Poverty Determination Analysis In Seventeen Districts With The Highest Poverty Rate In East Java

Moh. Faizin[1]*, Muh. Najib Amril Huda[2]

[1] Institut Agama Islam Negeri Ponorogo, Indonesia, faizin@iainponorogo.ac.id

[2] Institut Agama Islam Negeri Ponorogo, Indonesia, najibamril22@gmail.com

Article Info	Abstract
	Poverty has, until now, become an endless issue when discussed. This study aims to test and analyze several macroeconomic variables in the form of GRDP, open unemployment, minimum wage, and human development index about the poverty rate in seventeen districts in East Java with the highest poverty rate. By using panel data regression analysis and Eviews as the analysis tool, the results showed that partially only HDI had a significant effect on poverty. In contrast, the other three dependent variables showed the opposite result. The regression results also showed that the influence of four variables simultaneously affected poverty. The results of this research can be a reference in determining government policies at the central and regional levels to reduce the poverty rate in each region.

INTRODUCTION

Poverty is an important parameter in measuring the success and failure of development in an area or country (Berutu & Usman, 2018). On the other hand, advancing the general welfare is also part of the goals of the Indonesian state (Bintang & Woyanti, 2018). So far, policies on poverty reduction tend to be general in nature and apply to the entire region. Poverty reduction is still often dominated by the government and has an impact on the lack of initiative and sensitivity in society (Harmes et al., 2017).

The economic inequality that arises in society is due to imbalances in the equitable distribution of development outcomes. High economic growth is not a major indicator in the successful economic performance of a region. GRDP itself is considered as the sum of the added value of all business units in an area, in another sense GRDP is the sum of the final value of goods and services. Todaro explained that although economic growth is not the answer to every economic problem, but economic growth has an important role in the solution to alleviate the poverty of a region (Todaro, 2013).

Absolute poverty is caused by the inability of people to meet primary needs (clothing, food, shelter), not only due to the absence/lack of income they receive, but also due to fluctuations in economic conditions. The absence of income due to unemployment makes a person no longer sufficient for the needs of daily life.
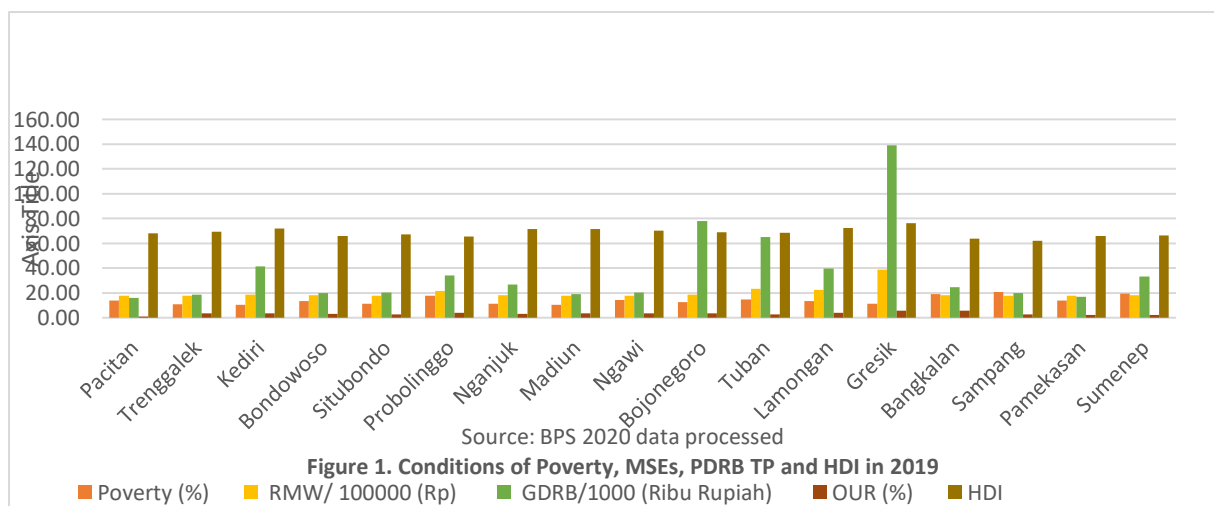
The fundamental problem that exists in poverty-related communities is the inability to meet basic needs, such as health and food and clothing education (Fithri & Kaluge, 2017). The inability to meet basic needs is due to lack of assets and income. This is an important reason how the government plays a role in maintaining the ability of people's purchasing power by implementing a minimum wage policy. The policy on the minimum wage is expected to be able to provide guarantees for the sufficiency of basic needs for each worker, so that later it can have an impact on reducing the poverty rate in an area. Research conducted by (Yakışık et al., 2017), results shows that a large number of studies have mainly focused on trying to better understand the attitudes of the poor to poverty, but fewer have looked at how poor people perceive poverty. From a different point of view, the results of a study conducted by (Hapazari & Loubser, 2021), show that the majority of men and women agree that poverty is caused by political instability. among the ways for both the short term and the long term in dealing with unemployment such as when there is an economic slowdown. With increased FDI, lending and capital market optimization, as well as private sector development (Kusuma & Muthmainnah, 2022).

The study shows that GRDP is very important in influencing the economy. The results of research conducted by (Ehigiamusoe et al., 2021), show that GDP has a positive impact on financial developments across all panels. However, there are differences in the results for each group of people with different incomes, it is found that there is a positive impact on high and middle-income groups while the impact is not significant on low-income groups. In other conditions, the results of the study show a different reality. The late twentieth century saw positive growth rates in some regions despite deteriorating economic conditions in other parts of the world. The international community was forced to face the reality that economic

growth may not always be good for the poor, and international institutions began to shift their focus from development as growth towards poverty, first in terms of inequality and then towards a broader understanding of what is happening. meant to be poor. This shift has occurred at different rates, in different ways, over the last three decades (Bach & Morgan, 2020). Recent studies show that there are other alternatives in reducing the level of GRDP in a region, a study conducted by (Galimberti, 2020), sows that Overall, there has been found evidence to support the use of night light data to estimate GDP growth.

In addition to the lack of income and assets, another cause of poverty is the low quality of existing human resources. The low quality of human resources has an impact on low productivity. In turn, low productivity also has an impact on the lack of income which then leads to an increase in the poverty rate (Heriansyah et al., 2018). The quality of human resources of a region can be known by looking at the value of the Human Development Index (HDI). The condition of the quality of human resources is reflected in the magnitude of the human development index (Gravelle, 2020). inequality not only causes economic backwardness but also seems to cause human backwardness (Castells-Quintana et al., 2019).

Today's unemployment is still a challenge, especially for countries with very large population numbers (Bari et al., 2021) (Bohlmann et al., 2021). Internationally defined standards of understanding mean that some people who have entered the world of work and who are somewhat actively looking for work may not find the job they want, or those who find it impossible to find work and are looking for work (previously registered for work) and at the time the same feel will not be able to find a job (Sayifullah & Gandasari, 2016). The results of research in certain regions of the country have different results. For example, a study conducted by (Bawazir et al., 2022) shows that Middle Eastern countries have experienced a decline in female labor force participation over the last three decades. This study empirically investigates the possible determinants of female labor force participation in Middle Eastern countries. East Java as a fairly strategic province in Indonesia. East Java alone consists of 38 regencies/cities, with a population of almost 40 million people. The size of the area and the large number of people are great potentials as well as making East Java faced with economic and social problems. BPS data states that the poverty rate in East Java is 4,112,250 people or around 10.37% of the total population.

Source: BPS 2020 data processed

Figure 1. Conditions of Poverty, MSEs, PDRB TP and HDI in 2019

■ Poverty (%)   ■ RMW/ 100000 (Rp)   ■ GDRB/1000 (Ribu Rupiah)   ■ OUR (%)   ■ HDI

In Figure 1, it can be seen that there is an interesting phenomenon from the existing poverty data, of the 38 districts and cities there are several regions with a percentage of the number of poor people of more than 10%, seventeen districts in East Java that have a high poverty rate when compared to other districts consisting of; Sampang Regency 20.71%, Sumenep Regency 19.48%, Bangkalan Regency 18.90%, Probolinggo Regency17.78%, Tuban Regency 14.58%, Ngawi Regency 14.39, Pamekasan Regency 13.95%, Pacitan Regency 13.67%, Bondowoso Regency 13.33% and Lamongan Regency 13.21%, Bojonegoro Regency 12.38%, Gresik Regency 11.35%, Nganjuk Regency 11.24%, Situbondo Regency 11.20%, Trenggalek Regency 10.98%, Madiun Regency 10.54% and Kediri Regency 10.42%. This inequality is quite far apart when compared to the poverty rate in East Java and the national poverty rate (Provinsi Jawa Timur Dalam Angka 2020, 2020).

The data shows that there is a gap between theory and existing social facts. It can be seen that in Pacitan Regency the unemployment rate is relatively small while the poverty rate is quite high. Another fact is also seen in Gresik district, macroeconomic conditions in Gresik district are relatively better when aligned with other districts. This can be seen from the value of RMWs and GRDP which are quite high but the poverty rate is also quite high. The same can also be seen in tuban, Bojonegoro Lamongan and Kediri districts, the level of RMWs and GRDP is quite high and poverty is also quite high.

Research that discusses poverty has been widely carried out, for example (Ramdhan et al., 2018) research mentions that the variables of GRDP, education level and RMW have a direct impact on poverty, while inflation has no effect. The same goes for Romi and Umiyati's research. The results showed that wages had an effect on poverty (Romi & Umiyati, 2018). While the research of Susanto et al. The results of this study explain that inflation affects poverty but is not significant (Susanto et al., 2018). The similarity of this study is in the unemployment variable, while the difference with this research lies in the use of education and inflation variables, as well as the use of different methods.

Next is the research conducted by (Zuhdiyaty & Kaluge, 2017). The conclusion obtained is that the HDI variable has an influence on poverty, while the OUR has no effect. While the research of (Berutu & Usman, 2018), the results show that GRDP has a significant impact on poverty. The difference from this study is the use of independent variables in the form of small industrial investments and the number of people. (Bintang & Woyanti, 2018) the results of the study showed that GRDP had a significant positive effect on poverty. The difference with this study is the use of independent variables in the form of school length, health and unemployment. Furthermore, research conducted by Purnama, the results showed that HDI had a significant positive effect on poverty and unemployment had a significant negative effect on poverty (Isa et al., 2019).

Many studies that discuss poverty show that the results of research tend to be inconsistent, on the other hand, in previous studies also did not pay attention to the macro conditions of each region and immediately took the entire area that existed in one existing area. Interestingly, in contrast to the previous research, this study analyzes several macroeconomic variables (Gross Regional Domestic Product (GRDP), Open Umplyment rate

(OUR), Regional Minimum Wage (RMW) and Human Devwlopment Indeks (HDI)) which are considered to affect fluctuations in the poverty rate that occur in seventeen districts with the highest poverty rates in East Java.

RESEARCH METHOD

This type of research is quantitative research with cross section and time series data so that panel data regression analysis must be used. The research sites are seventen districts in East Java province with the highest poverty rate. The seventen districts are Pacitan, Trenggalek, Kediri, Bondowoso, Situbondo, Probolinggo, Nganjuk, Madiun, Ngawi, Bojonegoro, Tuban, Lamongan, Gresik, Bangkalan, Sampang, Pamekasan, Sumenep. Periode this study by using secondary data from 2011 to 2021 (Gross Regional Domestic Product (GRDP), Open Umplyment rate (OUR), Regional Minimum Wage (RMW) and Human Devwlopment Indeks (HDI)). The stages in the panel data regression analysis consist of:

Model selection

Panel data estimation can be done in three options, firstly the Common Effect (CEM) model, the second the Fixed Effect (FEM) model and the third is the Random Effect Model (REM). The three models were model selection was carried out using the Chow test (to determine the CEM or FEM model), the Hausman test (to determine the FEM or REM model) and the Lagrange Multiplier test (used to determine the CEM model or REM model).

Classical Assumptions

Classical assumption testing is divided into Normality test, Autocorrelation test, Heteroskedasticity test and Multicoliniarity test.

Model Eligibility

The Eligibility of the model in regression is carried out to find out the independent variables in exerting an influence on the bound variables. There are two approaches to knowing the impact of independent variables on bound variables. The first is by using the t test and the second F test is to use the coefficient of determination test. The test carried out to see the influence on each of the independent variables (partial) the test was carried out using the t test while in seeing the overall influence of the independent variable simultaneously was carried out using the F test. While the coefficient of determination was used to reflect the degree of magnitude of the variation in the influence of the entire independent variable in exerting an influence on the bound variable.

Model Interpretation

If the selection of the right model has been carried out, testing classical assumptions and so on, then the last stage is to interpret the existing model. Interpretation is carried out by looking at regression coeficent numbers including numbers and signs on the coefficient. The magnitude of the number indicates the value of the equation while the sign indicates the relationship of the two variables that are positive or negative.

RESULT AND DISCUSSION

In the regression of panel data, the model selection stage is carried out with three stages of testing. Here are the stages of testing:

Chow Test

The first Chow test. The Chow test is used to choose between the most appropriately used Fixed Effect or Common Effect model. Based on Table 1, it shows the chow test results obtained a chi-square cross-section probability value of 0.0000 or less than = 5% (0.00000 < 0.05) so that H0 rejected. this suggests that the model used in hypothesis testing is a Fixed model Effect.

Table 1. Chow Test Results.

. Effects Test	. Statistics.	d.f.	Prob.
. Cross-section F	22.627077	(16,165)	0.0000
. Cross-section Chi-square.	216.005173	16	0.0000

Source: Data. processed 2022.

Hausman Test

The next stage in the selection of the model is carried out using the Hausman Test. In the Hausman Test, it is used to determine the most appropriate choice Fixed model, Effect or Random Effect model used in estimating panel data. Here are the Hausman test result inTable 2. The hausman test results are known probability values (Prob.) of 0.1569 which means that it is greater than the significance level = 5% (0.1569 > 0.05), then H0 is rejected. So the conclusion for the model that is most considered appropriate is the Random Effect model.

Table 2. Hausman Test Results.

Test Summary.	Chi-Sq. Statistics.	Chi.-Sq. d.f. .	Prob.
Cross-section.	6.628260	4	0.1569

Source: Data. processed 2022

Langrange Multipier Test

The next test is the Langrange Multipier test. The Langrange Multipier test in this test is carried out in determining the choice of the Common Effect or Random Effect model that is most appropriately used in estimating panel data. Table 3, the results of the Langrange Multipier test using Eviews 10 obtained a probability value (Prob.) of 0.0000 which means that it is smaller than the significance level = 5% (0.00000 < 0.05), then H0 is accepted. So the correct approach of the panel data model is the Random Effects model.

Table 3. Multipier Langrange Test Results

Breush-Pagan.	Prob.
356.8695	0.0000

Source: Data processed 2022

Test of Classical Assumptions

The regression panel data provides alternative models, Common Effect, Fixed Effect and Random Effect. The Common Effect and Fixed Effect models use the Ordinary Least Squares (OLS) approach in their estimates, while Random Effects uses Generalized Least Squares (GLS) as estimates.

Classical assumption tests used in linear regression with the Ordinary Least Squared (OLS) approach include linearity, autocorrelation, heteroskedasticity, multicholinearity and normality tests. However, not all classical assumption tests should be performed on every linear regression model with the OLS approach.

Linearity tests are hardly performed on any linear regression model. Because the model is linear. Even if it has to do it yourself, just to see how far the degree of linearity is. Autocorrelation only occurs on time series data. Autocorrelation testing on data that is not a time series (cross section or panel) will be useless or possibly meaningful. Multicholinearity needs to be performed when linear regression uses more than one independent variable. If there is only one independent variable, then multicholinearity is unlikely.

Heteroskedasticity usually occurs in cross section data, where panel data is closer to the characteristics of cross section data than time series data. The normality test is not essentially a REQUIREMENT of BLUE (Best Linear Unbias Estimator) and some opinions do not require something to be met. From the above it can be said that in the regression data panel not all the tests of the classical assumptions that exist in the OLS method are used, only multicholinearity and heteroskedasticity are required.

According to Nachrowi and Mahyus Eka, the autocorrelation test has only one value in 1 regression model. If in one model there are several values (results) of an autocorrelation test (e.g. DW) then the test is no longer valid. The results of the autocorrelation test will change if the order of the data is changed (in this case it leads to a cross-section).

Whereas time-continuous data has only one possible sequence of data (monthly/yearly data sequence) of other periods does not, while cross-sectional data and panel data have a sequence of sequences. If you perform an autocorrelation test on a linear regression of panel data, then the autocorrelation test results are inaccurate. It is for this reason why the Autocorrelation test is not mandatory for the OLS and GLS approaches. The following is presented in Table 4 as an explanation of the required classical assumption test requirements on panel data with three model approaches.

Table 4. Test classical assumptions on Panel data.

Test Prerequisites	OLS (FEM & CEM	GLS (REM)
Normality	Not	Yes
Heteroskedasticity	Yes	Not
Multicholinearity	Yes, if the independent variable is more than 1	Yes, if the independent variable is more than 1
Autocorrelation	Not	Not

Source: processed data 2022

Normality Test

The normality test is used to find out whether the data is normally distributed or not. The normality test can be seen by looking at the p-value on the P-plot test. The data can be said to be normally distributed if the p-value is more than 0.05. In this normality test, it can be seen that the data is normally distributed.
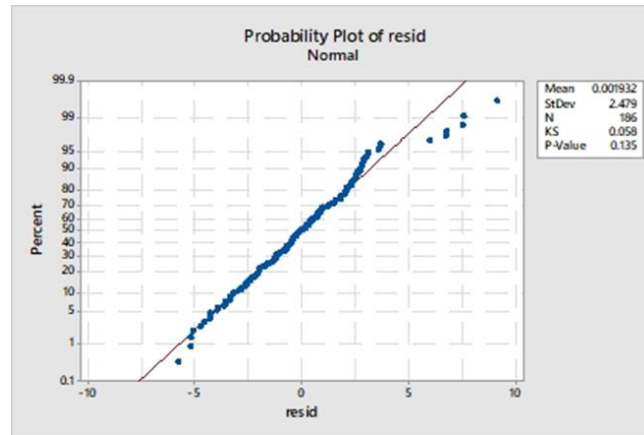
Source: Data processed 2022

Figure 2: Normality Test Results.

Figure 2, the normality test results are known to have a probability value of 0.135 or more than a significance of 0.05 (0.135 > 0.05), so it can be said that the data is normally distributed.

Multicollinearity Test

In multicholinearity testing, it will be possible to find out whether there is a correlation between independent variables. If the value of P > 0.8 means that there is multicholinearity between independent variables. Table 5 of the multicholinearity test results, by looking at the P value between all dependent variables < 0.8, it can be said that there is no multicholinearity problem.

Table 5: Multicollinearity Test Results.

	HDI	GRDP.	OUR.	RMWs
HDI	1.000000			
GRDP	0.507505	1.000000		
OUR	0.359721	0.425717	1.000000	
RMW	0.619416	0.739740	0.316892	1.000000

Source: Data processed 2022Based on

Heteroskedasticity Test

The heteroskedasticity test is used to test whether in the regression model there is a variance inequality from the residual. The heteroskedasticity test in this study was carried out using the Glejser test. From Table 6 it can be seen that the overall probability values are all above 0.005 so that it can be ascertained that there is no Heteroskedasticity.

Table 6 Glejser Test Results.

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	7.148739	4.532838	1.577100	0.1165
LN_GDRB	0.089973	0.320135	0.281046	0.7790
LN_MRW	-0.195687	0.455069	-0.430016	0.6677
HDI	-0.048099	0.037157	-1.294475	0.1972
OUR	-0.045587	0.089131	-0.511463	0.6097

Source: processed data

Statistical Test

From the application of the model selection test, it can be concluded that the selected model is the Random Effect Model. So next, a statistical test of the selected model is carried out.

Table 7 Random Effect Model Test Results.

Variable.	Coefficient.	Std. Error.	t-Statistics.	Prob.
C	52.41524	5.072874	10.33245	0.0000
LN_GDRB	1.214564	0.704443	1.724149	0.0864
OUR	0.052929	0.118057	0.448338	0.6544
LN_MRW	1.588106	0.809862	1.960958	0.0514
HDI	-1.065612	0.118841	-8.966721	0.0000
Cross-section random.				
Idiosyncratic random				
R-squared.	0.565075	*Mean dependent var.*	3.553642	
Adjusted R-squared.	0.555463	*S.D. dependent var.*	2.159653	
S.E. of regression.	1.442102	*Sum squared resid.*	376.4181	
F-statistics.	58.79090	*Durbin-Watson stat.*	0.376456	
Prob(F-statistic).	0.000000	*Mean dependent var.*	16.37220	
R-squared.	0.671784			
Sum squared resid.	1137.055	*Durbin-Watson stat.*	0.124624	

Source: Data processed 2022

Based on Table 7, the estimation results of the research model can be made regression equations as follows:

$$Yit = α + β1X1it + β2X2it + β3Xnit + β4Xnit + eit$$

$$Yit = 52.41524 + 1.214564X1it - 0.052929X2it + 1.588106X3nit - 1.065612Xnit + eit$$

Information:

Y: Poverty (percent)

α : Constants/Intercepts

β 1. β 2, β 3, β 4   : Coefficient of Partial Regression

X1   : GRDP

X2   : HDI

X3   : Open Unemployment

E   : Error

Test F

The F test was carried out to see whether the four independent variables, namely GRDP, OUR, RMW and HDI, had a simultaneous or joint effect on these variables, namely in seventeen districts in East Java. If the value is prob. F-statistics < 0.05 then it is concluded that independent variables have a simultaneous effect on dependent variables.

In Table 7 it can be seen that the F-statistic or F-count is 58.79090 with a prob value. (F-statistic) of 0.0000 < 0.05. It can be said that the variables of GRDP (X1), OUR (X2) and RMW (X3) and HDI (X4) have a simultaneous influence on poverty (Y) in seventeen districts with the highest poverty rates in East Java.

t test

The t test is used in knowing from each of the independent variables in influencing the bound variables. By looking at the comparison of t-table with t-count. Based on Table 7, it can be concluded that the results of the t-test analysis are as follows:

1. **Influence GRDP against poverty**

    The results showed that the t-statistical value of the GRDP variable was 1.724149 with a prob value. 0.0864 > 0.05. So it can be said that the GRDP variable does not have a significant effect on poverty in seventeen districts with poverty levels in East Java.

2. **The effect of OUR on poverty**

    The t-statistical value of the OUR variable is 0.448338 with a prob value. 0.6544 > 0.05. So it can be said that the OUR variable does not have a significant effect on poverty in seventeen districts with poverty levels in East Java.

3. **The Effect of RMWs on Poverty**

    The t-statistical value of the RMW variable is 1.960958 with a prob value. 0.0514 > 0.05. So it can be said that the OUR variable does not have a significant effect on poverty in seventeen districts with poverty levels in East Java.

4. **The effect of HDI on poverty**

    The t-statistical value of the HDI variable is -8.966721 with a prob value. 0.0000 < 0.05. So it can be said that the HDI variable has a significant effect on poverty in seventeen districts with poverty levels in East Java. While the value of the HDI coefficient is marked negatively, which is -8.966721. Negative values indicate a direction that is in line/in the same direction between HDI and poverty. So it can be concluded that any increase in HDI will decrease by 8.966721% assuming other variables remain constant.

Coefficient of Determination (R^2)

The usefulness of the coefficient of determination R2 is to explain the degree of proportion of variable variation described by the four independent variables The value of the coefficient of determination lies between 0 and 1.

Table 7, the value of Adjusted R2 or Adjusted R-squared shows the number 0.555463, meaning that the variable's ability to describe the dependent variable is 55.54% while the remaining 44.46% is based on other factors not included in the model.

The Effect of GRDP on Poverty

Kuznet explained that growth and has a very strong correlation, because in the early stages of development the poverty rate tends to increase and when approaching the final stage the number of poor people gradually decreases. Results Based on panel data regression test using Random Effect Model. The GRDP variable has a positive coefficient value of 1.724149 with an insignificant probability value of 0.0864 at an error rate of 5%. This means receiving H0, so it can be said that the GRDP variable partially does not have a negative and significant effect on the disease in the seventeen districts with the highest transmission rate in East Java.

The results of this study are not in line with Kuznet's theory which states that there is a very strong correlation between economic growth and poverty. And this is not in line with the results of previous studies conducted by Zuhdiyati & Kaluge which showed that GRDP did not have a significant effect on poverty. Meanwhile, the different results are shown by research conducted by Ram et al, research conducted by Evi Berutu and Usman, and research conducted by Bintang Woyanti. All the results of this study show that GRDP has a significant effect on the rise and fall of poverty.

The Effect of OUR on Poverty

According to Arsyad, there is a very close relationship between the level of consciousness and the mission. For most people, those who do not have a permanent job or are only part-time always belong to the poorest group of society. Meanwhile, people who work on fixed wages in the government and private sectors are usually in the upper middle class. Everyone who does not have a job is called poor, while someone who has a full job is called rich.

Results Based on panel data regression test using Random Effect Model. The OUR variable has a coefficient value of 0.052929 with a probability value of 0.6544 which is insignificant at an error rate of 5%. This means receiving H0, so it can be said that the OUR variable partially has no positive and significant effect on the disease in the seventeen districts with the highest transmission rate in East Java.

The results of this study are not in line with Arsyad's theory which states that there is a very close relationship between the high level of movement and mission. The results of this study are also the same as the previous researchers, namely Zuhdiyati and Kaluge, who showed that the movement had no significant effect on poverty. Meanwhile, different results were shown by previous studies conducted by Purnama et al, which in this study showed an influence between displacement and displacement.

The results of this study showed that the rise and fall of this level did not have a significant effect on poverty in the seventeen districts with the highest poverty rates in East Java. These results show that not all include the poor. It could be that one of the unemployed family members has a high enough income to be able to meet the basic needs of the unemployed

person. Or maybe people who have jobs actually have less income to meet their basic needs so they belong to the poor group.

In accordance with research that has been conducted by (Bayar & Diaconu Maxim, 2020), keeping the unemployment rate low is one of the main goals of all governments in the world. However, despite all the efforts made by national governments and international agencies, many countries still face high unemployment rates. Trying to find policies to reduce unemployment effectively, researchers have proposed various explanations for this phenomenon, among which one can mention the oil shock of the 1970s, the low productivity levels recorded in the 1980s and 1990s and, more recently this, the nature of formal and informal institutions that affect the entire market environment. Studies on the consequences of labor market regulation on unemployment can be grouped into three categories, taking into account the period of analysis and the methodology used. While the first generation of studies do not show clear patterns regarding the efficiency of active labor market programs, the second and third generation of studies offer more conclusive results. One of the main findings of this latest study is that stiffer labor regulations are associated with higher unemployment rates. The relationship between business regulation and unemployment has not been extensively studied in the literature. However, several studies that indirectly investigated this link have concluded that a more onerous business environment discourages small entrepreneurs and large investors, resulting in an increase in unemployment. Government policies are important in explaining why wage controls seem to be the solution. Policymakers began to consider macroeconomics in their decisions, and unions adapted by presenting their own macroeconomic arguments (Beggs, 2021). The results of the study show that redistribution policy and trade union wage setting are closely related (Dur, 2001).

The Effect of RMWs on Poverty

In accordance with Arsyad's previous explanation, the causes of the disease are complex and multidimensional. The inability to access capital and the lack of income will greatly affect the increase in mission in an area. It can be said that the level of income prevailing in the community, in this case called the district/ city minimum wage, is an important part in maintaining the sustainability of people's purchasing power. With maintained purchasing power, poverty will naturally decrease over time.

The results of the panel data analysis in the previous explanation showed that, with the selection of the Random Effect Model, taking into account the value of the RMW coefficient of 1.588106 and the probability level of 0.0514 which is not at an error rate of 5%. this means h0 is accepted and h1 is rejected. This means that RMWs do not have a significant effect on poverty in the seventeen districts with the highest poverty rates in East Java.

These results are different from ramdhan at al's research and Romi and Umiyati's research which show that there is an influence between wages and poverty. The results of this analysis also do not correspond to theories related to problems that are affected by the amount of income. The results of this study do not necessarily generalize the causes of poverty in each region. The data showed that seventeen counties in the study population had fairly unequal

wage levels. For example, Gresik Regency, Tuban, the distance between wages and districts on Madura Island, or with districts in western East Java (Ngawi, Pacitan). as well as the issuance of regulations on wage determination in the form of Presidential Regulation Number 78 of 2015 which is only based on two variables, namely inflation and economic growth. On the one hand, this policy can provide a conducive climate for the business world. But under other conditions this policy cannot maintain the purchasing power of the general public. Especially when there is economic turmoil (pandemic and fuel price increase).

The Effect of HDI on Poverty

In accordance with Arsyad's explanation, which said that increasing consumption of social services is an important policy tool in the overall strategy of alleviating poverty and increasing the level of welfare in a region. It can be said that the increase in consumption of social services such as access to education, access to health services and the fulfillment of good nutrition will reduce the reduction. Indicators of education, health and nutrition in an area can be seen from the Human Development Index (HDI) in the area.The results of panel data estimation with the use of the Random Effect Model as the selected model. The HDI variable has a negative coefficient value of -1.065612 with a significant probability value of 0.0000 at an error rate of 5%. This means the acceptance of H1 and the rejection of H0, so that researchers can conclude that HDI has a significant partial influence on poverty in seven earthquake disaster districts in East Java. The HDI variable has a negative constant value of -1.065612 which means that the HDI relationship is unidirectional. So it can be ascertained that every increase in HDI of 1% will decrease by 1.065612% assuming other variables remain constant.

The results of this study are in line with Arsyad's theory, which can be said that good human development will reduce the number of people in the region. As well as the results of previous research conducted by Zuhdiyati and Kaluge as well as research by Purnama et al., which showed that HDI affects poverty.

The results of this study show that the increase in the Human Development Index is able to reduce the poverty rate in the seventeen districts with the highest poverty rate in East Java. Although HDI is able to reduce the rate in the seventeen districts with the highest poverty rate in East Java, in reality the percentage of HDI in the seventeen districts with the highest poverty rate in East Java is still the national percentage. Although the five provinces experience an increase in the percentage of HDI every year, in reality they have not been able to reach the high category. The government must focus more on increasing human resources in each of these fields in order to be able to create quality human resources. Because quality human resources will be able to compete and compete in the world of work, so as to increase productivity at work, in the end it can reduce the poverty rate in the seventeen districts with the highest poverty rates in East Java.

Simultaneous destruction of GRDP, OUR, RMW and HDI against Poverty

Based on the results of the F test using the Random Effect Model on Eviews 10. The variables OF GRDP, OUR, UMK and HDI have an F-statistical value of 58.79090 with a probability value of 0.0000 which is significant at an error rate of 5%. This means rejecting H0 and having to accept H1, so it can be said that the variables of GRDP, OUR, UMK, and HDI simultaneously have a significant effect on the spread of disease in seventeen districts with the highest rates in East Java. So that the results of this study show positive and significant with a confidence level of 0.555463. This means that the level of trust in this study was 55.54% and the residual factor of 44.46% was influenced by other people who were not included in this study model.

The results of this study show that the variables of GRDP, OUR, RMW and HDI simultaneously affect poverty in seventeen districts with the highest poverty rates in East Java. Therefore, the government must pay attention to the four variables together and conduct periodic evaluations so that the three can continue to be improved in a better direction. The increase in GRDP must be followed by an increase in the development of good human resources. Because the development of good human resources will create quality human resources. Quality human resources will be able to compete and compete in the world of work or even be able to create jobs for others. With the existence of quality human resources, it will certainly be able to reduce movement and increase business productivity. Good business productivity will certainly reduce poverty.

CONCLUSION

Based on the discussion and analysis of data in the research above, the following conclusions can be drawn: Gross Regional Domestic Product (GRDP) partially did not have a significant effect on poverty in the seventeen districts with the highest poverty rates in East Java. The results showed that partially the Open Unemployment rate (OUR) had no significant effect on the bound variable of poverty in the seventeen districts with the highest poverty rates in East Java. The Regency/City Minimum Wage (UMK) partially has a significant effect on poverty in the seventeen districts with the highest poverty rates in East Java. Human Development (HDI) partially affected poverty in the seventeen districts with the highest poverty rates in East Java. The variables of GRDP, OUR, RMW and HDI simultaneously have a significant effect on poverty in seventeen districts with the highest poverty rates in East Java.

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