

## The Effect of Economic Growth, Unemployment Rate and Human Development Index on Poverty Rate in North Jakarta

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### ABSTRACT

Poverty is a complex problem, many factors affect the poverty rate in North Jakarta. This study aims to analyze the effect of economic growth, open unemployment rate, and human development index on the poverty rate in North Jakarta.iod 2009 to 2021, data was obtained through the Central Statistics Agency using multiple linear analysis methods using SPSS 27. The results of this study show that simultaneously Economic Growth, Unemployment Rate, and Human Development Index affect the Poverty Rate. Partial Economic Growth has no effect on the Poverty Rate, the Unemployment Rate has a positive impact in the Poverty Rate and the Human Development Index has a positive impact on the Poverty Rate.

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## **INTRODUCTION**

Problems in economic development that need to be resolved, or at least minimized, are the problem of poverty. DKI Jakarta is one of the provinces that has a low poverty rate, but when viewed from the city in Jakarta, the cities of North Jakarta and the Thousand Islands are the lowest areas of the DKI Jakarta ranking that have the highest poverty rate. Judging from the reality that occurs, poverty in North Jakarta City can be seen through the many slum areas as happened in the Penjaringan area, crime that is still rampant, the number of unemployment rates and access to meet human needs is still lacking in quality.

The city of North Jakarta is one of the largest industrial areas in DKI Jakarta, which should be able to accommodate many jobs for the community but in fact there is still a lot of unemployment piling up in North Jakarta. The factor of urbanization that continues to increase every year causes the demand for jobs to increase but employment cannot accommodate all job seekers. If the increase in labor cannot increase national production, it will cause low prosperity (Sukirno, 2019). The negative impacts of excessive urbanization include the creation of urban poverty and slum areas. City traffic is increasingly chaotic, drainage and sanitation systems are poor, culture is increasingly individualistic and materialistic, consumerism culture is increasing (Girsang, 2011)

In addition, economic growth is one of the benchmarks in reducing poverty (Mayangsari et al., 2021). With the increase in economic growth will reduce poverty because economic growth will stimulate increased investment which will have an impact on increasing employment opportunities, improving access to community services and increasing income which will have an impact on reducing existing poverty.

Improving the quality of the Human Development Index (HDI) is also important for poverty alleviation. It should be noted that in increasing HDI, several things must be considered, namely equal access to education, health, and decent living standards are challenges in increasing HDI in North Jakarta, although the Jakarta area is an area with high HDI, the quality of human resources in the region is still relatively low compared to the DKI Jakarta area. Low HDI will result in low labor productivity of the population (Andhykha et al., 2018)

The poverty situation in the North Jakarta area was exacerbated by the Covid-19 pandemic that hit, almost the entire economy was affected, especially the triangle sector in three interrelated jobs. This sector consists of trade; transportation and warehousing; and the processing industry which is the largest livelihood that accommodates a lot of labor. The main livelihood of workers is stopped in difficult conditions coupled with the continuing urbanization conditions causing increasingly fierce competition. Those who are unable to compete for jobs due to lack of skills will be eliminated and become unemployed. In addition, low ownership of production factors and poor access to productive economic resources are one of the triggers of poverty (Pulungan, 2022).

The harsh reality of poverty in the city of North Jakarta can be seen from the still existing slum areas, layoffs, thuggish and vagrant behavior. Poverty seems to never disappear from human life (Fitria et al., 2021). In the end, poverty will affect the economic growth of a country or region, this is clear considering that economic growth is one of the crucial indicators in assessing the performance of an economy, especially to analyze the results of economic development that has been carried out by a country or a region. Based on the topic of background discussion, researchers are interested in researching more deeply about "Effect of Economic Growth, Unemployment Rate and Human Development Index on Poverty Rate in North Jakarta City".

## **LITERATURE REVIEW**

### **Definition of Poverty Level**

The poverty rate is the percentage of poor people in a region (BPS, 2022). Poverty which is a causal relationship (circular causality) which means a high level of poverty occurs due to low per capita income, market imperfections, lack of capital, and underdevelopment of human resources causing low productivity. Poverty is one of the fundamental problems, because poverty means the fulfillment of the most basic needs in life. Poverty is a global problem because poverty is a problem faced by many countries in the world. Income inequality is a direct result of the underlying cause of poverty, namely inequality in income distribution. In addition, one of the causes of poverty is the low ownership of production factors and the limited access of poor people to useful economic resources (Pulungan, 2022)

### **Definition of Economic Growth**

Economic growth can be defined as the development of activities in the economy that can cause the production of goods and services produced in society to increase (Sukirno, 2019). According to the BPS, economic growth is a series of efforts and policies in order to improve people's welfare, expand employment and equalize the distribution of people's income and seek changes in the progress of economic activities from the secondary sector to the primary and tertiary sectors.

### **Definition of Unemployment Rate**

The open unemployment rate is the percentage of the number of unemployed to the total labor force. The Labor Force consists of people of working age (15 years and over) who are employed or have a job but are temporarily unemployed, and unemployed. Unemployment is divided into several namely: residents who are looking for work, residents who are preparing for new businesses and jobs, residents who are not looking for work at all because they find it difficult to find work, population groups who are not looking for work because they already have a job but have not started working. If the unemployment situation in a country/region is very bad, it will worsen the economic situation, public welfare and long-term economic development

prospects (Sukirno, 2019).

### **Definition of Human Development Index (HDI)**

The Human Development Index (HDI) is a method to measure the development of human welfare in a country or region. HDI is used as an indicator to describe the level of human development by taking into account three main dimensions, namely health, education and standard of living. The main components of HDI calculation are 1) Health: Measured by life expectancy at birth and mortality rate of children under 5 years of age. This indicator reflects the access and quality of health services available to the population. 2) Education: Measured using adult literacy rates and primary, middle, and high school enrollment rates. This indicator reflects the access and quality of education available to the population. 3) Standard of Living: Measured by real per capita income or real per capita consumption expenditure. This indicator reflects the standard of living of individuals in terms of income and consumption.

### **METHODOLOGY**

This research is a quantitative research using data obtained from the official website of the BPS North Jakarta in the period 2009-2021 using multiple linear analysis methods using the SPSS 27 data processing program.

### **Analysis Techniques**

According to (Ghozali, 2018), explained that the multiple linear regression equation model is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_n X_n + e \dots \dots \dots \text{(Ghozali, 2018)}$$

Information:

- Y : Dependent Variable
- X1,X2,X3 : Independent Variable
- a : Constanta
- $\beta_1, \beta_2, \beta_3$  : Coefficients of Regression Equation
- e : Standard error

## RESEARCH RESULT AND DISCUSSION

### Normality Test

The normality test is carried out to test whether in the regression model the independent variable and the dependent variable or both have a normal distribution or not (Ghozali, 2018)

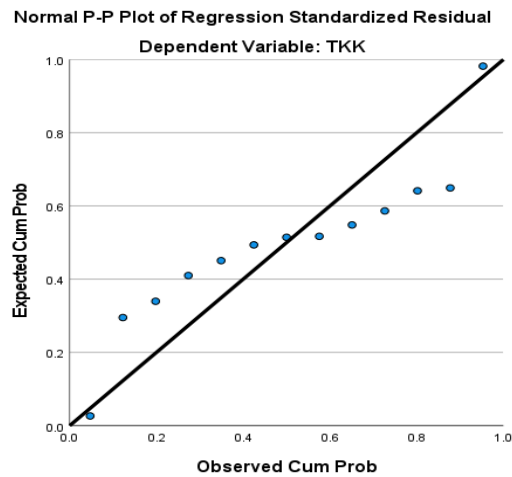


Figure 1. Normality Test

Based on the results in the figure above, it is known that the point has followed its diagonal line, therefore it can be said that the data has been distributed normally.

### Autocorrelation Test

The autocorrelation test aims to test whether in the linear regression model there is a correlation between confounding errors in the period with errors in the t-1 period (before)

Table 1. Durbin Watson

Durbin-Watson
3.068

According to the results of the autocorrelation test above, it is known that the results of the autocorrelation test are durbin watson values of 3.068. According to these results, it can be seen that the value of 3.068 indicates that there is a negative autocorrelation, with a dL value of  $< (4-d) < dU$  or  $0.71465 < 0.932 < 1.81593$ . It can be interpreted that there is no definite conclusion. Because the results show no definite conclusions, therefore a run test is needed.

**Runs Test**

Table 2. Test Runs Results

<b>Runs Test</b>				
	PE	TPT	IPM	Unstandardized Residual
Test Value <sup>a</sup>	5.78	9.26	78.30	.02268
Cases < Test Value	6	6	6	6
Cases >= Test Value	7	7	7	7
Total Cases	13	13	13	13
Number of Runs	6	3	2	9
Z	-.561	-2.310	-2.893	.606
Asymp. Sig. (2-tailed)	.575	.021	.004	.545
a. Median				

Based on the results of the run test above, it is known that the value of Asymp Sig (2-tailed) is 0.545 > 0.05, it is concluded that there is no autocorrelation in this study.

**Multicollinearity Test**

The Multicollinearity Test aims to determine whether between independent variables there is mulikolinier or not and whether regression is found to have a high or perfect correlation between independent variables (Ghozali, 2018).

Table 3. Multicollinearity Test Results

	Collinearity Statistics	
	Tolerance	VIF
(Constanta)		
PE	.584	1.711
TPT	.548	1.825
IPM	.532	1.881

Based on table 4.6 above, showing the VIF value in each variable, namely PE, TPT, and HDI less than 10 (< 10), this shows that in this regression model there are no symptoms of multicollinearity.

**Heterokedasitas Test**

This heterokedacity test aims to determine the difference between variants of one residual with another observation (Ghozali, 2018).

Table 4. Heterokedacity Test Results

			Unstandardized Residual
Spearman's rho	PE	Sig. (2-tailed)	.979
	TPT	Sig. (2-tailed)	.957
	IPM	Sig. (2-tailed)	.529

It is known based on the results or values of the spearman rank test to de-termined whether there are symptoms of heterokedasticity, that for all

variables, namely PE, TPT, and HDI the sig value (2-tailed) is greater than 0.05. Then it can be said that there are no symptoms of heterokedasticity.

### Coefficient of Determination (R<sup>2</sup>)

The coefficient of determination (R<sup>2</sup>) basically measures how far capital is capable of explaining the variation of the dependent variable. The value of the co-efficient of determination is 0 to 1.

Table 5. Coefficient of Determination Test Results

R	R Square	Adjusted R Square	Std. Error of the Estimate
.791 <sup>a</sup>	.626	.501	.62958

According to the results of the table above that the R square value is 0.626 or 62.6%. The results stated that the ability of the independent variable in this study was able to influence the dependent variable by 62.6%, while 37.4% was explained through other variables outside the study.

### Test F

The F test aims to find out whether the independent variables have an influence on the dependent variables simultaneously (together).

Table 6. F Test Results

	Sum of squares	df	Mean square	F	Sig
Regression	5.971	3	1.990	5.022	.026 <sup>b</sup>
Residual	3.567	9	.396		
Total	9.539	12			

According to the results of the F test above, the calculated F value is 5.022 > F table is 3.86 and the significant value is 0.026. So in accordance with the decision making of test F, it can be concluded that there is a significant influence between the independent variable and the dependent variable simultaneously.

### Results of Linear Model Estimation of Each Variable Linear Regression Model

Table 7. Multiple Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	-37.374	10.416	
PE	.072	.071	.272
TPT	.364	.115	.874
IPM	-.454	.143	-.886

According to the results of multiple linear regression above, the multiple linear regression equation can be drawn as follows:

$$TK = 37,374 + 0,072PE + 0,364TPT - 0,454IPM + e$$

Through the above equation can be explained as follows:

1. Konstanta (b0)  
If the variables of economic growth (X1), open unemployment rate (X2), and human development index (X3) are constant, then the unemployment rate increases by 37.374%.
2. Regression coefficient of economic growth ( $\beta_1$ )  
If the economic growth variable has a positive effect on the poverty rate with a coefficient value of 0.072. If economic growth (X1) increases by 1%, then the unemployment rate increases by 7.2%.
3. Regression coefficient of open unemployment rate ( $\beta_2$ )  
If the variable unemployment rate is open, it has a positive effect on the poverty rate with a coefficient value of 0.364. If the open unemployment rate (X2) increased by 1%, it would increase the poverty rate by 36.4%.
4. Regression coefficient of human development index ( $\beta_3$ )  
If the human development index variable has a negative effect on the poverty rate with a coefficient value of -0.454. If the open unemployment rate (X3) increased by 1%, it would decrease the poverty rate by 45.4%

### Test t

The t test aims to determine whether the independent variable has an influence on the dependent variable partially (individually).

Table 1. Test Results t

Model	t	Sig.
(Constant)	3.588	.006
PE	1.019	.335
TPT	3.173	.011
IPM	-3.169	.011

According to the t test above, it can be explained as follows:

1. According to the results of the economic growth variable t test, it is known that the calculated t value is  $1.019 < t \text{ table } 2.30600$  and the significant value is  $0.335 > 0.05$ . So the economic growth variable does not have a partial influence on the poverty level variable. This can be interpreted that with the increase In line with research (Budhijana, 2020) which shows the results that economic growth does not affect the poverty level in North Jakarta, this can be influenced by the persistence of income inequality and other factors such as development inequality, rapid urbanization, job availability and human resource skills that can affect the poverty level in the city North Jakarta. However, it is different from research conducted by (Permatasari, 2019) which shows the results of economic growth negatively affect

poverty. This is because increased economic growth will cause goods produced to also increase when goods and services produced will increase, this is also followed by an increase in the number of workers.

2. According to the results of the open unemployment rate variable t test, it is known that the calculated t value is  $3.173 > t$  table  $2.30600$  and the significant value is  $0.011 < 0.05$ . So the variable open unemployment rate has a partial influence on the variable poverty rate. This is in line with research conducted (Sembiring et al., 2020) which states that the open unemployment rate has a significant positive effect on the poverty rate in North Jakarta. This shows that the increasing unemployment rate will reduce people's productivity so that they are unable to meet their living needs which will further increase poverty. As in the *Covid-19 phenomenon* which recently occurred with many job cuts due to social restrictions caused the poverty rate in North Jakarta City to also increase.
3. According to the results of the human development index variable t test, it is known that the calculated t value is  $-3.169 > t$  table  $2.30600$  and the significant value is  $0.011 < 0.05$ . Therefore, the human development index variable has a partial negative influence on the poverty level variable. This is in line with research (Ardian et al., 2021) which states that the Human Development Index (HDI) has a significant effect on the poverty rate. With this, it can be proven that by improving the quality of human resources, it will increase community productivity so as to reduce poverty in North Jakarta. Therefore, it is necessary to improve the quality of access to health, education, wages and supporting infrastructure to encourage an increase in the Human Development Index (HDI) in North Jakarta

## CONCLUSIONS AND RECOMMENDATIONS

According to the results of the study, conclusions can be drawn, namely First, Economic Growth does not contribute to the North Jakarta Poverty Rate, this shows that economic growth is uneven for every poor group in North Jakarta in the sense that there is still inequality that occurs. Second, the Open Unemployment Rate has an influence on the Poverty Rate in North Jakarta City, this successfully shows that unemployment can cause social and economic problems that will reduce people's welfare and increase poverty. And the third Human Development Index (HDI) has an influence on the Poverty Rate in North Jakarta, this shows that if a quality Human Development Index (HDI) will be able to reduce the poverty rate

Based on the conclusions above, the following are known some suggestions for consideration, namely to the North Jakarta City Government needs to expand employment opportunities in all fields to reduce unemployment so that people can meet the needs of life properly so as to reduce poverty. The North Jakarta City Government needs to hold MSME training programs and skills training for the community to improve the welfare of residents in North Jakarta City.

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