

EXAMINING THE DETERMINANTS OF POVERTY IN EAST JAVA

Dewi Kholifah*¹ 

Hadi Sumarsono²

^{1,2} Faculty of Economics and Business, Malang State University

Email: dewi.kholifah.1904326@students.um.ac.id¹; hadi.sumarsono.fe@um.ac.id²

ARTICLE HISTORY

Received:

29 May 2023

Revised

13 May 2023

Accepted:

20 May 2023

Online available:

29 May 2023

Keywords:

Economic Growth,
General Allocation
Funds, Health,
Poverty

*Correspondence:

Name: Dewi Kholifah

E-mail:

dewi.kholifah.1904326
@students.um.ac.id

ABSTRACT

Introduction: Economic development is one of a nation's attempts to achieve social well-being. The poverty line could possibly be utilized to indicate social welfare given there is an adverse relationship between welfare and poverty rates in Indonesia. A citizen is considered to be poor if their earnings are insufficient to cover necessities such food and shelter.

Methods: This research uses the panel data method in 38 districts/cities in East Java Province between 2019 and 2022.

Results: Economic growth, general allocation funds, and health have a negative and substantial impact on the poverty rate of districts and cities in East Java Province.

Conclusion and suggestion: The government is expected to be able to maximize the results of the economic sector in each district or city in East Java, due to a high potential for expanding the economy, in addition to optimizing general allocation funds for public infrastructure and facilities, access to education, health, and infrastructure that stimulates economic activity, and enhance the quality of public health considering good health, of course, leads to economic growth.

INTRODUCTION

Economic development is one of the attempts made by a country to achieve social well-being (Amami & Asmara, 2022). Because there is a negative relationship between welfare and poverty levels in Indonesia, social welfare can be expressed using the poverty line. Development economics literature emphasizes poverty's multidimensionality (Babalola & Mohd, 2022). Lower poverty rates mean better lives (Andykha et al., 2018). Poverty is one of the problems that economic growth may help to eliminate (Qurrata & Ramadhani, 2021). When an individual or group of people does not have enough money to meet basic needs and enjoy a certain level of living, they are said to be poor (Wahyu Azizah et al., 2018). Poverty is a global issue that every country, especially developing

countries like Indonesia, faces. Poverty is an economic disease that must be cured or at least mitigated (Safuridar, 2017). Because poverty is a major issue, both the Central Government and local governments must pay close attention to decision-making in poverty reduction activities (Amami & Asmara, 2022). When a person's income is not sufficient to provide for basic living expenses, such as food and housing, they are said to be poor (BPS, 2022). Poverty is closely linked to issues of economic development, social welfare, and economic growth. Poverty is also linked to education and health.

An indicator of a region's economy is economic growth. Strong and sustainable economic growth is the most important precursor or necessity for the continuance of economic development and improved welfare (Sabyan & Widyanti, 2022). National economic growth is inextricably linked to regional economic growth. Growth in the regional economy can be evaluated by measuring the rate of increase in the GRDP in both real and nominal terms over a specified time interval. The gross regional domestic product of a nation or area serves as a gauge of its pace of economic growth (GRDP). Economic growth is a factor that affects the amount of poverty. Economic growth is a key strategy for poverty alleviation (Ho & Lyke, 2018). Economic growth affects a region's level of human welfare, and vice versa. A policy that promotes economic growth is required in order to speed poverty reduction (Suryahadi et al., 2012).

In order to enhance and expand the regional economy, the government has worked to alleviate or eliminate poverty in a variety of ways, which are represented in numerous government initiatives. One of the government's initiatives to promote people's welfare and alleviate poverty is to implement fiscal decentralization as a means of providing suitable and adequate public facilities through the distribution of regional autonomy authority. Fiscal decentralization is supposed to generate regional economic stimulation, increasing APBD revenues and improving people's welfare, hence reducing poverty (Maulana & Masbar, 2018). The General Allocation Fund (DAU) is a fiscal decentralization tool whose implementation is entrusted to the regions. DAU allocations are very limited for places with great economic potential but low financial needs. In the meantime, the DAU is quite high in locations that have low economic potential but significant financial requirements.

The quality of human resources must also be addressed in economic development. Because productive human resources are an important aspect of poverty alleviation, health is one of the elements that determine human resource quality. Poor health is a major contributor to poverty (Chowdhury et al., 2013). Because one of the welfare factors that may be used to assess the degree of public health in relation to the quality of life is health, it can also affect poverty (Yuliana et al., 2020). Life expectancy is a metric used to assess government performance in order to improve people's well-being and public

health. A low life expectancy in an area suggests that health development has not been successful, whereas a greater life expectancy shows that health development in that area has been successful. A person who is in good health is more productive. This also has an impact on their revenue. Higher-income can enhance consumption, thereby meeting life's essentials and easing poverty (Aprilia & Triani, 2022).

According to research (Sasmal & Sasmal, 2016) utilizing the Fixed Effect model panel data regression approach on "Public expenditure, economic growth, and poverty alleviation," economic growth can alleviate poverty by maximizing the utilization of public needs. Then, using panel data regression, research was conducted Sholikhah et al. (2022) on "The Effects of Economic Growth, Inflation, Minimum Wage, and Government Expenditures on Poverty in the Special Region of Yogyakarta in 2013-2019" to learn that the advancement of economic activity has a negative effect on the level of poverty in the Yogyakarta Special Region.

Furthermore, using the multiple linear analysis methods, research Jalil et al. (2020) on "The Influence of General Allocation Funds (Dau) on Poverty in Central Aceh District" discovered that general allocation funds have a negative and substantial influence on poverty in Aceh District. Middle. Furthermore, research conducted by (Amami & Asmara, 2022) using multiple linear regression on "Analysis of the Influence of PAD, DAU, DAK, and Capital Expenditure on Poverty in Ngawi Regency" indicates that general allocation funds have a negative and substantial influence on poverty in the Regency Ngawi.

Research conducted by (Pratiwi & Malik, 2022) entitled "Analysis of the Influence of Economic Growth, Education, and Health Levels on the Number of Poor Population in Bali in 2011-2020" with the Random Effect Model yielded the conclusion that health has a significant negative and significant influence on poverty in the Province of Bali.

Based on the foregoing, the issues raised in this study are how the rate of economic growth, the number of general allocation funds, and health districts/cities in East Java Province have developed, and how much influence the rate of economic growth, the amount of general allocation funds, and health have on the poverty rate in East Java Province in 2016-2020.

LITERATURE REVIEW

Poverty

Poverty has five characteristics, according to (Chambers, 1998) : (1) property poverty; (2) helplessness; (3) susceptibility to an emergency situation (state of emergency); (4) reliance; and (5) geographic and social isolation. Poverty is a persistent issue in people's lives (Giovanni, 2018). When a person's income is not sufficient to provide for basic living expenses, such as food and housing, they are said to be poor (BPS, 2022). Another sign of poverty is when a person struggles to meet basic needs such food, housing,

job, clothes, education, and well-being as shown by excellent health. The phrase "vicious circle" is used. As a result of its underlying causes, poverty is a cycle that is interrelated. Poverty must be tackled since it is a barrier to progress. The federal and regional governments have undertaken different attempts to eradicate poverty, including the implementation of legislation and initiatives (Agustin & Sumarsono, 2022). Increasing economic development, education, and health care, among other things, are some of the efforts that may be undertaken to eliminate poverty.

Economic Growth

Economic growth is an indicator of a region's economic (Suripto & Subayil, 2020). An rise in aggregate output, which is the sum of all products and services created by economic activity, is one definition of economic growth. Another definition of economic growth is an increase in the quantity of things produced. Gross Domestic Product (GDP) is the entire value of all product end created by an economy, including both local citizens and foreigners living in the country in question. As a result, common sizes are frequently employed to assess the rate of economic growth, such as percentage change in GDP on a national scale or percentage change in GRDP on a provincial or regency/city scale. Economic growth is an example of how development activities may be extended to attain a given degree of prosperity (Iskandar et al., 2022).

General Allocation Funds

The General Allocation Fund is a fund created from granted APBD with the purpose of spreading financial capacity evenly among regions in order to help needy areas in the context of decentralization. The General Allocation Fund seeks equity and seeks to alleviate regional financial disparities. In accordance with Regional Financial Balance Law Number 33 of 2004, the concept of fiscal imbalance is used to determine the necessity for provincial, district, and city DAU. Regional fiscal capabilities should be determined by local fiscal requirements. In other words, DAU is used to bridge gaps formed when local demand exceeds the quantity of locally generated money. According to the fiscal imbalance concept, locations with greater capacity will get less DAU, while those with less capacity would receive more DAU. In practice, this notion would enable DAU computations in areas where financial capacity surpasses financial necessity. As a result, the DAU computation returns a negative value. To prevent reducing regions' capacity to finance previously incurred costs, the DAU calculation applies a balancing guideline (according to PP No. 6 of 2011 on balancing funds) in conjunction with a fiscal budget formula. gap. After the balancing factor is known, the fiscal gap formula and the balancing factor are utilized to establish regional DAU allocation. To compute the general allocation of funds for each

province and district/city, the basic formula for distribution of funds stipulated in Law Number 33 of 2004 on the Central and Regional Financial Balance is applied.

Health

In accordance with Law Number 23 of 1992, everyone must be in good physical condition, mental, and social health in order to live productive lives on both a social and economic level. Health is a state of stability, dynamic and balance. Occupational health is an effort to improve the physical, mental and social health of employees in all positions. Health is a factor that can affect a person's quality of life. Population health is essential to the success of nation-building because development can go easily with a healthy population. Poverty has a direct impact on people's well-being. Life expectancy is used to assess a person's health (Suryandari, 2018). A measure of how well the government is performing in terms of boosting the general welfare and health of the public is the Life Expectancy Rate (AHH).

Hypothesis

The following is the study's hypothesis:

H1: Economic Growth has a negative effect on Poverty

H2: General Allocation Fund has a negative effect on Poverty

H3: Health has a negative effect on poverty

RESEARCH METHODS

This quantitative research focuses on causal effects. This research is based on secondary data. Both the Ministry of Finance and the East Java Province BPS (Central Bureau of Statistics) websites provided the data for this article. The panel data regression data analysis method was used to analyze the data using the Eviews 12 tool. 38 regencies/cities in the East Java Province provided panel data in the form of time series and cross sections between 2019 and 2022.

Variables and Definitions The variables in this study as follows the variable poverty rate as the dependent variable (Y) with units of percent (percent), the variable economic growth as X1 with units of percent (percent), the variable allocation funds general as X2 with units of billions of rupiah (000), and the health variable as X3 with the data used being life expectancy (years).

Chow, Hausman, and Langrange multiplier tests determine the optimum panel data regression model estimate from the common effect model, fixed effect model, and random effect model. F, t, and R2 tests should be used in the interim to test the theory.

This research's panel data regression equation model:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + e_{it} \dots \dots \dots (1)$$

Information:

- Y = Poverty Rate (%)
 t = Regencies/Cities in East Java
 i = Research Year (2016, 2017, 2018, 2019, 2020)
 α = Constant
 X1it = Economic Growth (%)
 X2it = General Allocation Fund (billion rupiah)
 X3it = Health (years)
 B1,2,3 = Regression Coefficient
 eit = Standard Error

RESULT AND ANALYSIS**Data Analysis****Table 1. Chow Test Results**

Effects Test	Statistic	d.f	Prob.
Cross-section F	297.019357	(37,149)	0.0000
Cross-section Chi-square	819.704832	37	0.0000

Source: Eviews 12 (processed)

In light of the findings of the Chow test, the probability value of the cross-section F is 0.0000, which is lower than the threshold value of 0.05. In light of this, the Fixed Effect regression model seems to be the most appropriate choice.

Table 2. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	28.661883	3	0.0000

Source : Eviews 12 (processed)

Based on the Hausman test, the chi-square statistic's probability value is 0.0000, less than 0.05. The Fixed Effect regression model fits best.

Table 3. Multicollinearity Test Results

	X1	X2	X3
X1	1.000000	0.043400	-0.037569
X2	0.043400	1.000000	-0.070630
X3	-0.037569	-0.070630	1.000000

Source : Eviews 12 (processed)

The correlation value across variables in table 3 is less than 0.8, indicating that this study is free of multicollinearity concerns.

Table 4. Heteroscedasticity Test Results

Variabel	Prob.
X1	0.6804
X2	0.9576
X3	0.3295

Source : Eviews 12 (processed)

Table 4 shows that all probability values are larger than 0.05, showing no heteroscedasticity in this investigation.

Table 5. Regression Results Data model Fixed effect

Variable	Coeff	t-statistic	Prob.
C	215.0029	27.52490	0.0000
X1	-0.080430	-7.835822	0.0000
X2	-2.74E-09	-2.557793	0.0115
X3	-2.817226	-25.56151	0.0000
Effect Specifications			
R-squared	0.994663	F-statistic	694.2547
Adjusted R-squared	0.993230	Prob (F-statistic)	0.000000

Source : Eviews 12 (processed)

Based on the Chow and Hausman tests, the Fixed Effect regression model is the best panel data regression model. Panel data regression with fixed effects yielded the appropriate regression model equation for this study:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + e_{it}$$

$$Y_{it} = 215.0029 - 0.080430 X_{1it} - 2.74E-09 X_{2it} - 2.817226 X_{3it} + e_{it}$$

Information :

- Y = Poverty Rate (%)
- t = Regencies/Cities in East Java
- i = Research Year (2016, 2017, 2018, 2019, 2020)
- α = Constant
- X1it = Economic Growth (%)
- X2it = General Allocation Fund (billion rupiah)
- X3it = Health (years)
- B1,2,3 = Regression Coefficient
- eit = Standard Error

F Test (Simultaneous)

When the regression coefficients of the independent variables are combined, the F test is used to determine how much influence they have on the dependent variable. Table 5 shows that economic development, general allocation money, and health all affect poverty simultaneously.

The t test (Partial)

The t-test determines if each independent variable affects the dependent variable statistically. Table 5 shows that economic expansion has a negative effect with a significance value of (0.0000 0.05) and a t statistic of -7.835822. Thus, economic expansion worsens poverty. Thus, the general allocation funds variable has a significance value of (0.0115 0.05) and a t statistic value of -2.557793, showing that it negatively impacts poverty. The health variable has a significance value of 0.0000 0.05 and a t-statistic of -2.817226, demonstrating a negative influence on poverty.

Coefficient of Determination (R-squared)

R-squared tests the independent variable's ability to explain the dependent variable. R-squared is 0–1. If R² is near to 0, the independent variable can't explain the dependent variable, but if it's close to 1, it can. Table 5's R-squared value is 0.994663, indicating that the independent variables (economic growth, DAU, and health) explain 99.46 percent of the dependent variable (poverty), with 0.54 percent explained by factors outside the model.

Discussion

The conventional assumption test passed for this study's regression model (free of multicollinearity and heteroscedasticity problems). The independent variables in this study, such as economic growth, general allocation funds, and health, have a big effect on poverty (5%). Poverty increases with economic progress. The regression findings reveal that if economic growth improves by 1 percent, poverty will reduce by 0.08 percent. [Hidayati & Niniiek \(2022\)](#) found that economic expansion worsens poverty, as did our study. General allocation funds also worsen poverty. If general allocation funds increase by 1 billion, poverty will reduce by 2.74 percent, according to the regression results. According to [Fatahillah \(2019\)](#), general allocation funds aggravate poverty. Life expectancy has an impact on poverty. According to regression findings, if life expectancy increases by 1%, poverty decreases by 2.82 percent. This conclusion is consistent with the findings of [Mariyanti and Mahfudz \(2016\)](#), who discovered that health influences poverty.

CONCLUSION

Fixed effects data analysis shows that fluctuating economic development worsens poverty. Economic progress reduces poverty in East Java Province. Thus, the government should optimize economic sector outcomes in each East Java district/city, which has significant potential in improving economic growth and therefore becoming one of the attempts to eliminate poverty in East Java Province. The general allocation fund variable has a large negative impact on poverty. This suggests that by increasing the quantity of general allocation money acquired, poverty in East Java Province can be reduced. As a result, the government is expected to maximize the amount of general allocation funds received to improve public facilities such as public facilities

and infrastructure, access to education, health, and economic infrastructure. As a result, by maximizing the general allocation funds received, poverty in East Java Province can be reduced. Poverty is significantly influenced by health. Health improvements may reduce poverty in East Java Province. It is hoped that the government would be able to improve the quality of public health since good health, of course, may encourage economic activity, which will have an impact on poverty reduction.

REFERENCES

- Agustin, L., & Sumarsono, H. (2022). Pengaruh Pengangguran, IPM, Dan Bantuan Sosial Terhadap Kemiskinan Di Provinsi Jawa Timur. *Ekonika : Jurnal Ekonomi Universitas Kadiri*, 7(2), 263–286. <http://ojs.unik-kediri.ac.id/index.php/ekonika>
- Amami, R., & Asmara, K. (2022). Analisis Pengaruh PAD, DAU, DAK, dan Belanja Modal terhadap Kemiskinan di Kabupaten Ngawi. *Jurnal Ekobistek*. <https://doi.org/10.35134/ekobistek.v11i2.297>
- Andykha, 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), 113–123.
- Aprilia, V., & Triani, M. (2022). Analisis Pengaruh Ketimpangan Gender, Rasio Ketergantungan Dan Kesehatan Terhadap Kemiskinan Di Indonesia. *Jurnal Kajian Ekonomi Dan Pembangunan*, 4, 43–50.
- Babalola, S. J., & Mohd, S. (2022). An analysis of multidimensional poverty and its determinants in the public university host communities in Ondo State, Nigeria. *Journal of Economic and Administrative Sciences*, 38(1), 135–155. <https://doi.org/10.1108/jeas-06-2019-0066>
- BPS. (2022). *Kemiskinan dan Ketimpangan*.
- Chambers. (1998). *Pembangunan Desa Mulai Dari Belakang*. LP3ES.
- Chowdhury, A. M. R., Bhuiya, A., Chowdhury, M. E., Rasheed, S., Hussain, Z., & Chen, L. C. (2013). The Bangladesh paradox: Exceptional health achievement despite economic poverty. In *The Lancet* (Vol. 382, Issue 9906, pp. 1734–1745). Elsevier B.V. [https://doi.org/10.1016/S0140-6736\(13\)62148-0](https://doi.org/10.1016/S0140-6736(13)62148-0)
- Fatahillah, Arya Galuh. (2019). Pengaruh PDRB, PAD, DAU, Dan Pendidikan Terhadap Kemiskinan Provinsi Jawa Tengah (2012-2017). <https://dspace.uui.ac.id/handle/123456789/16223>
- Giovanni, R. (2018). Economics Development Analysis Journal. In *Economics Development analysis journal* (Vol. 7, Issue 1). <http://journal.unnes.ac.id/sju/index.php/edaj>
- Hidayati, Dwi Rahayu & Niniek Imaningsih. (2022). Pengaruh pengeluaran pemerintah sektor pendidikan, kesehatan, pertumbuhan ekonomi dan kemiskinan terhadap indeks pembangunan manusia. FORUM EKONOMI: Jurnal Ekonomi, Manajemen dan Akuntansi. Volume. 24 Issue 4 (2022) Pages 703-710
- Ho, S. Y., & lyke, B. N. (2018). Finance-growth-poverty nexus: a re-assessment of the trickle-down hypothesis in China. *Economic Change and Restructuring*, 51(3), 221–247. <https://doi.org/10.1007/s10644-017-9203-8>

- Iskandar, I., Abrar, M., & Sufirmansyah, S. (2022). Pengaruh Ipm, Inflasi, Pengangguran Dan Pertumbuhan Ekonomi Terhadap Kemiskinan. *Jurnal Ekonomi Dan Pembangunan*, 13(1). <https://doi.org/10.22373/jep.v13i1.761>
- Jalil, A., Ekonomi Dan Bisnis, F., Gajah Putih, U., Bebangka Kecamatan Pegasing, B., & Tengah, A. (2020). PENGARUH DANA ALOKASI UMUM (DAU) TERHADAP KEMISKINAN DI KABUPATEN ACEH TENGAH. *Jurnal GPJER*, 2(1), 01–15. <https://jurnal.ugp.ac.id/index.php/gpjer>
- Mariyanti, Tatik & Akhmad Affandi Mahfudz. (2016). Dynamic circular causation model in poverty alleviation: Empirical evidence from Indonesia. *Humanomics*. 32(3). 275-299. DOI:10.1108/H-02-2016-0016
- Maulana, I., & Masbar, D. R. (2018). *Desentralisasi Fiskal Dan Kemiskinan Di Indonesia (Studi Kasus: Indonesia Bagian Timur)* (Vol. 3, Issue 1).
- Pratiwi, E. H., & Malik, N. (2022). Analisis Pengaruh Pertumbuhan Ekonomi, Tingkat Pendidikan dan Kesehatan Terhadap Jumlah Penduduk Miskin di Bali Tahun 2011-2020. *Jurnal Ilmu Ekonomi (JIE)*, 6(1), 112–122.
- Qurrata, V. A., & Ramadhani, N. (2021). The Impact of HDI, Minimum Wages, Investment and GRDP on Poverty in East Java in 2019. *KnE Social Sciences*. <https://doi.org/10.18502/kss.v5i8.9393>
- Sabyan, M., & Widyanti, R. (2022). Pengaruh Pertumbuhan Ekonomi Dan Upah Minimum Regional Terhadap Kemiskinan Di Kota Jambi. *Menara Ekonomi*, VIII(3), 311–315.
- Safuridar. (2017). Pengaruh Pertumbuhan Ekonomi Terhadap Kemiskinan di Kabupaten Aceh Timur. *IHTIYADH*, 1(1), 37–55.
- Sasmal, R., & Sasmal, J. (2016). Public expenditure, economic growth and poverty alleviation. In *International Journal of Social Economics* (Vol. 43, Issue 6, pp. 604–618). Emerald Group Publishing Ltd. <https://doi.org/10.1108/IJSE-08-2014-0161>
- Sholikhah, N. M., Priyono, T. H., & Yunitasari, D. (2022). Pengaruh Pertumbuhan Ekonomi, Inflasi, Upah Minimum, Dan Pengeluaran Pemerintah Terhadap Kemiskinan Daerah Istimewa Yogyakarta Tahun 2013-2019. *Jurnal Ilmiah Ekonomi Bisnis*, 27(2), 259–273. <https://doi.org/10.35760/eb.2022.v27i2.4149>
- Suripto, & Subayil, L. (2020). Pengaruh Tingkat Pendidikan, Pengangguran, Pertumbuhan Ekonomi Dan Indeks Pembangunan Manusia Terhadap Kemiskinan Di D.I.Yogyakarta Priode 2010-2017. *GROWTH: Jurnal Ilmiah Ekonomi Pembangunan*, 1(2), 127–143.
- Suryahadi, A., Hadiwidjaja, G., & Sumarto, S. (2012). Economic growth and poverty reduction in Indonesia before and after the Asian financial crisis. *Bulletin of Indonesian Economic Studies*, 48(2), 209–227. <https://doi.org/10.1080/00074918.2012.694155>
- Suryandari, A. N. (2018). Pengaruh Pertumbuhan Ekonomi, Pendidikan, Dan Kesehatan Terhadap Tingkat Kemiskinan Di Provinsi Diy Tahun 2004-2014. *Jurnal Pendidikan Dan Ekonomi*, 7(1), 33–41.
- Wahyu Azizah, E., Kusuma, H., Kunci, K., Perkapita, P., & Penduduk, J. (2018). Pengaruh Pendidikan, Pendapatan Perkapita Dan Jumlah Penduduk Terhadap Kemiskinan Di Provinsi Jawa Timur. In *Jurnal Ilmu Ekonomi* (Vol. 2).

Yuliana, Adamy, Y., M.Nur, E., & Zahara, R. (2020). Pengaruh Pendidikan Dan Kesehatan Terhadap Kemiskinan Di Kabupaten/ Kota Provinsi Aceh Tahun 2014-2017. *Jurnal Humaniora*, 4(2), 64–70.