



## The Influence of Human Development Index, Unemployment and Population on Poverty Rate in Sulawesi Island in 2013-2022

Rhegina Delly Shantika<sup>1\*</sup>, Sunoto<sup>2</sup>

Faculty of Economics and Business, Department of Development Economics,  
University of Bengkulu, Indonesia

**Corresponding Author:** Rhegina Delly Shantika [rheginads02@gmail.com](mailto:rheginads02@gmail.com)

---

### ARTICLE INFO

*Keywords:* Unemployment,  
Poverty Rate, Population,  
Human Development Index

*Received :* 16, April

*Revised :* 30, April

*Accepted:* 28, May

©2025 Shantika, Sunoto: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



### ABSTRACT

Finding out how Sulawesi Island's poverty rate is impacted by HDI, unemployment, and total population characteristics is the goal of this study. This study's research methodology uses panel data regression from six Sulawesi Island provinces from 2013 to 2022, with the Random Effect Model (REM) as the chosen analysis model. As demonstrated by the findings, (1) HDI significantly and negatively affects Sulawesi Island's poverty rate. In Sulawesi Island, (2) The open unemployment rate significantly and favorably affects the poverty rate. (3) The overall population has no discernible impact on Sulawesi Island's poverty rate.

---

## INTRODUCTION

According to (Utari & Malida, 2024), poverty is a significant issue in developing nations like Indonesia and continues to be a social and economic burden there. Sulawesi is one of several Indonesian islands that continue to have high rates of poverty. While certain parts of Sulawesi Island continue to rely on traditional agriculture and fishing, other parts exhibit a rapid expansion of the industrial and service sectors. The unequal distribution of wealth and regional disparities in poverty are both a result of this inequality. The inability of people to acquire financial resources is a prerequisite for poverty. Because poverty is a complex condition that includes disparities in human resources, ownership of factors of production, low community capital formation, and biased policies, it must be addressed through systemic efforts to increase and facilitate access to various economic resources. The impoverished will continue to live in poverty if this is not resolved right now (Febriani et al., 2023).

In addition to being in a state of financial hardship, poverty can also be characterized by low health and educational attainment as well as a lack of control over one's own life. The government has a duty to reduce poverty in order to build a successful society (Septriani et al., 2023). The government has implemented a number of measures to avoid and combat poverty, including immigration, programs for the impoverished, and direct financial aid (Sianturi & Desmawan, 2023). Notwithstanding the government's numerous efforts to combat poverty, the poverty rate remains comparatively high because of the programs' poor targeting of those who actually need them, their limited community reach, and the persistence of regional inequality, particularly in rural and underdeveloped areas. According to Ragnar Nurkse's (1953) vicious circle of poverty hypothesis, poverty is a vicious cycle that perpetuates itself, with the impoverished remaining trapped in it because of a number of interconnected and challenging-to-break circumstances. Without outside help, it becomes impossible for people to escape poverty because of the trap this cycle creates.

Figure 1 below illustrates how the proportion of the impoverished varied by province on the island of Sulawesi between 2013 to 2022. As may be observed, Gorontalo province had the largest percentage of the poor in 2015 (18.16%), while North Sulawesi province had the lowest in 2022 (7.34%).



Figure 1: Sulawesi Island's Poverty Rate from 2013 to 2022

The population, open unemployment rate, and human development index are some of the variables that affect the poverty rate. The welfare of the

populace in a region is mostly determined by these three elements. First, the Human Development Index (HDI) is a factor, according to (Statistik, 2023) A good standard of living, education, and healthy living are the three components of the Human Development Index (HDI), which measures significant advancements in human development. A decline in the unemployment rate is linked to a rise in HDI, which also indicates greater regional autonomy. A rise in HDI can be ascribed to various factors, including higher population welfare, improved demography, and improved education. The population's quality and skills will rise dramatically as these aspects continue to develop, which will result in a fall in both the unemployment and poverty rates (D. Y. Utami & Armelly, 2023). Poverty can result from short life expectancy and limited access to education in areas with a low HDI. Furthermore, a low HDI suggests that the region has issues with human welfare (Haria & Anitasari, 2023). The human development index, or HDI, measures how people gain access to health, financial, and educational services as a result of economic advancement (Zanzibar et al., 2024).

The Open Unemployment Rate is the next variable that influences the poverty rate. The percentage of working-age individuals who have not yet found employment is known as the "open unemployment rate." This refers to the productive-age population that is actively seeking employment but has not yet secured one, and is calculated as the percentage of the labor force in a region or nation (Suaidah et al., 2023). Two factors contribute to the rise in the unemployment rate: the majority of the labor force is not being absorbed by the labor market, and many workers continue to lack the necessary skills and abilities because they are not well-educated (Azmi et al., 2024).

The population is the final element that influences the poverty rate. The population is the total number of people living in a country or territory at a given point in time; this number might fluctuate over time as a result of migration, births, and deaths. A huge population translates into a large workforce as well. If there are not enough jobs to support the big population, additional issues will arise, such as rising unemployment and poverty in an area (F. P. Utami et al., 2022). Population growth is a major issue for a region's economic development since unchecked population expansion can hinder poverty reduction and community wellbeing (Didu & Fauzi, 2016). Because population expansion can lower per capita income, put greater strain on resources, exacerbate inequality, and make it harder to access public services like food and education, it can exacerbate efforts to decrease poverty (Boari et al., 2024).

According to earlier research, the Human Development Index significantly and negatively affected poverty in 35 Central Javan districts and cities (Wati & Sadjarto, 2019). According to a study by (Muslihatinningsih & Abidin, 2022), poverty in the province of East Java was significantly impacted negatively by the Human Development Index. However, the human development index has a positive and negligible effect on poverty in Indonesia, according to a (Leonita & Sari, 2019). This suggests that the measure had no discernible effect on poverty in Indonesia. According to earlier studies, the unemployment rate in Indonesia from 1998 to 2018 had a positive and significant

impact on the poverty rate; that is, as unemployment rose, so did the poverty rate (Faisal & Ichsan, 2020). However, research by (Zuhdiyaty & Kaluge, 2018) found that the open unemployment rate had a negative and negligible effect on poverty in Indonesia between 2011 and 2015. This means that poverty was unaffected by the open unemployment rate, indicating that a person who is unemployed does not necessarily have a low income.

Additionally, the findings of earlier studies by (Intan et al., 2022) demonstrated that poverty levels in the western part of Indonesia are negatively and negligibly impacted by population. In this instance, as the population grows, poverty will also rise because of the disparity in the ages of the young and the old. As a result, many immigrants will visit and start enterprises, and many homeless people will still exist in Indonesia's Western Region. However, the findings of a recent study by (Fathurohman et al., 2022) indicate that poverty in the Ngoro sub-district from 2012 to 2021 is influenced by population size. This implies that poverty rises in tandem with population expansion in the Ngoro sub-district, which may also rise if the population growth leads to a rise in unemployment and less prosperous communal life, both of which are associated with poverty.

Understanding how Sulawesi Island's population, open unemployment rate, and human development index impact the island's poverty rate is the aim of this study. The relationship between the three variables and the degree of community wellbeing on Sulawesi Island is anticipated to be better understood as a result of this investigation. It is anticipated that the findings of this study would then be consulted by policymakers as they create more sustainable and successful strategies to address Sulawesi Island's poverty issues.

## **LITERATURE REVIEW**

### ***Human Development Index***

According to the Human Capital Theory, which was created by Theodore W. Schultz (1971) and Gary S. Becker (1964), education, health care, and personal skills are investments in "human capital" that can boost future earnings and productivity. Investing in personal talents, health, and education is an investment that will pay off in the long run rather than being a form of consumption. The quality of human capital can be enhanced by these investments by increasing its productivity and competitiveness in the labor market. Individual disparities in productivity and income are therefore heavily impacted by factors such as education, health, and skill levels. When the HDI rises, more people have better access to jobs that can bring in money, which lowers poverty.

### ***The Open Unemployment Rate***

According to Michael P. Todaro's Theory of Migration and Urbanization (1976), moving from a rural to an urban area is a logical choice that is impacted by both present circumstances and expectations of future income. People who are thinking about moving will weigh the advantages of living in the city, like career prospects and income levels, against the circumstances in the village and estimate their possibilities of landing a job there. However, migration frequently

results in increased unemployment rates, strain on urban infrastructure, and over-urbanization, where urban population growth surpasses the city's infrastructure and ability to create jobs. Todaro highlights the significance of equitable rural development in order to prevent disparities in employment prospects, the creation of jobs in rural regions, and improved urbanization management in order to bring urban population growth into line with infrastructural and economic expansion.

### **Population**

According to the Malthusian Population Theory developed by Thomas Malthus (1798) in his famous work "*An Essay on The Principle of Population*" explains the relationship between population growth and resources (especially food) in a society. The supply of food and other resources will be severely strained by this mismatch between the slow growth of resources and the fast rate of population growth. According to Malthus, this is known as positive control. If the population keeps growing out of control, there will be food shortages, which can result in poverty, price hikes, and other social issues including hunger, illness, and even conflict. The theory begins by discussing how imbalances and possible crises could arise from resources growing at an arithmetic rate and the population rising at an exponential rate.

### **METHODOLOGY**

This study used a quantitative research approach, analyzing data in the form of numerical values obtained from the Central Statistics Agency and processed through the use of the eviews 12 software. Panel data, the type of data used in this study, includes time series data covering the years 2013–2022, as well as cross-sectional or sample data from six provinces on the island of Sulawesi: North Sulawesi, Central Sulawesi, South Sulawesi, Southeast Sulawesi, Gorontalo, and West Sulawesi. The Random Effect Model (REM) was chosen as the analysis model for this study, and the variables used are the Population Number (X3), the Open Unemployment Rate (X2), the Human Development Index (IPM) (X1), and the Poverty Level (Y).

The model of regression equations that is employed is:

$$K_{it} = \beta_0 + \beta_1 IPM_{it} + \beta_2 TPT_{it} + \beta_3 JP_{it} + \varepsilon_{it}$$

Details :

K : Poverty (%)

$\beta_0$  : Constant

HDI : Human Development Index (Unit)

TPT : Open Unemployment Rate (Percent)

JP : Population (Million People)

$\beta_1 \beta_2 \beta_3$  : Regression Coefficient Of Independent Variables

$\varepsilon$  : Error Term

i : Cross Section (Province)

t : Time Series (Year)

## RESEARCH RESULT

In order to generate the optimal research model, the Chow, Hausman, and Lagrange multiplier tests will be conducted initially:

### 1. Chow Test

Table 1. Results of the Chow Test

Redundant Fixed Effects Tests  
Equation: Untitled  
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	209.732598	(5,51)	0.0000
Cross-section Chi-square	184.256004	5	0.0000

*Eviews12, processed in 2025*

According to the above table's Chow test, the Cross-section Chi-square value (0.0000) and the Cross-section F prob. value (0.0000) are both less than 0.05. As a result, the fixed effect model (FEM) is the best option for this research.

### 2. Hausman Test

Table 2. Results of the Hausman Test

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	3.014745	3	0.3894

*Eviews12, processed in 2025*

The Random Effect Model was chosen as, according to the Hausman test above, the Cross-section random probability value (0.3894) > 0.05.

### 3. Lagrange Multiplier Test

Table 3. Results of the Lagrange Multiplier Test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	189.1030 (0.0000)	1.694461 (0.1930)	190.7975 (0.0000)

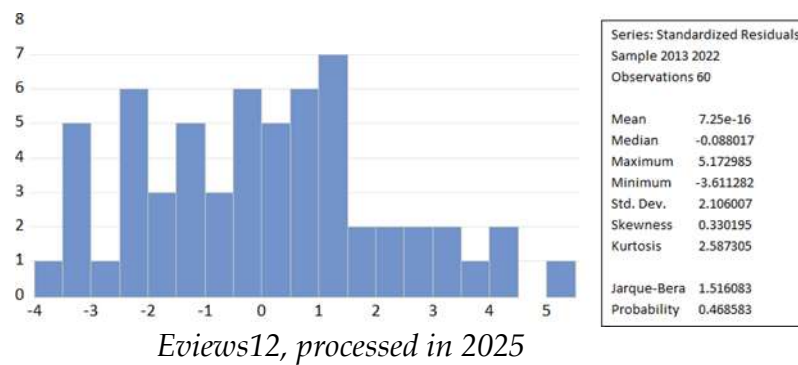
*Eviews12, processed in 2025*

The value of the Breush-Pagan prob. is 0.0000 less than 0.05, according to the table in the LM Test mentioned above. The Random Effect Model is therefore the most effective model in the Lagrange Multiplier Test.

**The Classical Assumption Test**

**1. Normality Test**

Table 4. Results of the Normality Test



According to the aforementioned Normality Test, the Jarque-Bera Probability value is 0.468583 greater than 0.05. Therefore, it can be said that the data satisfies the normality test or is regularly distributed.

**2. Multicollinearity Test**

Based on the research data below, the centered VIF indicates that there is no multicollinearity because the correlation coefficient of IPM, TPT, and Population Number is less than 10.00.

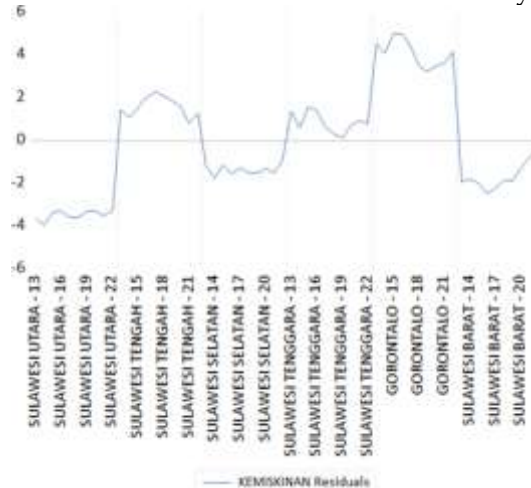
Table 5. Results of the Multicollinearity Test

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	63.98058	821.5156	NA
IPM	0.015598	947.7677	1.655358
TPT	0.051497	14.35669	1.507732
JP	1.46E-08	3.179366	1.238289

*Eviews12, processed in 2025*

**3. Heteroscedasticity Test**

Table 6. Results of the Heteroscedasticity Test



*Eviews12, processed in 2025*

The residual graph of the employed model does not cross the 500--500 limit, as indicated by the aforementioned heteroscedasticity test findings. Therefore, it can be said that either the test results pass heteroscedasticity or there is no sign of heteroscedasticity.

**Regression Analysis of Panel Data**

The random effect model (REM) is the best appropriate for this investigation, based on the results of the Chow, Hausman, and Lagrange multiplier tests.

Table 7. Random Effect Model Results

Dependent Variable: KEMISKINAN  
 Method: Panel EGLS (Cross-section random effects)  
 Date: 02/10/25 Time: 20:24  
 Sample: 2013 2022  
 Periods included: 10  
 Cross-sections included: 6  
 Total panel (balanced) observations: 60  
 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	35.14823	3.323038	10.57714	0.0000
IPM	-0.345783	0.051226	-6.750192	0.0000
TPT	0.209290	0.102400	2.043857	0.0457
JP	-0.000144	0.000403	-0.357401	0.7221

Effects Specification		S.D.	Rho
Cross-section random		2.944222	0.9733
Idiosyncratic random		0.487816	0.0267

Weighted Statistics			
R-squared	0.627961	Mean dependent var	0.619570
Adjusted R-squared	0.608030	S.D. dependent var	0.779268
S.E. of regression	0.487880	Sum squared resid	13.32952
F-statistic	31.50729	Durbin-Watson stat	0.838883
Prob(F-statistic)	0.000000		

*Eviews12, processed in 2025*

The linear equation can be expressed as follows using the table above as a guide:

$$K = 35.148 - 0.3457IPM + 0.2092TPT - 0.0001JP$$

Explanation:

- a. The HDI variable's regression coefficient is -0.3457, meaning that for every unit increase in the HDI, the poverty rate will fall by 0.3457%.
- b. The TPT variable's regression coefficient, however, is 0.2092. This means that a 1% increase in the TPT will result in a 0.2092% increase in the poverty rate.
- c. According to the regression coefficient for the population variable, which is -0.0001, the poverty rate will drop by 0.0001% for every million additional persons added to the population.

1. *T-Test*

Table 8. Results of the T-Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	35.14823	3.323038	10.57714	0.0000
IPM	-0.345783	0.051226	-6.750192	0.0000
TPT	0.209290	0.102400	2.043857	0.0457
JP	-0.000144	0.000403	-0.357401	0.7221

*Eviews12, processed in 2025*

Explanation :

- The HDI variable's t-test findings showed that the t-Statistic value was  $6.750192 > t$  table, or  $2.001717$ , and the Prob. value was  $0.0000 < 0.05$  (Significant). Stated differently, Sulawesi Island's poverty rate is influenced by the HDI variable.
- The t-test results for the TPT variable yielded an t-Statistic value of  $2.043857 > t$  table, or  $2.001717$ , and a Prob. value of  $0.0457 < 0.05$  (Significant). Stated differently, Sulawesi Island's poverty rate is impacted by the TPT variable.
- Based on the population variable's t-test results, the t-Statistic value was  $0.357401 < t$  table, or  $2.001717$ , and the probability value was  $0.7221 > 0.05$  (Not Significant). Stated differently, Sulawesi Island's poverty rate is unaffected by the population variable.

2. *F-Test*

Table 9. Results of the F Test

<b>F-statistic</b>	<b>31.50729</b>
<b>Prob(F-statistic)</b>	<b>0.000000</b>

*Eviews12, processed in 2025*

Table 9 shows that the Prob(F-statistic) score is less than 0.05 and the F-statistic value is  $31.50729 > F$ -table of  $2.769431$ . Thus, it can be concluded that Sulawesi Island's poverty rate is influenced by the factors of IPM, TPT, and population size.

3. *Determination coefficient (R<sup>2</sup>)*

Table 10. Determination Coefficient (R<sup>2</sup>) Results

<b>R-squared</b>	<b>0.627961</b>
<b>Adjusted R-squared</b>	<b>0.608030</b>

*Eviews12, processed in 2025*

The coefficient of determination value indicates that the IPM, TPT, and population variables are the independent factors that can account for 60.80% of the poverty rate variable on the island of Sulawesi, with an Adjusted R-Squared value of 0.608030, or 60.80%. The remaining 39.2% is then explained by other factors not included by this research methodology.

## DISCUSSION

### *The Impact of Sulawesi Island's Human Development Index on Poverty Levels from 2013 to 2022*

According to the partial test results, the Human Development Index has a negative impact. The coefficient is 0.345783, meaning that if the HDI rises by one unit, the poverty rate will fall by 0.3457%. This difference is significant (0.0000 less than 0.05). It follows that when the HDI rises, the poverty rate on the island of Sulawesi will continue to decline. The HDI measures the community's quality of life according to three criteria: health, education, and a respectable standard of living. These factors can help lower the poverty rate on the island of Sulawesi.

According to the Human Capital Theory, which was created by Theodore W. Schultz (1971) and Gary S. Becker (1964), education, health care, and personal skills are investments in "human capital" that can boost future earnings and productivity. Investing in personal talents, health, and education is an investment that will pay off in the long run rather than being a form of consumption. The quality of human capital can be enhanced by these investments by increasing its productivity and competitiveness in the labor market. Individual disparities in productivity and income are therefore heavily impacted by factors such as education, health, and skill levels. When the HDI rises, more people have better access to jobs that can bring in money, which lowers poverty..

According to a study by (Kristin & Sukmawati, 2018), the HDI significantly and negatively affects Indonesia's poverty rate. The study's findings indicate that when the HDI rises, the poverty rate falls, demonstrating the HDI's capacity to enhance community performance and, consequently, raise income levels needed to support a reasonable standard of living. The three dimensions of the HDI are as follows: Per capita income, health, and education. Human quality is crucial for lowering poverty rates, according to a different study by (Sukron & Yasin, 2021). According to the results of his research, HDI can raise human labor productivity, which can raise living expenses and income.

### *The Impact of Sulawesi Island's Open Unemployment Rate on Poverty Level from 2013 to 2022*

According to the findings of the partial test, the open unemployment rate has a positive effect (coefficient of 0.209290), meaning that if the TPT rises by 1%, the poverty rate will rise by 0.2092%. This difference is significant (0.0457 less than 0.05). Consequently, it may be said that Sulawesi Island's poverty rate will rise in tandem with the TPT increase. An increase in the TPT can ultimately lead to a rise in Sulawesi Island's poverty rate if more and more individuals lose their employment or are unable to find new ones. The greater the socioeconomic difference, the lower the household income, and the weaker the purchasing power, the more individuals lose their employment or are unemployed.

According to Michael P. Todaro's Theory of Migration and Urbanization (1976), moving from a rural to an urban area is a logical choice that is impacted by both present circumstances and expectations of future income. People who are thinking about moving will weigh the advantages of living in the city, like career prospects and income levels, against the circumstances in the village and

estimate their possibilities of landing a job there. However, migration frequently results in increased unemployment rates, strain on urban infrastructure, and over-urbanization, where urban population growth surpasses the city's infrastructure and ability to create jobs. Todaro highlights the significance of equitable rural development in order to prevent disparities in employment prospects, the creation of jobs in rural regions, and improved urbanization management in order to bring urban population growth into line with infrastructural and economic expansion.

According to research by (Derek et al., 2023) ,open unemployment significantly and favorably reduces poverty in the province of South Sulawesi. According to the findings of his study, the poverty rate in South Sulawesi Province will rise in tandem with the open unemployment rate in the province. This confirms the findings of a study by (Nengsih et al., 2024) that TPT significantly reduces poverty in the province of Jambi. According to his findings, people are less productive when the unemployment rate is higher. It prevents them from meeting their basic requirements, and the rise in unmet needs will lead to greater poverty.

### ***The Impact of Sulawesi Island's Population on Poverty Levels from 2013 to 2022***

According to the partial test results, the population has a negative influence with a coefficient of 0.000144. This implies that if the population grows by one million, the poverty rate will drop by 0.0001%. The poverty rate is not significant at this level (0.7221 greater than 0.05). Thus, it may be said that Sulawesi Island's poverty rate would decline as its population grows. This indicates that the population has grown without being offset by improvements in economic possibilities and quality of life, which is insufficient to end current poverty. Therefore, measures that enhance the caliber of human resources, create new employment opportunities, and promote equitable infrastructure development can help to lower poverty.

According to the Malthusian Population Theory developed by Thomas Malthus (1978) in his famous work "*An Essay On The Principle Of Population*" explains the relationship between population growth and resources (especially food) in a society. The supply of food and other resources will be severely strained by this mismatch between the slow growth of resources and the fast rate of population growth. According to Malthus, this is known as positive control. If the population keeps growing out of control, there will be food shortages, which can result in poverty, price hikes, and other social issues including hunger, illness, and even conflict. The theory begins by discussing how imbalances and possible crises could arise from resources growing at an arithmetic rate and the population rising at an exponential rate.

## **CONCLUSIONS AND RECOMMENDATIONS**

### ***Conclusion***

During the years 2013–2022, the Human Development Index significantly and negatively impacted the island of Sulawesi's poverty rate; this indicates that as the index rises, the island's poverty rate will fall. This demonstrates how improving living standards, health care, and education considerably reduces

poverty. The open unemployment rate has a positive and significant impact on the poverty rate on the island of Sulawesi from 2013 to 2022. This indicates that as the open unemployment rate rises, the island's poverty rate will also rise. This implies that the poverty rate rises in proportion to the unemployment rate. Consequently, lowering unemployment is a key component in lowering Sulawesi's poverty rates. Additionally, the population has no discernible impact on Sulawesi's poverty rate between 2013 and 2022. According to this study, the poverty rate on the island of Sulawesi will decline as the population grows. This demonstrates that population changes have no statistically significant impact on poverty, suggesting that quality elements and economic possibilities are more crucial in eliminating poverty than population size.

### ***Recommendation***

The Sulawesi Island regional government must improve access to health care, education, and purchasing power in order to boost the human development policy and raise the HDI as a means of reducing poverty. Concrete measures to raise the HDI and lower poverty rates include initiatives like health service subsidies, work skills training, and educational scholarships. Furthermore, providing durable and effective work is a major step in reducing poverty by overcoming unemployment.

Furthermore, boosting Micro, Small, and Medium-Sized Businesses and bolstering vocational education are critical to lowering Sulawesi Island's open unemployment rate. Lastly, even though the population is not a major element, it still needs to be controlled in order to maximize demographic potential. By enhancing the caliber of human resources, fostering an atmosphere that encourages entrepreneurship, and bolstering the contribution of the younger generation to economic development in the Sulawesi Island regions, the government may capitalize on the demographic bonus.

### **ADVANCED RESEARCH**

Building upon the findings that Human Development Index (HDI) improvements significantly reduce poverty while open unemployment exacerbates it in Sulawesi, future research should adopt a multidimensional approach that integrates spatial econometrics and panel data analysis across sub-regions within the island. This would allow for the identification of localized disparities in HDI components and labor market dynamics that may not be visible in aggregate data. In particular, advanced studies could examine the interaction effects between education quality, informal sector employment, and regional governance capacity to determine how these variables mediate the relationship between HDI and poverty. Furthermore, investigating the role of digital infrastructure and access to technology as an enabler of both human development and employment could provide valuable insights into sustainable poverty alleviation strategies in the context of Indonesia's digital transformation agenda.

### **REFERENCES**

Azmi, K. N., Azzahra, S. P., Dewi, V. K., & Pertiwi, Y. W. (2024). Analisis

- Pengangguran Terhadap Tindakan Kriminalitas di Kota Bekasi. *Observasi : Jurnal Publikasi Ilmu Psikologi*, 2(3), 223–234. <https://doi.org/10.61132/observasi.v2i3.497>
- Boari, Y., Syofya, H., Agustina, I., Rohman, M. F., & Irawati, R. (2024). Pengaruh Pertumbuhan Ekonomi, Tingkat Pendidikan, Dan Pertumbuhan Penduduk Terhadap Tingkat Kemiskinan Di Indonesia. *Edunomika*, 08(02), 1–13.
- Derek, T. M., Lopian, A. L. C. P., & Tumangkeng, S. Y. . (2023). Pengaruh Pengangguran Terbuka, Pengeluaran Pemerintah, Indeks Pembangunan Manusia Terhadap Tingkat Kemiskinan Di Sulawesi Utara. *Jurnal Berkala Ilmiah Efisiensi*, 23(9), 49–60. <https://ejournal.unsrat.ac.id/v3/index.php/jbie/article/view/50899>
- Didu, S., & Fauzi, F. (2016). Pengaruh Jumlah Penduduk, Pendidikan Dan Pertumbuhan Ekonomi Terhadap Kemiskinan Di Kabupaten Lebak. *Jurnal Ekonomi-Qu*, 6(1), 102–117. <https://doi.org/10.35448/jequ.v6i1.4199>
- Faisal, M., & Ichsan, I. (2020). The Analysis of Economic Growth, Unemployment Rate and Inflation on Poverty Levels in Indonesia (Using the Vector Error Correction Model (VECM) Method). *Journal of Malikussaleh Public Economics*, 3(2), 42. <https://doi.org/10.29103/jmpe.v3i2.3210>
- Fathurohman, F., Fitriana, D., Baharta, R., & Mukminah, N. (2022). Analisis Pengaruh Pertumbuhan Ekonomi Dan Jumlah Penduduk Terhadap Kemiskinan. *Journal of Public Power*, 6(2), 104–112. <https://doi.org/10.32492/jpp.v6i1.6105>
- Febriani, R. E., Rambe, R. A., Yusnida, Y., & Indraswanti, B. I. E. (2023). *Measurement of Productivity of Local Government Spending in Poverty Alleviation (Issue Bicemba)*. Atlantis Press International BV. [https://doi.org/10.2991/978-94-6463-328-3\\_24](https://doi.org/10.2991/978-94-6463-328-3_24)
- Haria, T. F. N., & Anitasari, M. (2023). The Influence of Economic Growth, Human Development Index, and Open Unemployment Rates on Poverty in Sumatra. *Management, Business and Accounting*, 1(1), 177–182. <https://proceeding-bicemba.feb.unib.ac.id/index.php/bicemba>
- Intan, Maya, E., Rahmawati, S., & Wibowo, Gofur, M. (2022). Pengaruh Pertumbuhan Ekonomi Terhadap Tingkat Kemiskinan di Kawasan Barat Indonesia Periode 2016 - 2020. *Jurnal Al-Iqtishad*, 01(18), 65–83.
- Kristin, A. P., & Sukmawati, U. S. (2018). Analisis Pengaruh Indeks Pembangunan Manusia (IPM), Pertumbuhan Ekonomi dan Pengangguran Terhadap Kemiskinan di Indonesia. *EQUILIBRIUM: Jurnal Ekonomi Syariah*, 6(2), 217–240. <https://doi.org/10.21043/equilibrium.v6i2.3663>
- Leonita, L., & Sari, R. K. (2019). Pengaruh Pengangguran Dan Pembangunan Manusia Terhadap Kemiskinan Di Indonesia. *ISOQUAT : Jurnal Ekonomi, Manajemen Dan Akuntansi*, 3(2), 1–8.
- Muslihatinningsih, F., & Abidin, J. (2022). Analisis Kemiskinan Provinsi Jawa Timur. *Jurnal Ekuilibrium*, 2, 132–147. <https://doi.org/https://doi.org/10.19184/jek.v6i2.33217>
- Nengsih, T. A., Saqina, N., Maula, N., & Oktavia, F. A. (2024). ANALISIS PENGARUH TINGKAT PENGANGGURAN TERBUKA (TPT) DAN INDEKS PEMBANGUNAN MANUSIA (IPM) TERHADAP TINGKAT

- KEMISKINAN DI PROVINSI JAMBI. *Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah*, 9, 2283–2296. <https://doi.org/https://doi.org/10.30651/jms.v9i3.23064>
- Septriani, S., Armelly, A., Ekaputri, R. A., Hadiyanto, H., Sunoto, S., & Nopiah, R. (2023). *The Effect of Government Expenditure on Poverty in Indonesia* (Issue Bicemba). Atlantis Press International BV. [https://doi.org/10.2991/978-94-6463-328-3\\_25](https://doi.org/10.2991/978-94-6463-328-3_25)
- Sianturi, P. L., & Desmawan, D. (2023). Analisis Pengaruh Indeks Pembangunan Manusia dan Tingkat Pengangguran Terbuka terhadap Kemiskinan di Provinsi Sumatera Utara pada tahun 2021. *Jurnal Pendidikan Tambusai*, 7, 30224–30229.
- Statistik, B. P. (2023). *STATISTIK INDONESIA 2024*. <https://www.bps.go.id/id/publication/2024/02/28/c1bacde03256343b2bf769b0/statistik-indonesia-2024.html>
- Suaidah, S., Harahap, I., Ardiansyah, M. R., & Hamdani, F. (2023). Analisis Pengaruh Pendidikan, Jumlah Penduduk Dan Pengangguran Terbuka Terhadap Tingkat Kemiskinan Di Provinsi Sumatera Utara. *Edunomika*, 7(01), 1–13. <https://jurnal.stie-aas.ac.id/index.php/jie/article/view/7505>
- Sukron, I., & Yasin, A. (2021). Pengaruh Ipm, Pengangguran Dan Pertumbuhan Ekonomi Terhadap Kemiskinan Pada Kabupaten/Kota Di Provinsi Jawa Tengah. *INDEPENDENT: Journal Of Economics*, 1, 47–65.
- Utami, D. Y., & Armelly, A. (2023). DEMOGRAPHIC, ECONOMIC, AND HUMAN WELL-BEING: THEIR INFLUENCE ON UNEMPLOYMENT RATE OF 34 PROVINCES IN INDONESIA. *Jurnal Ekonomi*, 12(04), 2359–2367.
- Utami, F. P., Lubis, I., & Rahmanta. (2022). Analisis Faktor-Faktor Yang Mempengaruhi Kemiskinan Di Aceh Bagian Timur. *Jurnal Samudra Ekonomika*, 6(1), 1–9. <https://doi.org/10.33059/jse.v6i1.5017>
- Utari, Y., & Malida, N. (2024). Analisis Pengaruh Tingkat Pengangguran Terbuka dan Pertumbuhan Ekonomi Terhadap Kemiskinan Tahun 2018-2022. *Ekonomikawan: Jurnal Ilmu Ekonomi Dan Studi Pembangunan*, 24(1), 102–112. <https://doi.org/10.30596/ekonomikawan.v24i1.16250>
- Wati, E., & Sadjiarto, A. (2019). PENGARUH INDEKS PEMBANGUNAN MANUSIA DAN PRODUK DOMESTIK REGIONAL BRUTO TERHADAP KEMISKINAN. *Ecodunamika: Jurnal Pendidikan Ekonomi*, 2. <https://ejournal.uksw.edu/ecodunamika/article/view/1747>
- Zanzibar, D., Rahmadhania, F., Kiswanda, R., & Rohmi, M. L. (2024). Pengaruh Indeks Pembangunan Manusia dan Pengangguran terhadap Kemiskinan di Jawa Timur. *Jurnal Economina*, 3(4), 562–574. <https://doi.org/10.55681/economina.v3i4.1296>
- Zuhdiyaty, N., & Kaluge, D. (2018). Analisis Faktor - Faktor Yang Mempengaruhi Kemiskinan Di Indonesia Selama Lima Tahun Terakhir. *Jurnal Ilmiah Bisnis Dan Ekonomi Asia*, 11(2), 27–31. <https://doi.org/10.32812/jibeka.v11i2.42>