

## Education, Unemployment, Poverty on Economic Growth in East Java Province

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### ***Abstract***

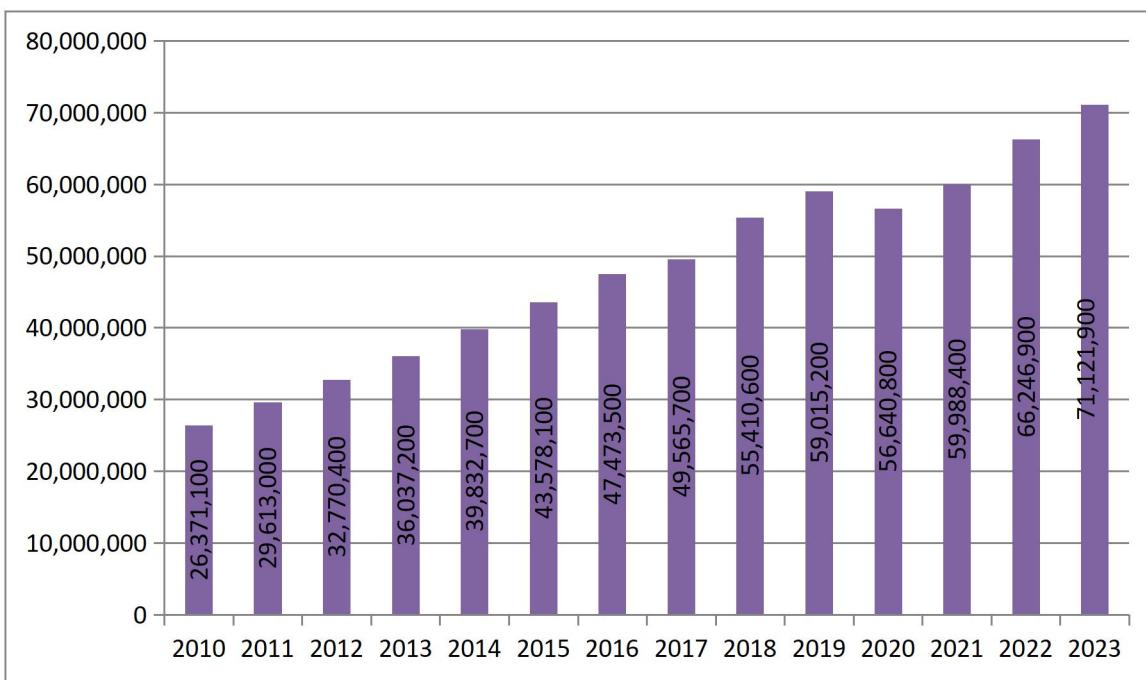
*Economic development in a country or region can be seen from several indicators of an economy, including unemployment, poverty and education. This study aims to analyze the influence of education, unemployment and poverty on economic growth in East Java Province for the period 2010-2023. The data sources used in this study are secondary data in the form of time series data. The method used is multiple linear regression analysis and Ordinary Least Square (OLS) estimation. The results of the study The t-test of education has a significant effect on economic growth in East Java, unemployment has a significant effect on economic growth in East Java and poverty has a significant effect on economic growth in East Java. The results of the F-test show that the variables Education, unemployment and poverty have a significant effect simultaneously on economic growth in East Java. Local governments, communities or the private sector can take strategic steps to improve the quality of education, reduce unemployment and can alleviate poverty problems in East Java.*

**Keywords :** Education, Unemployment, Poverty, Economic Growth.

### **1. INTRODUCTION**

Economic growth is an important benchmark in discussing a country's economy. The progress of the economy can explain economic activities that can generate more income for each community in a certain period of time. If all the results of service services regarding production aspects in each period have a significant increase from the previous period, this can result in economic activities that experience a development process (Mataheurilla & Rachmawati, 2021) .

In the scope of the Indonesian region, East Java is one of the provinces that has a continuously increasing economic growth rate in the last decade. However, in 2020 there was a decline due to Covid-19. Many countries are suppressing the effects of the Covid-19 outbreak by limiting social interaction. The impact of these restrictions has caused a slowdown in social and economic activities which has caused problems. The problems experienced in people's lives are increasing unemployment, decreasing people's income and triggering an increase in the number of people trapped in poverty. Therefore, economic growth is one of the goals to achieve economic development, increase wealth and reduce poverty (Purwanti, 2024) .



Graph 1. East Java GRDP Per Capita 2010-2023

Source : BPS East Java Province

Graph 1 above shows that economic growth in East Java over the past 14 years has shown fluctuating developments. The highest economic growth in East Java was in 2023 at 71,121,900 thousand and the lowest economic growth was in 2010 at 26,371,100 thousand. Before the Covid-19 pandemic entered Indonesia in 2019, economic growth in East Java reached 59,015,200 thousand, but in 2020 it decreased to 56,640,800 thousand.

The economic development of each country or region can be shown from some indicators of an economy, namely from the unemployment rate, poverty and education. If viewed from the unemployment rate, it can be seen from the economy which is developing or slowing down or even experiencing a situation of decline. In addition, it can be seen from the poverty indicator which can be seen from the distribution of income from a country or region's society (Imanto et al., 2020) . Then if viewed from the education indicator, it will have an impact on the quality of human resources which can be part of the economic development of a country or region, if the level of education is higher, the quality of human resources will increase (Frederich et al., 2023) .

In the field of education, it will have an impact on the quality of human resources which will be an instrument in the economic development of a region, because if the higher and quality of education taken by each citizen, the quality of human resources will increase. By increasing human resources, it can increase the welfare of a society which will ultimately increase the economic growth of the region or country because education will make it a form of long-term investment (Frederich et al., 2023) .

The unemployment rate in a region still shows quite high fluctuations. This happens because the provision of jobs has not been maximized. The cause of this is the high competition in finding work. The available jobs are limited, but with the increase

in population, there will be high competition. Thus, if the unemployment problem continues to increase, the welfare of the community will be lower due to minimal income (Putra & Illahi, 2024) .

The high poverty rate can cause high implementation costs in development and will indirectly hinder the development process. Poverty is caused by differences in terms of ability, opportunity and quality of human resources. In line with the increasing population, the number of job seekers will also increase and the workforce will continue to grow while job opportunities themselves are getting smaller. Thus, the unemployment rate and poverty rate will have an influence on the course of economic growth in a region, economic growth is an important aspect in reviewing the course of an economy (Kusumawati et al., 2021) .

The problem of poverty is one of the main problems of economic development. Economic development essentially aims to improve the welfare of a society. In order to achieve the goals of economic development, increased economic growth and an even distribution of income are required (A. Maulana et al., 2022) . With stable economic growth, it can overcome the problems of unemployment, poverty, illiteracy and can improve people's welfare by increasing access to health services and education (Subiyakto et al., 2023) .

Research by Alvy Kusumawati, Wiwin Priana Primandhana and Muhammad Wahed (2021) shows that the poverty rate and Human Development Index (HDI) have a significant positive effect on economic growth in East Java. The open unemployment rate variable has a significant negative effect on economic growth in East Java (Kusumawati et al., 2021) . Research by Ryozky Frederich, Nurhayati and Samuel Fery Purba (2023) states that education has a positive and significant value on economic growth (Frederich et al., 2023) . Research by Hane Andreanu Subiyakto, Nurhayati and Syafri (2023) shows that each variable, including investment, population, education, poverty and unemployment has an impact on economic growth (Subiyakto et al., 2023) . Research by Nur Risma Novitasari and Citra Mulya Sari (2023) states that the variables of the number of workers, unemployment and poverty simultaneously influence the variable of economic growth (Risma Novitasari & Mulya Sari, 2023) .

This research is different from previous research because previous research often uses variables of unemployment and poverty on economic growth, while research discussing education, unemployment and poverty on economic growth is still limited.

In this study, economic growth in East Java Province is not only influenced by macroeconomic factors, but also the ability of the region itself in overcoming the problems of education, unemployment and poverty. Thus, this is important because it is to determine the relationship between the three independent variables and their impact on the economy. This study aims to analyze the influence of education, unemployment and poverty on economic growth in East Java Province for the period 2010-2023.

## 2. THEORETICAL BASIS

### Education

According to the Delors Commission, education is the key to life for everyone, which is the ability to understand oneself, others and the fate of one's nation in the future. Based on this concept, it is clear that the essence of education is to provide

preparation for students through the educational process so that they are able to access their roles in the future (Wibowo, 2013) .

According to Sojomukti (2015) education is life. Education is an event of a learning process that takes place in all situations throughout a person's life. An educator is all aspects of life that can have an impact on a person's development. Education is an aspect of life because education can continue throughout life (Salsabila et al., 2021) . According to F. Kneller, education has two meanings, namely in a narrow and broad sense. In a broad sense, education is a learning that can influence the development of the soul, character or physical abilities of each individual. However, the narrow meaning of education explains a process of change that occurs in knowledge, skills that are carried out by entering an educational institution, including formal and non-formal education (R. Maulana et al., 2023) . According to research by Dyamawani Trinovelia Purba, Inda Serfina Tarigan, Nopia indsa Simamora and Nova Novita Pardede (2024), education has an effect on economic growth (Purba et al., 2024) .

$H_0$  : Education has no partial effect on economic growth

$H_1$  : Education has a partial effect on economic growth.

### **Unemployment**

According to Rina Oktaviani and Tanti Novianti, unemployment is a person who is included in the workforce category, namely aged 15 to 64 years who are looking for work and have not yet found the job. People who are not looking for work include mothers who take care of the household, students who are in school and college students and so on due to a consequence that does not need a job. Unemployment can also be said to be adults who are not looking for work and who are actively looking for work (Oktaviani & Novianti, 2011) .

According to Todaro and Smith (2011), unemployment can reduce people's purchasing power which can lead to weak domestic demand. This condition can slow down the rate of economic growth. High unemployment rates can have an impact on state finances, as a result the government must provide social assistance funds, subsidies and poverty alleviation. From an economic perspective, high unemployment rates can cause social instability, which will have an impact on economic activity, reduce investor confidence and disrupt productivity activities (R. Maulana et al., 2023) . Zulfa (2016) states that unemployment is a person who has no work experience, is looking for work or someone who is working only 2 days a week. The thing that causes high unemployment rates is due to the number of workers being greater than the number of jobs available (Romadhon & Nawawi, 2024) . According to research by Yonaldin Ndawareha, Yuniarti Reny Renggo and Adrianus Kabubu Hudang (2024), unemployment affects economic growth (Ndawareha et al., 2024) .

$H_0$  : Partial unemployment has no effect on economic growth

$H_1$  : Unemployment has a partial effect on economic growth.

### **Poverty**

Poverty according to the World Bank (2000) is a lack of welfare. Specifically, poverty can be measured by comparing the income or consumption of each individual in society with several provisions that have been set where they will be considered poor if their income or consumption is below the established standard. There is the broadest approach to welfare, one of which is the approach issued by Amartya Sen (1987) who stated that welfare comes from the ability to carry out a function in community life.

Therefore, poverty arises when a society does not have its main ability, namely not having income or not getting adequate education, having poor health, feeling insecure, not having a sense of trust and not having rights, for example the right to freedom of speech (Haughton & Khandker, 2012) .

According to Suparlan (1984), poverty is a situation where the standard of living of the community is low, which means that there is a lack of material in the standard of living in society. Poverty is also defined as a condition of a population living in poor health, minimal income and low education (Salsabila Sevira Putri, 2022) . According to Suharto, poverty is a lack of material, minimal income and there are social needs. Thus, it can be said that the group that falls into the poor category is someone who cannot meet their life needs due to minimal income (A. Maulana et al., 2022) .

In Islam, it is taught to avoid poverty, there are two ways that can be implemented, namely by developing human resources for life in the future and requiring humans to obey the rules of Allah SWT as stated in the Quran and Sunnah to make humans happy in this world and the hereafter (A. Maulana et al., 2022) . According to research by Mirza Ahmad Nairizi (2023), poverty affects economic growth (Nairizi, 2023) .

$H_0$  : Poverty has no partial effect on economic growth

$H_1$  : Poverty has a partial effect on economic growth.

### **Economic growth**

According to Sukirno, economic growth is an increase in output both physically and in services in a certain period of time. Economic growth at the national level is usually measured using the level of gross domestic product (GDP), while the measure of the success of economic development in a region can be measured through gross regional domestic product (GRDP) (Risma Novitasari & Mulya Sari, 2023) .

Economic growth is the development of GNP that occurs in society and is followed by the restructuring and modernization of the economic structure. Economic growth is the increase in total expenditure of an economy as a result of the increase in GNP. Good and stable economic growth is highly expected by developing countries because it can overcome problems of poverty, unemployment, illiteracy and can increase prosperity in society by paying more attention to education and health (Masriah & Mujahid, 2011) .

According to Adam Smith, the development of an economy requires specialists and division of labor so that labor productivity can increase. This division of labor is prioritized by the results of capital obtained from savings funds and market expansion to accommodate production results. Meanwhile, Thomas Robert Malthus stated that the process of economic development requires an increase in the amount of capital to be invested continuously. JB Say stated that *supply creates its own demand* (the amount of production that increases then the demand for production also increases). In essence, human needs will always increase along with the progress of the times. Therefore, economic development is something gradual (Masriah & Mujahid, 2011) .

In Islam, economic growth has the main objective, namely to create human welfare from material and spiritual aspects which is guided by: Allah SWT, the giver of sustenance to anyone He wishes because of His Rahman and Rahim nature as stated in the letter Ar-Rad verse 26:

أَللَّهُ يَبْسُطُ الْرِّزْقَ لِمَن يَشَاءُ وَيَقْدِرُ وَفَرَحُوا بِالْحَيَاةِ الدُّنْيَا وَمَا أَلْحَيَهُمُ الْأَنْتِيَاءُ فِي الْأَنْعَامِ إِلَّا مِنْهُ

Meaning: Allah enlarges the provision and restricts it for whom He wills. They rejoice in the life of this world, while in comparison with the Hereafter it is but a (brief) enjoyment.

### 3. RESEARCH METHODS

This type of research uses a quantitative descriptive method. The purpose of this study is to examine the relationship between education, unemployment and poverty as variable X on economic growth as variable Y. This research was conducted in East Java for the period 2010-2023. The data source used is secondary data in the form of *time series data*. This secondary data is obtained from a second source that is ready to use (Widarjono, 2018). The data obtained comes from the East Java Central Statistics Agency (BPS). The analysis used is the multiple linear regression analysis method and *Ordinary Least Square* (OLS) estimation. Using the OLS method because of its technical ease (Alfath et al., 2024).

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

Information:

$Y$  = Economic growth

$\beta_1 X_1$  = Education

$\beta_2 X_2$  = Unemployment

$\beta_3 X_3$  = Poverty

$\alpha$  = Constant

$e$  = Error

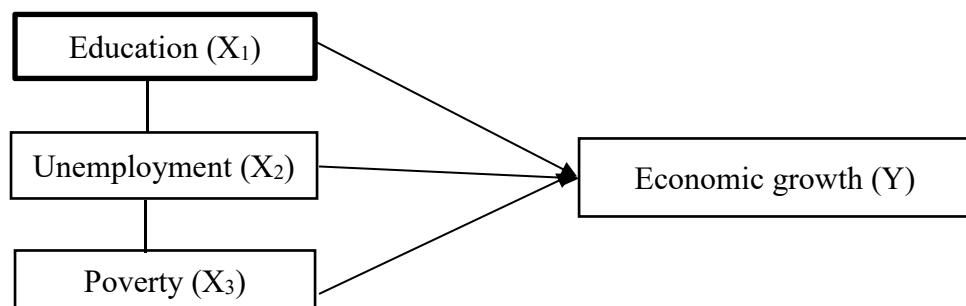


Figure 1. Framework of Thought

### 4. RESULTS AND DISCUSSION

#### Classical Assumption Test

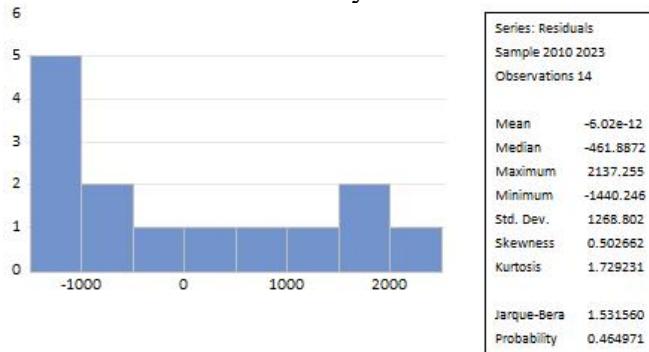
The classical assumption test is carried out in multiple linear regression analysis because this study uses the *Ordinary Least Square* (OLS) method approach. The classical assumption test is carried out to verify or validate and the accuracy of the regression equation. Tests carried out in this classical assumption include normality, multicollinearity, heteroscedasticity and autocorrelation tests.

#### Normality Test

The normality test is carried out to determine whether the data is normally distributed. or not, using Chi-Square, Kolmogorov Smirnov, Shapiro Wilk or Jarque

Bera (Basuki & Prawoto, 2015) . The normality results were determined based on the Jarque-Bera value with the significance used  $\alpha=0.05$ . significance  $> 5\%$  indicates normal results, and significance  $< 5\%$  indicates otherwise.

Table 1 Normality Test Results



Source: Processed Eviews data (2024)

It is known that the Jarque-Bera probability value is 0.464 ( $>0.05$ ), so it can be concluded that the data is normally distributed.

### Multicollinearity Test

Multicollinearity or *Multiple Collinearity* ( *Multicollinearity* ) is in the multiple regression model there is a linear relationship between each variable. In the multiple regression model, variables are said to have perfect multiple collinearity if there is a linear relationship between each independent variable that is perfectly correlated (Basuki & Prawoto, 2015) . Multicollinearity can be identified through the *Variance Inflation value. Factors* (VIF) , if  $VIF < 10$  there are no symptoms of multicollinearity between independent variables, while if  $VIF > 10$  indicates symptoms of multicollinearity.

Table 2 Multicollinearity Test Results

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	7.93E+08	5307.595	NA
X1	7287834.	2639.090	9.971670
X2	875206.4	127.0640	2.715666
X3	6.674976	982.9258	7.589684

Source: Processed Eviews data (2024)

If the VIF value of the independent variable is known to be  $<10.00$ , it can be concluded that the assumption of the multicollinearity test has been met or has passed the multicollinearity test.

### Heteroscedasticity Test

Heteroscedasticity is the existence of an inequality of residual variance for all data in the regression model. The regression model must meet the requirements of not having heteroscedasticity, then a heteroscedasticity test is carried out to determine whether there is a deviation (Basuki & Prawoto, 2015) . If the prob value  $<0.05$  there are

symptoms of heteroscedasticity, but if the prob value > 0.05 there are no symptoms of heteroscedasticity,

Table 3 Heteroscedasticity Test Results

Heteroskedasticity Test: White  
Null hypothesis: Homoskedasticity

F-statistic	0.353789Prob. F(9,4)	0.9099
Obs*R-squared	6.205011Chi-Square Prob.(9)	0.7192
Scaled explained SS	1.154308Chi-Square Prob.(9)	0.9990

Source: Processed Eviews data (2024)

The assumption of the heteroscedasticity test has been met, because the Obs\*R-squared Probability value is known to be 0.7192 (>0.05).

#### Autocorrelation Test

Autocorrelation test is used to detect residual relationships between observations of the regression model, whether or not there is a deviation from the classical assumption of autocorrelation (Basuki & Prawoto, 2015) . Correlation LM Test is carried out. If the p-value Obs\*R-square <0.05 there are symptoms of autocorrelation. However, if the p-value Obs\*R-square> 0.05 there are no symptoms of autocorrelation.

Table 4 Autocorrelation Test Results

F-statistic	0.480320Prob. F(2,8)	0.6353
Obs*R-squared	1.500893Chi-Square Prob.(2)	0.4722

Source: Processed Eviews data (2024)

The probability value of Obs\*R-squared is known to be 0.4722 (>0.05) which can conclude that the assumptions of the autocorrelation test have been met.

#### Hypothesis Testing

##### Multiple Linear Regression Test

Table 5 Multiple Linear Regression Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-96017.66	28167.64	-3.408794	0.0067
X1	25454.93	2699.599	9.429151	0.0000
X2	-2345.973	935.5247	-2.507655	0.0310
X3	-6.843052	2.583598	-2.648653	0.0244

Source: Processed Eviews data (2024)

#### Equation Analysis of Multiple Linear Regression

$$Y = -96017.66 + 25454.93X_1 + -2345.973X_2 + -6.843052X_3$$

1. The constant value obtained is -96017.66. It can be concluded that an increase in the independent variable by one unit will cause the dependent variable to decrease by -96017.66.

2. The value of the regression coefficient for variable  $X_1$  has a positive value of 25454.93, it can be concluded that if variable  $X_1$  increases then variable  $Y$  will also increase with a value of 25454.93.
3. The value of the regression coefficient for variable  $X_2$  has a negative value of -2345.973, it can be concluded that if variable  $X_2$  increases then variable  $Y$  will decrease with a value of -2345.973.
4. The value of the regression coefficient for variable  $X_3$  has a negative value of -6.843052, it can be concluded that if variable  $X_3$  increases, variable  $Y$  will decrease by a value of -6.843052.

#### t-Test (Partial)

Statistics have created a t-test to test the truth of the hypothesis based on sample data. The purpose of the t-test is to check whether the truth or error of the null hypothesis is found which is supported by the sample data. The results of the statistical test obtained from the data are used to decide whether to accept or reject (Basuki & Prawoto, 2015) . To measure the t-test, you can compare the calculated t-prob value with the error rate of (0.05). If the calculated t-prob value  $<0.05$ , it is concluded that the independent variable has a significant effect on the dependent variable, but if the calculated t-prob value  $>0.05$ , it is concluded that the independent variable does not have a significant effect on the dependent variable.

Table 6 T-Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-96017.66	28167.64	-3.408794	0.0067
X1	25454.93	2699.599	9.429151	0.0000
X2	-2345.973	935.5247	-2.507655	0.0310
X3	-6.843052	2.583598	-2.648653	0.0244

Source: Processed Eviews data (2024)

#### Analysis of T-Test Results (Hypothesis Test)

1. The results of the regression test show that the value of the education variable ( $X_1$ ), t-statistic is 9.4291 with a probability value (significance) of 0.0000 ( $<0.05$ ), so it can be concluded that the variable  $X_1$  has a significant effect on the economic growth variable ( $Y$ ), so  $H_{a1}$  is accepted and  $H_{o1}$  is rejected.
2. The results of the regression test show that the value of the unemployment variable ( $X_2$ ), t-statistic is -2.5076 with a probability value (significance) of 0.0310 ( $<0.05$ ), so it is concluded that the variable  $X_2$  has a significant effect on the economic growth variable ( $Y$ )  $H_{a2}$  is accepted and  $H_{o2}$  is rejected.
3. The results of the regression test show that the poverty variable ( $X_3$ ) t-statistic value is -2.6486 with a probability value (significance) of 0.0244 ( $<0.05$ ), so it is concluded that the variable  $X_3$  has a significant effect on economic growth ( $Y$ )  $H_{a3}$  is accepted and  $H_{o3}$  is rejected.

#### F Test (Simultaneous)

The F test is conducted to assess how each independent variable affects the dependent variable. The results of the F test can be seen and also explained using the ANOVA value or analysis of variance (Basuki & Prawoto, 2015) . The F test compares the

calculated F probability value with the error rate of (0.05). If the calculated F probability value  $<0.05$ , it is concluded that the regression model is feasible, indicating that all independent variables have a simultaneous effect on the dependent variable, if the calculated F probability value  $> 0.05$ , it is concluded that the regression model is not feasible, indicating that all independent variables do not have a simultaneous effect on the dependent variable.

Table 7 F Test Results

R-squared	0.991734
Adjusted R-squared	0.989255
SE of regression	1446.657
Sum squared residual	20928160
Log likelihood	-119.3880
F-statistic	399.9411
Prob(F-statistic)	0.000000

Source: Processed Eviews data (2024)

The F-statistic value of 399.9411 with a probability value (F-statistic) of 0.000000 ( $<0.05$ ) shows that variables X1 ,X2 ,X3 have a significant effect simultaneously or together on variable Y.

### Coefficient of Determination Test

The determination coefficient test is conducted in multiple regression to measure the proportion of variation of the dependent variable explained by all independent variables. To overcome the dependence of R<sup>2</sup> on the number of independent variables, the adjusted R<sup>2</sup> value is used as an alternative (Basuki & Prawoto, 2015) .

Table 8 Results of Determination Coefficient Test

R-squared	0.991734
Adjusted R-squared	0.989255
SE of regression	1446.657
Sum squared residual	20928160
Log likelihood	-119.3880
F-statistic	399.9411
Prob(F-statistic)	0.000000

Source: Processed Eviews data (2024)

It can be seen that the adjusted R Square value is 0.989255 or 98.9255%. The value of the determination coefficient shows that the independent variables consisting of education, unemployment and poverty can explain the economic growth variable in East Java with a value of 98.9255%, while the remaining 1.0745% (100 - adjusted R Square value) is explained by other variables not included in this research model.

### Discussion

#### The Influence of Education on Economic Growth

The results of the t-test in table 8 show that the education variable has an effect on economic growth with a significance value of 0.0000  $<0.05$ . The relationship between

education and economic growth is related to human capital, labor and advances in technology which are factors in the production of national income. If the number of workers increases, the population growth rate will be higher, the greater the national income and the higher the economic growth (Ritonga, 2021).

In terms of improving the quality of human resources, education plays a major role. Through education, it is believed that it can improve skills and the way a person's thinking ability increases which can lead to increased productivity in the long term. The fact that education is an investment in development that has a long-term impact that can be felt in the future so that education is the key or access to progress in a region or country both economically and socially (Yudi Supiyanto et al., 2020)

This study is in line with the research conducted by Rezki Maulana, Cut Zakia Rizki, BS Nazamuddin and Fitrah Afandi ZT (2023) whose results stated that education variables have an effect on economic growth. Research by Dyamawani Purba, Inda Tarigan, Nopia Simamora and Nova Pardede (2024) whose results stated that education variables have an effect on economic growth (Purba et al., 2024) . However, this is not in line with research by Alifah Yustina Salsabila, Niniek Imaningsih and Riko Setya Wijaya (2021) whose results stated that education variables have no effect on economic growth (Salsabila et al., 2021) .

### **The Impact of Unemployment on Economic Growth**

The test results on the t-test contained in table 8 can be seen that the unemployment variable has an effect on economic growth with a significance value of  $0.0310 < 0.05$ . If the unemployment rate is high, it will slow down the economy. A negative value from the test means that if unemployment decreases, economic growth will increase. Unemployment in East Java is still relatively low, but unemployment in East Java is not balanced with the available jobs so that the impact of unemployment is that people cannot maximize the welfare they achieve. Therefore, the greater the unemployment rate, the lower the economic growth in East Java.

According to Todaro and Smith (2011) unemployment can reduce people's purchasing power which can cause weak domestic demand. This condition can slow down the rate of economic growth. High unemployment rates can have an impact on state finances, as a result the government must provide social assistance funds, subsidies and poverty alleviation. From an economic perspective, high unemployment rates can cause social instability, which will have an impact on economic activity, reduce investor confidence and disrupt productivity activities (R. Maulana et al., 2023) .

This study is in line with the research conducted by Aprilia Somba, Daisy SM Engka and Jacline I. Sumual (2021) whose results stated that the unemployment variable has an effect on economic growth (Somba et al., 2021) . The research of Muhammad Anbia Alfath, Rangga Mukti, Nimas Safitri and Muhammad Kurniawan (2024) showed that unemployment has an effect on economic growth (Alfath et al., 2024) . However, this is not in line with the research conducted by Argo Beba Putra and Ilham Illahi (2024) whose results showed that unemployment has no effect on economic growth (Putra & Illahi, 2024) .

### **The Impact of Poverty on Economic Growth**

The results of the t-test in table 8 show that the poverty variable has an effect on economic growth with a significance value of  $0.0244 < 0.05$ . The poverty rate of a region or country is in an extremely high position, so people have less purchasing power to shop. So that it will have an impact on the production process of decreasing demand for goods and services because people are unable to meet their living needs. This can result in decreased economic growth (Yuanda & Haryatiningsih, 2022). When poverty in an area is high, it will have an impact on increasing government spending to reduce poverty levels in an area and to carry out economic development in that area. In dealing with poverty alleviation, of course, it is not easy, but with an increase in welfare in an area, it becomes a better thing for the government to implement by prioritizing people who seem to be more in need with a social assistance program so that people will meet their living needs. This method is one of the effective ways to overcome the problem of economic growth in an area.

According to Suparlan (1984), poverty is a situation where the standard of living of the community is low, which means that there is a lack of material in the standard of living in society. Poverty is also defined as a condition of a population living in poor health, minimal income and low education (Salsabila Sevira Putri, 2022). According to Suharto, poverty is a lack of material, minimal income and social needs. Thus, it can be said that the group that falls into the poor category is someone who cannot meet their living needs due to minimal income (A. Maulana et al., 2022). Poverty describes the financial inability to meet the most basic or daily living needs. From an economic perspective, someone who does not have enough money or is unable to meet their living needs in terms of the expenses made is said to be poor (Naiola et al., 2023).

This study is in line with the research conducted by Alvira Tania Lidyanti and Nurul Hanifa (2022) whose results stated that the poverty variable has an effect on economic growth (Lidyanti & Hanifa, 2022). The research of Shafira Artiza, Rizqa Meliza and Deris Desmawan (2022) showed that the poverty variable has an effect on economic growth (Artiza et al., 2022). However, this is not in line with the research conducted by Hayyu Farah Salsabila Firda, Muhammad Fakhril Ma'ruf, Indah Yuliana and Yayuk Sri Rahayu (2024) whose results showed that the poverty variable had no effect on economic growth (Farah Salsabila Firda et al., 2024).

### **The Influence of Education, Unemployment and Poverty on Economic Growth**

The test results on the F test contained in table 9 can be seen that the variables of education, unemployment and poverty have a simultaneous or concurrent effect on economic growth with a probability value (F-Statistic) of  $0.000000 < 0.05$ . Increasing quality education will reduce the high unemployment rate and poverty rate. Conversely, if unemployment is high, poverty will be high and can hinder economic growth due to decreased productivity and limited access to economic opportunities. To increase economic growth, it can improve the quality of education, create wider employment opportunities and alleviate poverty.

Education has become one of the consumption of a society. According to Julianto (2019), the need for education continues to increase along with the progress of the times. Therefore, education is related to the state of a market where the demand for unskilled labor shifts to the demand for skilled labor due to the progress of industrialization.

Education is a long-term investment that aims to obtain better quality human resources in the future and expects to get a higher income (Hanifa & Irsad, 2022). According to Byrne and Strobl (2004), unemployment is a condition where an individual enters the productive age category at a certain time while the individual does not have a job, is not working or is trying to find a job. The problem of unemployment is often experienced because there is an imbalance between the number of workers and the jobs available in the field. Therefore, it can be caused by the number of workers offered being high compared to the number of demands needed for workers or individuals who do not yet have a job (Albab Al Umar et al., 2020). Poverty in general is low income to meet basic living needs. The welfare of a society is seen from the level of poverty which can be seen from the influence of income levels and usage patterns including consumption and non-consumption. However, the level of poverty is not only influenced by income levels but also by aspects of the social environment and the level of empowerment and involvement (Faturohim et al., 2023).

## 5. CONCLUSION

Research on "Education, Unemployment and Poverty on Economic Growth (Case Study in East Java Province for the Period 2010-2023)" it can be concluded that the education variable ( $X_1$ ) has a probability value. (significance) of 0.0000 ( $<0.05$ ) then the variable  $X_1$  has a significant effect on the economic growth variable ( $Y$ ) then  $H_{a1}$  is accepted and  $H_{o1}$  is rejected. The unemployment variable ( $X_2$ ) has a probability value. (significance) of 0.0310 ( $<0.05$ ) then the variable  $X_2$  has a significant effect on the economic growth variable ( $Y$ )  $H_{a2}$  is accepted and  $H_{o2}$  is rejected. The poverty variable ( $X_3$ ) has a probability value (significance) of 0.0244 ( $<0.05$ ) then the variable  $X_3$  has a significant effect on economic growth ( $Y$ )  $H_{a3}$  is accepted and  $H_{o3}$  is rejected.

Local governments, communities or the private sector can work together to take appropriate steps to improve the quality of education, reduce unemployment and alleviate poverty in East Java. Joint efforts to improve the quality of education, create jobs and strengthen the local economy in order to provide important programs for economic growth. The government in a particular region can provide policies to improve the level of welfare of a community in East Java. Based on the results obtained from the research that has been conducted, it is expected that further researchers can develop this research either by adding research variables or adding research samples that can increase knowledge.

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