

## ANALYSIS OF THE EFFECT OF GROSS REGIONAL DOMESTIC PRODUCT, HUMAN DEVELOPMENT INDEX, AND OPEN UNEMPLOYMENT RATE ON THE NUMBER OF POOR PEOPLE IN CENTRAL JAVA PROVINCE IN 2019-2021

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**Abstract.** This study goals to determine the impact of gross regional domestic product, human development index, and open unemployment rate on the poor in the 29 districts and 6 cities of Central Java province in 2019-2021. The source of the data was obtained from the Central Statistics Agency (BPS). Analyze research data using panel and cross section data with the operational help of E-views 9. After the data was processed using eviews 9, the result of this was that the gross regional domestic product variable showed a negative value, which means that the variable did not affect the number of poor people in Central Java in 2019-2021, but for the human development index variable and the open unemployment rate showed a positive value which means that the variable affects the number of poor people in Central Java Province in 2019-2021.

**Keywords:** Poor population, grdp, hdi, odl.

### INTRODUCTION

One of Indonesia's national development goals based on the Preamble to the 1945 Constitution is to promote the general welfare. In order to enjoy a good existence and advance in their social and economic responsibilities, citizens of a country need to have their basic material, spiritual, and social needs met. This is what we mean by "general well being". On the basis of the amount of poverty, Indonesia's standard of living is one of them. In Indonesia, there is a negative correlation between general welfare and poverty. The population's standard of living increases as the poverty rate decreases (Ridho Andykha, 2018).

Poverty is the inability of a person to fulfill fundamental requirements such as food, housing, clothes, health, and education. This is because of the complication of finding a decent job and the low skills possessed. The difficulty of finding a job is usually caused by several factors such as low education, less extensive knowledge, lack of creativity, and so on. Low skills will be more difficult to find a job because individual skills are very influential in carrying out a job, with multitalented skills a person will find it easier to find a job by taking advantage of these skills. The number of unemployed is higher than the desire to find a job. The low interest in finding a job is such a tight competitiveness and having enough experience.

Poverty is a basic issue that governments in every country in the globe must address. It is not easy to define poverty, various concepts, notions, and measures have been expressed by many economists. The difference in points of view finally brings blessings, because the best poverty reduction program is based on the concept of poverty experienced by the community itself. Many residents in isolated areas and the real inland terms of food are not lacking, but they are isolated from various accesses, unable to go to school, and backward from the side of civilization. Of

course, the way to deal with this will be different from the poor people in the city who live in shops and bridgeheads. In Indonesia itself, the problem of poverty is still very big. The government, both central and local governments, have made efforts in implementing various policies and programs for poverty reduction programs, including the existence of a healthy family card program, JAMKESMAS, family hope program, BOS funds (school operational assistance), Raskin, BSM (Poor Student Assistance), and People's Business Credit, but these programs are still not optimal enough. One aspect that plays an important role in poverty reduction on target is the availability of accurate and reliable poverty data to be used in determining the value of poverty measures (Amalia, 2017). Scarcity is an issue not just in emerging nations, but also in industrialized nations, albeit to a lesser extent than in developing nations. (Mahendra, 2017).

Poverty is a condition that is often associated with difficulties and a lack of needs in all lives. Poverty is also defined as someone who does not have someone to address the demands of basic consumption in order to enhance living quality. The measure of poverty is divided into two types, namely relative poverty and absolute poverty. Relative impoverishment is poverty related to the difference in income levels in one group with another, while absolute poverty is not having someone go beyond a predetermined poverty line (Anis Rahmawati, 2021).

Urban poverty has multi-dimensional phenomena including low levels of income, health and education, housing and personal insecurity, and helplessness. This results in urban poor living in slums and dense settlements so that they have difficulty accessing health facilities, basic education, and employment opportunities (Soleh, 2018).

Various strategies for alleviating the problem of poverty have been carried out by the government, including Central Java Province. Central Java's efforts to reduce poverty are based on the five pillars of the "Grand Strategy", The first, community empowerment, seeks to speed up social, political, economic, and cultural institutions of the community and expand the participation of the community in decision-making processes; the second, economic diversification, seeks to create economic, political, and social conditions and environments that allow the poor to have opportunities in fulfilling basic rights and sustainably improving living standards; and the third, economic expansion, seeks to create economic, political, and social conditions and environments that allow the poor to have opportunities in fulfilling basic rights and sustainably improving living standards (Manisha Elok Sholikhati, 2020).

Several factors affect poverty, notably the Gross Regional Product, the Human Development Index, and the Open Unemployment Rate (TPT). The first element is the gross regional domestic product which is the end outcome of goods and services that have been generated. That way, goods that can be processed will produce good production results and can improve the quality of society. Because thus, the community can produce maximum products with government assistance. Where GRDP can be said to be government revenue, where the government can get the results of goods and services from the community. If the government cannot meet the needs of the people, there are even many governments that embezzle people's money for personal interests, so that people lack materials to meet their jobs, for example, many people grow rice, and subsidies from the government are lacking. Then it cannot resolve or get a solution from the government. So that the government's revenue will also be reduced, and it will not be able to satisfy the desires of the people.

The second element is the human development index, which is the outcome of the first of processed public thinking seen from education, health, income, etc. Where this human development index explains the increase in literacy and life expectancy. This literacy number can be interpreted as someone who is not capable of reading but they can write letters in the alphabet. So this literacy rate usually exists in someone who has below the standard of human literacy. Meanwhile, life expectancy can be interpreted as someone who is expected to have a long life. Life expectancy is usually calculated from the average person who has had a birthday. Poverty is caused by a number of factors, including low education, restricted work, and inadequate capital. Education and the limitations of human capital have to do with how people develop their lives. People desire a reasonable standard of living, including appropriate clothing, food, housing, and education. The human development index (HDI) measures the progress made toward a fair standard of living for all people (Lily Leonita, 2019).

The third factor is the open unemployment rate which can be interpreted as a society that does not have a job. For example, many people have graduated from high school but have not found a job either. This is due to a large number of human resources and job opportunities do not exist. There are so many now who rely on insiders. Where a person can have a job quickly but the result of bribery (Pratama, 2022). Low education causes poor people to have less knowledge. Lack of knowledge and low education makes a person's competitiveness in the world of work and the business world low, which will cause a person's productivity to be small (Handayani, 2018). The unemployed population, in general, is scattered in the countryside and the city. Unemployment is prevalent in rural areas because these people are poorly educated and have no skills or skills. Meanwhile, urban unemployment is dominated by undergraduate graduates. In addition, the emergence of poverty is also caused by the heavy burden of life carried by one family (Fahmi, 2022). Unemployment increases as the economy shrinks (Rahma Ika Fitriana, 2022).

## RESEARCH METHOD

This study utilized information gathered from the central statistics agency (BPS) and published on the agency's official website. To examine the impact of gross regional domestic product, the human development index, and the open unemployment rate, research utilizing cross-sectional panel data analytic methodologies is required. The following equation is used in regression estimation:

$$PO_{it} = \beta_0 + \beta_1 PDRB_{it} + \beta_2 IPM_{it} + \beta_3 TPT_{it} + \varepsilon_{it}$$

Where :

- PO = Poor Population (%)
- PDRB = Gross Regional Domestic Growth Of Constant Prince 2019-2021 (million rupiahs)
- IPM = Human Development Index (%)
- TPT = Open Unemployment Rate (%)
- $\varepsilon$  = Error Term ( error factor )
- = Constant

$\beta_0$  = Independent Variabel Regression Coefficient

$\beta_1, \beta_2, \beta_3$

- i = Cross-Section Data
- t = Time Series Data For 2019-2021

## RESULT AND ANALYSIS

To test this research conducted using the views 9 application on a computer with a panel least square (PLS) regression analysis model, this research requires the following chow test:

Redundant Fixed Effects Tests

Equation: Untitled

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	242.203556	(34,67)	0.0000
Cross-section Chi-square	506.052706	34	0.0000

Tabel 1. Chow Test

Teguh Adi Nugroho<sup>1</sup>, Maulidyah Indira Hasmarini<sup>2</sup>  
 Analysis Of The Effect Of Gross Regional Domestic Product, Human Development  
 Index, And Open Unemployment Rate On The Number Of Poor People In Central Java  
 Province In 2019-2021

Based on the data processing table above, the probability value  $F = 0.0000 < 0.01$  and the probability value of chi-square =  $0.0000 < 0.01$ ,  $H_0 = \text{CEM}$ ,  $H_A = \text{FEM}$ . If the  $H_0$  conclusion is rejected, the Fixed Effect Model (FEM) is picked as the preferred model. When the chow test demonstrates the FEM model, the next step is to conduct a Hausman test, which consists of the steps outlined below:

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	112.400284	3	0.0000

Tabel 2. Hausman Test

Based on the data processing table above, the probability value  $F = 0.0000 < 0.01$ ,  $H_0 = \text{REM}$ ,  $H_A = \text{FEM}$  was obtained. The conclusion of  $H_0$  is that the chosen model is the Fixed Effect Model (FEM).

It has been demonstrated that the selected model is a Fixed Effect Model based on the findings of the two examined tests. Then, the following steps are taken to analyze the data using the Fixed Effect model:

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-78.39639	10.51134	-7.458268	0.0000
LOG(PDRB)	-0.159765	0.153791	-1.038842	0.3026
IPM	1.259032	0.137292	9.170486	0.0000
TPT	0.117187	0.027865	4.205558	0.0001

table 3. Regression Results Of Fixed Effect Models

Based on the table above, the results of the panel data regression equation are obtained as follows:

$$PO_{it} = -78.39639 - 0.159765 \text{ LogPDRB}_{it} + 1.259032 \text{ IPM}_{it} + 0.117187 \text{ TPT}_{it} + \varepsilon_{it}$$

The interpretation of the results of the Panel Least Square (PLS) regression equation shows that the value of the constant (C) = -78.39639 with a probability value (0.0000) smaller than alpha 0.01 significantly increased the number of impoverished people in central Java. Consequently, the GRDP value demonstrates a coefficient value of -0.159765 with a probability value (0.3026) bigger than alpha 0.1, which has been determined to be negligible, indicating that GRDP has no effect on the number of impoverished people in Central Java. The HDI variable has a coefficient value of 1.259032 with a probability (0.0000) less than 0.01 alpha, which has been demonstrated to be statistically significant for the number of impoverished individuals in Central Java. The TPT variable has a coefficient value of 0.117187 with a probability value (0.0001) less than 0.01 alpha, which has been found to be significantly associated with the number of impoverished people in Central Java.

**The effect of GRDP on the poor**

Based on the above regression results of the fixed effect model, it is known that the GRDP variable has a coefficient value of -0.159765, with a probability value of 0.3026. Given that the

probability value is greater than  $\alpha = 0.1$ , it can be concluded that the GRDP variable does not affect the poverty rate in Central Java.

Inasmuch as the rise in the poor population can be attributable to other factors, GRDP, which is just the ultimate value added to products and services in specific locations, cannot reduce the number of poor people. Since the coefficient value was negative, it is clear that GRDP did not reduce poverty levels. This shows that the GRDP has a influence on Central Java's poverty rate is small.

#### **The effect of HDI on the number of poor people**

In light of the facts, we may deduce that the HDI variable has a coefficient of 1.259032 and a probability of 0.0000, according to the fixed effect model's regression analysis. Since the probability value is smaller than  $\alpha 0.01$ , the HDI variable is shown to be statistically significant. As a result, we may infer that HDI affects the concentration of poverty in central Java.

Based on quality of life standards, the human development index can quantify human development accomplishments. The positive coefficient value in the regression findings above indicates that HDI has been shown to influence the number of impoverished individuals in Central Java.

#### **The effect of TPT on the number of poor people**

Based on the above regression results of the fixed effect model, TPT is a variable for which the coefficient is known to be 0.117187 and the probability to be 0.0001. As the probability value for TPT is smaller than  $\alpha = 0.01$  in this case, it may be argued that TPT has an effect on the poverty rate in Central Java.

Unemployment rates remain precarious in several regions of the nation. The positive coefficient value in the preceding regression findings indicates that the TPT has been shown to influence the number of impoverished people in Central Java. Unemployment in Indonesia, particularly in central Java, is extremely worrisome since it is still categorized as a high poverty rate despite the province's population being in the top 10 of the country's provinces.

## **CONCLUSION**

The following conclusion may be made in light of the information presented above:

The Panel Least Square (PLS) regression model of the impoverished population can provide a fixed effect model approach. The results indicated that an independent variable with a value of -78.39639 and a probability smaller than  $\alpha$  was statistically significant in relation to the dependent variable.

1. The number of people living in poverty in Central Java is negatively impacted by the GRDP.
2. The HDI has a favorable impact on the number of impoverished individuals in Central Java.
3. The open unemployment rate (TPT) improves the lives of Central Java's poor.

## **References**

- Andhykha, R., Handayani, H. R., & Woyanti, N. (2018). Analisis Pengaruh PDRB, Tingkat Pengangguran, dan IPM Terhadap Tingkat Kemiskinan di Provinsi Jawa Tengah. *Media Ekonomi dan Manajemen*, 33(2).
- Amalia, A. (2017). Pengaruh Pendidikan, Pengangguran Dan Ketimpangan Gender Terhadap Kemiskinan Di Sumatera Utara. *At-Tawassuth: Jurnal Ekonomi Islam*, 2(2), 324-344.
- Mahendra, A. (2017). Analisis Pengaruh Pertumbuhan Ekonomi, Pendapatan Perkapita, Inflasi dan Pengangguran Terhadap Jumlah Penduduk Miskin. *Jurnal Riset Akuntansi & Keuangan*, 113-138.

Teguh Adi Nugroho<sup>1</sup>, Maulidyah Indira Hasmarini<sup>2</sup>  
Analysis Of The Effect Of Gross Regional Domestic Product, Human Development  
Index, And Open Unemployment Rate On The Number Of Poor People In Central Java  
Province In 2019-2021

- Rahmawati, A., Lutfiani, L., Yunia, Z. R., Zahrok, F. F., & Wahyuningtyas, D. (2021). Dampak Pandemi Covid-19 Terhadap Indeks Pembangunan Ekonomi Inklusif Jawa Timur Indikator Tingkat Kemiskinan Dan Ketimpangan. *Efektor*, 8(1), 79-88.
- Soleh, A. (2018). Analisis dan strategi pengentasan kemiskinan di Provinsi Jambi. *EKSIS: Jurnal Ilmiah Ekonomi dan Bisnis*, 9(1), 79-90.
- Sholikhati, M. E. (2020). Analisis PDRB, IPM, Jumlah Penduduk, Pengangguran, Investasi PMA Terhadap Kemiskinan di Jawa Tengah 2011-2016. *EDUSAINTEK*, 4.
- Leonita, L., & Sari, R. K. (2019). Pengaruh PDRB, Pengangguran, dan Pembangunan Manusia Terhadap Kemiskinan di Indonesia. *ISOQUANT: Jurnal Ekonomi, Manajemen dan Akuntansi*. Vol. 3 No. 2 Oktober 2019, 1-8.
- Pratama, N. C., & Hasmarini, M. I. . (2022). The Effect of Education Level, Economic Growth, Allocation of Government Expenditure, and The Number of Poor People on Unemployment In Bali Province In 2017-2020. *Journal Research of Social, Science, Economics, and Management*, 2(04), 544.
- Handayani, A. (2018). Pengaruh Tingkat Pendidikan, Kesehatan Dan Pengangguran Terhadap Tingkat Kemiskinan Di Kabupaten Bojonegoro Tahun 2002-2015. *Jurnal EKBIS*, 19(1).
- Hasan, A. (2022). ANALISIS PERTUMBUHAN EKONOMI DAN PENGANGGURAN TERHADAP KEMISKINAN DI KOTA BENGKULU TAHUN 2011-2020. *PARETO: Jurnal Ekonomi dan Kebijakan Publik*, 5(1), 95-110.
- Fitriana, R. I., & Hasmarini, M. I. . (2022). Determinants of Poverty Rate In East Java Province In 2018-2020. *Journal Research of Social, Science, Economics, and Management*, 2(04), 533.