, but can not get the job he wants. All unemployment rates in this study were in percent (%).

Data Analysis Method

Data panel

Panel data is a combination of time series data and cross section data, where the same cross section unit will be measured at different times. Analysis of panel data is used to observe the relationship between dependent variable datum and one of independent variables.

According to Gujarati (2003), in its use of panel data has several advantages statistically as well as in economic theory, among others:

1. The panel data is capable of explicitly accounting for individual heterogeneity by allowing individual-specific variables to allow panel data to be used to test and build more complex behavior models omitted-variables secara substantia.

2. If the specification effect is significantly correlated with other explanatory variables, then the use of data panels will substantially reduce the omitted-variables problem.
3. Panel data based on repeated cross-section observation so that panel data method is suitable for study of dynamic adjustment.

4. The higher number of observations has implications for panel data that are more informative, more varied, the collinearity between variables is less likely, and the degree of freedom so that more efficient estimates can be obtained.

These advantages have implications for the unnecessary testing of classical assumptions in panel data models (Gujarati, 2003; Maddala, 1998). This study uses Regression Data Panel test to determine the effect of independent variables to the dependent variable. The general form of the Data Panel Regression model is:

\[ Y = a + b_1 \log X_1 + b_2 \log X_2 + b_3 \log X_3 + e \]

Where:

\( Y \) : Poverty
\( a \) : Constant
\( b_1, b_2, b_3 \): Determination Coefficient
\( X_1 \) : Regional Gross Domestic Product (GDRP)
\( X_2 \) : Human Development Index (HDI)
\( X_3 \) : Open Unemployment Rate (OUR)
\( E \) : Error

**Panel Data Regression Method**

Fixed Effect Model (FEM)

Gujarati (2012) stated that a model, where the intercepts are difference and the slopes are constant for every subject, is called as fix effect model. Fixed Effect Model (FEM) is a regression method that estimates panel data by adding dummy variables. This model assumes that there are different effects between individuals. This difference can be accommodated through differences in the intercept. Therefore, in the fixed effect model, each individual is an unknown parameter and will be estimated using the dummy variable technique.

**4 FINDINGS AND DISCUSSIONS**

This chapter contains findings and discussions about the research. Finding includes the description of the research object and the result is presented in forms of texts, tables, pictures, or charts. Conversely, discussion explains the result comprehensively using the author’s interpretations or opinions that may
strengthen, against, or in line with other researchers.

**Estimated Panel Data Regression Model**

In this sub-chapter, author would like to analyze and interpret the result of statistical estimation model. It is used to answer the research hypothetically by using panel data regression model.

Author uses panel data regression because the related data combines crosssection and time series model. Panel data regression has some models which will be tested in the equation of the framework, they are (1) Common Effect, (2) Fixed Effect Model, and (3) Random Effect Model. Eviews 9 is used as a tool to measure panel data regression.

1. **Common Effect Model**

Common effect model (CEM) is the simplest method. In this method, the data is merged only regardless of the individual dimension as well as the time dimension.

2. **Fixed Effect Model**

Fixed effect model is an approach where the intercepts are difference while the slopes are constants (Widarjono, 2009). The intercepts are difference because we assume that every cross section has its own characteristic. In order to get the differences, fixed effect model uses Least Square Dummy Variables (LSDV). The estimation is:

\[
Y = 21.739 + 0.019 \times X_1 - 4.627 \times X_2 + 0.019 \times X_3
\]

Table 4.2

Fixed Effect Model Estimation

Source: data was processed by Eview 9

3. **Random Effect Model**

Random effect is used in order to solve the disadvantage of fixed effect. In random effect, the method of the estimation uses Generalized Least Square (GLS). This is the only model that does not use the OLS estimation.

In random effect model, the amount of
cross section data should be bigger than the variables of research. The estimation is:

\[ Y = 16.428 + 0.019X_1 - 3.366X_2 + 0.017X_3 \]

**Best Estimated Panel Data Regression Model**

In this sub-chapter, author would like to determine the best estimation of panel data regression in a model. The best estimation of a model can be determined by examining Chow test (common vs fixed effect), Hausman test (random vs fixed effect), and Lagrange Multiplier (common vs random effect). The result is presented in the table below:

1. **Chow test**
   
   Uji Chow test determines the best model between common effect model and fixed effect model. (Widarjono, 2007) By using EviewS 9, Chow test is done by seeing the value of prob – F in Fixed Effect Model that is compared to the value of \( \alpha = 5\% \) or 0.05. Hence, the hypothesis of the equation becomes:

   \[ H_0 = \text{common effect model, accepted (when prob – F value > } \alpha) \]
   
   \[ H_1 = \text{fixed effect model, accepted (when prob – F value < } \alpha) \]

   the best choice between common effect model and fixed effect model has been determined. Prob-F is 0.000000 or less than \( \alpha (5\%) \) which means that \( H_1 \) (use fixed effect model) is accepted. Hence, between common effect and fixed effect model, fixed effect model is the best one.

2. **Hausman test**
   
   Hausman test determines the best model between fixed effect model and random effect model. By using Eviews 9, Hausman test is done by seeing the value of prob-chi in Random Effect Model that is compared to the value of \( \alpha = 5\% \) or 0.05. Hence, the hypothesis to determine the best model between Fixed Effect Model and Random Effect Model as follow:

   \[ H_0 = \text{random effect model is accepted (when prob-chi value is more than } \alpha) \]
\(H_1\) = fixed effect model is accepted (when prob-chi value is less than \(\alpha\))

the best choice between fixed effect model and random effect model has been determined. Prob – chi is 0.0038 or less than \(\alpha\) (5%) which means that \(H_1\) (use fixed effect model) is accepted. Hence, the best estimations model is fixed effect model.

**Multicollinierity**

Multicollinearity is classical assumption of correlation between variables in the model. According to Gujarati (2012), the high correlation between independent variables is shown by value of more than 0.80.

<table>
<thead>
<tr>
<th>Variables</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>1.000000</td>
<td>0.157093</td>
<td>0.181578</td>
</tr>
<tr>
<td>X2</td>
<td>0.157093</td>
<td>1.000000</td>
<td>0.570821</td>
</tr>
<tr>
<td>X3</td>
<td>0.181578</td>
<td>0.570821</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test</th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan LM</td>
<td>2535.368</td>
<td>703</td>
<td>0.0000</td>
</tr>
<tr>
<td>Pesaran scaled LM</td>
<td>47.85407</td>
<td></td>
<td>0.0000</td>
</tr>
<tr>
<td>Pesaran CD</td>
<td>36.70575</td>
<td></td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: data was processed by author using Eviews 9

If the number shows less than 0.8 then the variable is not exposed to multicollinerity, and if otherwise more than 0.8 then the multicollinerity. All independent variables have a result of 0.8 which means there is no multicollinerity. Or between independent variables are not interconnected.

**Heteroscedasticity**

Heteroscedasticity is one of the classical assumptions, in which the variant is no longer constant. It tends to occur when there is cross section data in the size of sample. It can be examined by looking at the value of prob – chi compared to \(\alpha\) (5%).

Prob – chi2 is 0.0000 or more than \(\alpha\) (5%), which means that the model is passed.
from heteroscedasticity assumptions. In another way, the graph of diagnostic plots in scattered (residual vs fitted) should not make some patterns. The plots are spreads around 0, so that there is not heteroscedascicity.

**Economic Analysis.**

**The Effect of Regional Gross Domestic Product (GDRP) on Poverty**

From the result of data of regression research of fixed effect model panel (FEM) data, it can be seen that the influence of Regional Gross Domestic Product (GDRP) on Poverty in East Java Province shows positive influence is not significant, this means poverty in 2010 - 2016 is directly proportional to the increase Regional Gross Domestic Product (GDRP) in East Java Province. Increasing the number of GDRP will Increase Poverty in East Java Province. In because GRDP is not significant then if GRDP Increase 1% then poverty will increase by 0,019%.

The results have similar results with previous research Mufid (2014). Regional Gross Domestic Product (GDRP) has a positive but insignificant influence on the number of poor people in Indonesia, an increase in Regional Gross Domestic Product (GDRP) is necessary and optional, but not sufficient to overcome the problem of poverty. The problem is not only how to increase the growth of GDRP, but what needs to be paid attention is how the distribution and distribution, so that the results of growth itself can be felt by all levels of society Mufid Research Result (2014) in line with the results of this research.

**The Effect of Human Development Index (HDI) on Poverty.**

From the result of data of regression research of fixed effect model panel (FEM) data, it can be seen that the influence of Human Development Index (HDI) toward Poverty in East Java Province shows significant negative effect, this means poverty in 2010 - 2016 is inversely proportional to Human Index Development (HDI) in East Java Province. Increasing the number of HDI will Reduce Poverty in East Java Province. Increasing the number of HDI will Reduce Poverty in East Java Province. In because HDI is significant then if HDI increases 1% then poverty will decrease by 4.62%.

The results of research have similar results with previous studies of Mufid (2014)
which indicates a decrease in poverty when HDI rises resulting in increased productivity of the work of the population raising income. With an increase in income will cause the community to meet its needs and can reduce the level of poverty. Regression results are also supported by the rise of HDI Indonesia from year to year so that the increase in HDI can reduce the poor in Indonesia. And the results of Mufid's research (2014), in line with the results of this study.

**The Effect of Open Unemployment Rate (OUR) on Poverty.**

From the result of data of regression research of fixed effect model panel (FEM) data, it can be seen that the influence of Open Unemployment Rate on Poverty in East Java Province shows the positive influence is not significant, it means poverty in 2010 - 2016 is directly proportional to the increase of Open Unemployment Rate (OUR) in East Java Province. Increasing the number of OUR will Increase Poverty in East Java Province. Increasing the number of OUR will Increase Poverty in East Java Province. In because the OUR is not significant then if the OUR increase 1% then poverty will increase by 0.019%.

The results of research have similar results with previous research Ni Ketut Eni Endrayani, Made Heny Urmila Dewi (2016) Unemployment does not affect poverty in Bali Province. Unemployment occurs not from low income but feels incompatible with the types of jobs available, so unemployment is only awaiting the kind of work that suits them. And the results of research by Ni Ketut Eni Endrayani, Made Heny Urmila Dewi (2016) in line with the results of this study.

**Interpretation**

Interpretation shows the explanation of independent variables in influencing the dependent variables. Through the interpretation, reader can really understand about the significant level of influences. In simple way, interpretation tells the result of the models or the estimations. By obtaining the result of panel data regression, the estimation of research becomes:

**Table 4.7**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Prob - t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>0.019458</td>
<td>0.1946</td>
<td>Not Significant</td>
</tr>
<tr>
<td>X2</td>
<td>-4.627923</td>
<td>0.0000</td>
<td>Significant</td>
</tr>
</tbody>
</table>
**Estimation Result Interpretation**

According to the result of the estimation above, the only variable that is significant is Human Development Index (HDI) because the probability is 0% which is lower than the to variable error that is 5%. As for the other 2 variables that have their probability of 19% for Regional GDP and 64% for Open Unemployment Rate, because their value is higher then 5%, the 2 variables are not significant.

1. Although 2 out of 3 variables are insignificant, there is still the need to interpret the coefficient. Everytime there is an increase in Regional GDP by 1 billion, the poverty will be increase by 0.019%.

2. Although 2 out of 3 variables are insignificant, there is still the need to interpret the coefficient. Everytime there is an increase in Human Development Index (HDI) by 1%, the poverty will be decrease by 4.62%.

3. Although 2 out of 3 variables are insignificant, there is still the need to

**Hypothesis Test**

1. As the result of the estimation shows that GDRP is not significant, therefore the accepted hypothesis is $H_0$, where GDRP does not have any effort on poverty.

2. As the result of the estimation shows that HDI is significant, therefore the accepted hypothesis is $H_1$, where as HDI does have any effort on poverty.

3. As the result of the estimation shows that OUR is not significant, therefore the accepted hypothesis is $H_0$, where as OUR does not have any effort on poverty.

**5 CONCLUSION**

**Conclusion**

By estimating test and analysis data about The impact of GDRP, Human Development Index, Open Unemployment Rate toward Poverty in East Java 2010-2016, the
hypothesis have been proven that one of the three independent variables are the only one that is significant. The details can be seen as followed:

1. There is a positive correlation between GDP and poverty, but unfortunately, the result showed that the correlation is insignificant, therefore, the accepted hypothesis is Null Hypothesis whereas there is no relation between GDP and poverty. The result showed that the probability of GDP affecting poverty is more than the acceptable error that is 5%, which is 19%. If the probability is not insignificant, then whenever there is an increase in GDP by 1 billion, then the poverty rate will be increased by 0.019%.

2. There is a negative correlation between Human Development Index (HDI) and poverty, but unfortunately, the result showed that the correlation is significant, therefore, the accepted hypothesis is H1 whereas there is no relation between Human Development Index (HDI) and poverty. The result showed that the probability of Human Development Index affecting poverty is lower than the acceptable error that is 5%, which is 0%. Whenever there is an increase in HDI by 1%, then the poverty rate will be decreased by 4.6%.

3. There is a positive correlation between Open Unemployment Rate and poverty, but unfortunately, the result showed that the correlation is insignificant, therefore, the accepted hypothesis is Null Hypothesis whereas there is no relation between Open Unemployment Rate and poverty. The result showed that the probability of Open Unemployment Rate affecting poverty is more than the acceptable error that is 5%, which is 64%. If the probability is not insignificant, then whenever there is an increase in GDP by 1 billion, then the poverty rate will be increased by 0.19%.

4. LIST OF BIBLIOGRAPHY


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