AT-TARIIZ: Journal Ekonomi dan Bisnis Islam

http://azramedia-indonesia.azramediaindonesia.com/index.php/attariiz/index
DOI : https://doi.org/10.62668/attariiz.v4i04.1877
Email : info@azramediaindonesia.com

Open Access

ANALYSIS OF ECONOMIC GROWTH AND UNEMPLOYMENT AS DETERMINING FACTORS OF POVERTY IN SOUTHEAST SULAWESI PROVINCE

Puspa Dewangga[*1], Zainuddin Saenong[2], La Ode Muhammad Arfan Samrin[3]
[1,2,3] Halu Oleo University, Kendari, Indonesia
[*]Corresponding Author: puspadewangga@uho.ac.id

Info Article
Received:
15 September 2025
Revised:
20 Oktober 2025
Accepted:
18 November 2025
Publication:
30 November 2025

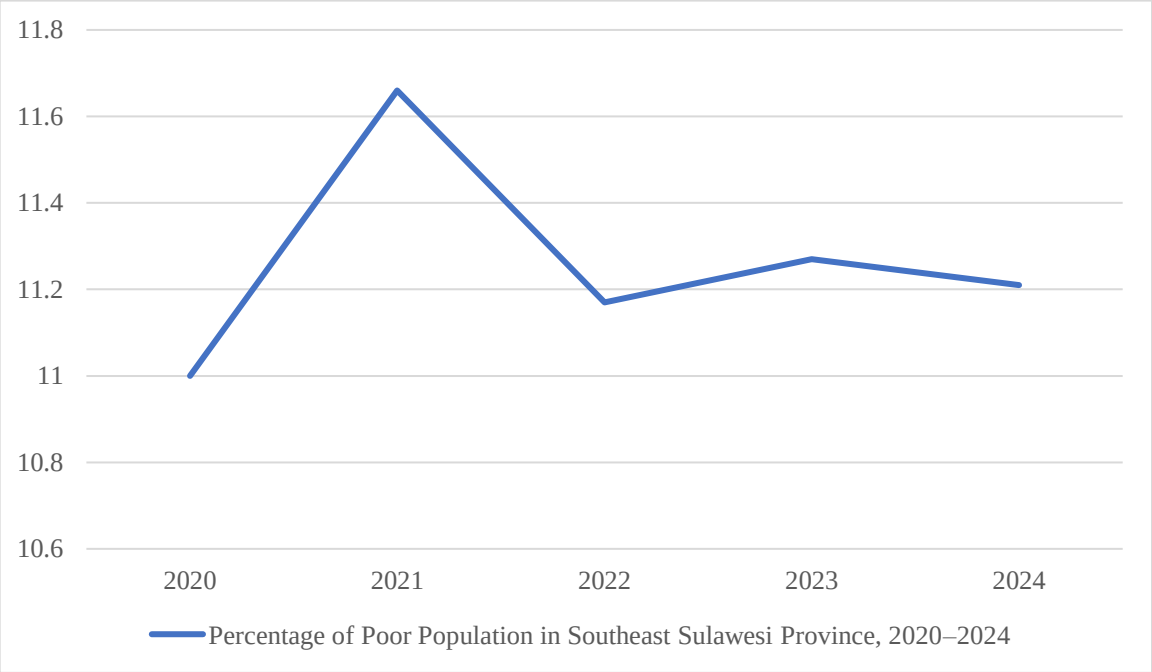
Keywords:
Economic Growth, Unemployment, Poverty, Inclusive Development
Kata Kunci:
Pertumbuhan Ekonomi, Pengangguran, Kemiskinan, Pembangunan Inklusif

Abstract: *This study examines the impact of economic growth and the open unemployment rate on poverty levels in Southeast Sulawesi Province during the period 2005 to 2024. This study embraced a quantitative approach, drawing on secondary data from the Central Statistics Agency (BPS) and employing multiple linear regression in SPSS to uncover meaningful patterns. The results show that both economic growth and unemployment significantly affect poverty. The open unemployment rate has the greatest influence, indicating that higher unemployment leads to higher poverty levels. Meanwhile, economic growth has not been inclusive, as the benefits of development have not been evenly distributed among different income groups. The study concludes that reducing poverty requires inclusive, pro-poor economic growth through employment creation, MSME empowerment, and economic diversification, to ensure that the benefits of economic progress are shared equitably and contribute to sustainable welfare improvements in Southeast Sulawesi Province.*

Abstrak: Penelitian ini bertujuan untuk menganalisis pengaruh pertumbuhan ekonomi dan tingkat pengangguran terbuka terhadap tingkat kemiskinan di Provinsi Sulawesi Tenggara selama periode 2005–2024. Pendekatan kuantitatif digunakan dengan data sekunder yang diperoleh dari Badan Pusat Statistik (BPS) dan dianalisis menggunakan regresi linier berganda melalui SPSS. Hasil penelitian menunjukkan bahwa pertumbuhan ekonomi dan tingkat pengangguran berpengaruh signifikan terhadap kemiskinan. Tingkat pengangguran terbuka memiliki pengaruh paling dominan, yang menunjukkan bahwa peningkatan pengangguran menyebabkan peningkatan kemiskinan. Sementara itu, pertumbuhan ekonomi belum bersifat inklusif karena manfaat pembangunan belum dirasakan secara merata oleh seluruh kelompok pendapatan. Penelitian ini menyimpulkan bahwa pengentasan kemiskinan memerlukan pertumbuhan ekonomi yang inklusif dan berpihak kepada masyarakat miskin melalui penciptaan lapangan kerja, penguatan UMKM, serta diversifikasi ekonomi untuk memastikan pemerataan manfaat pembangunan dan peningkatan kesejahteraan yang berkelanjutan di Provinsi Sulawesi Tenggara.

INTRODUCTION

Economic development significantly influences the socio-economic structure of regions, especially in a diverse province such as Southeast Sulawesi. From 2005 to 2024, the province experienced considerable fluctuations in open unemployment rates, economic growth, and poverty levels (Muslim et al., 2024). Examining the roles of economic growth and unemployment in determining poverty is essential for informing policy decisions that promote inclusive development and effective poverty alleviation.



Source: Badan Pusat Statistik Southeast Sulawesi, 2025

Figure 1 Percentage of Poor Population in Southeast Sulawesi 2020-2024

Although Southeast Sulawesi has experienced moderate economic growth, persistent poverty remains a significant challenge. The percentage of the province's poor population fluctuated between 2020 and 2024. In 2020, the poverty rate was approximately 11.0%, increasing to 11.7% in 2021, likely due to the economic effects of the COVID-19 pandemic. The rate declined to 11.2% in 2022, reflecting a gradual economic recovery. In 2023 and 2024, poverty rates stabilized at around 11.3% and 11.2%, respectively, indicating only modest progress in poverty reduction. Unemployment continues to reduce household income and restrict access to resources, thereby worsening poverty (Muslim et al., 2024). Furthermore, economic growth does not necessarily lead to poverty reduction if its benefits are not equitably distributed or do not reach vulnerable groups.

The Kuznets Curve theory posits that inequality may rise during early stages of economic growth but eventually declines as economies mature (Saipudin, 2024). However, empirical evidence from Southeast Sulawesi indicates that inequality and poverty do not always follow this trajectory, highlighting the need for inclusive growth policies (Saipudin, 2024). Additionally, poverty trap theory suggests that structural barriers, including limited access to education, healthcare, and credit, can prevent households from escaping poverty without comprehensive interventions (Elfaki & Ahmed, 2024)

Empirical analyses in Sulawesi confirm a significant causal relationship among economic growth, unemployment, and poverty. Research by Hidayat et al., 2023 found that conomic growth reduces both unemployment and poverty, whereas increases in unemployment raise Poverty levels should be assessed in both the short- and long-term. Similarly, Badu et al., 2020 reported that economic growth and unemployment significantly affect poverty rates across Sulawesi provinces. Regional disparities within the province further intensify these effects, emphasizing the importance of targeted interventions at the local level.

Regional economic diversification and infrastructure development are essential for sustainable poverty reduction; however, growth must be inclusive to ensure that marginalized groups benefit equitably (Syafa'atin et al., 2025). Government initiatives that prioritize employment generation, human capital development, and social protection are fundamental to reducing poverty and enhancing economic participation (World Bank, 2023). Reducing unemployment not only raises household incomes but also contributes to the social stability required for sustained development in Southeast Sulawesi.

This study investigates the roles of economic growth and unemployment as determinants of poverty in Southeast Sulawesi Province from 2005 to 2024, drawing on secondary data and established theoretical frameworks. The aim is to provide evidence-based recommendations for policy formulation to advance equitable and inclusive development in the province.

METHOD

This study employs a quantitative approach to examine the causal relationship between economic growth and the open unemployment rate on poverty levels in Southeast Sulawesi Province. This approach enables an objective analysis of cause–and–effect relationships through statistical data analysis and econometric model testing, as

widely applied in studies of poverty, unemployment, and economic growth across various provinces in Indonesia.

This study uses secondary data in the form of annual time-series data for the period 2005–2024, all sourced from the official publications of the Central Statistics Agency (BPS) of Southeast Sulawesi Province. The use of BPS secondary data on poverty, unemployment, and economic growth is consistent with many previous studies that have analyzed the relationships among these variables at the provincial level in Indonesia. The variables used include the poverty rate (%), the open unemployment rate/TPT (%), and economic growth (%), obtained through documentation methods, namely the collection, recording, and extraction of data from BPS annual reports, including poverty publications, labor statistics, and GRDP reports.

The analytical method used is multiple linear regression with natural logarithm transformation (log-linear model). This transformation is used to address issues of non-normal data and to produce elasticity interpretations that are more relevant in regional economic analysis. Because the dataset contains zero or negative values which cannot be processed using a natural logarithm. the logarithmic transformation is performed using the Ln(x+1) technique. This adjustment ensures that all values become positive, allowing the variables to be transformed properly and avoiding system-missing errors in time-series processing. This model is commonly used to address non-normality, reduce skewness, and improve the distribution of residuals in applied economic studies. (Ghozali, 2018)

$$lnY = \beta_0 + \beta_1 lnX_1 + \beta_2 lnX_2 + \epsilon \quad \text{..... (1)}$$

Explanation:

ln Y = natural logarithm of the poverty rate

ln X_1 = natural logarithm of the open unemployment rate

ln X_2 = natural logarithm of economic growth

β_0 = constant

β_1, β_2 = regression coefficients (elasticities)

ϵ = error/residual

Data analysis was carried out in several stages. First, descriptive statistics were used to describe the data's characteristics using minimum, maximum, mean, and standard deviation values, as is commonly practiced in quantitative research based on BPS data (Mubarak & Sbm, 2020)

Second, a series of classical assumption tests was conducted after the log transformation, because the logarithmic transformation does not automatically eliminate all potential violations of classical assumptions. The tests conducted include the residual normality test (using Shapiro–Wilk and Normal Q–Q Plot), multicollinearity test (based on Tolerance and Variance Inflation Factor/VIF values), heteroscedasticity test (using a scatterplot between standardized residuals and predicted values), and autocorrelation test (using the Durbin–Watson statistic); this procedure is consistent with the practice of classical assumption testing in various articles using multiple linear regression in Indonesia (Febrianti et al., 2025)

Third, multiple linear regression with the log-linear model was used to test simultaneous effects (F-test) and partial effects (t-test), calculate the contribution of independent variables to the dependent variable through the coefficient of determination (R^2), and analyze the direction and magnitude of relationships through elasticity coefficients. All statistical tests were performed using SPSS, which is also widely used in applied economic research on poverty, unemployment, and economic growth across various regions of Indonesia (Janie, 2012).

RESULTS AND DISCUSSION

Research Result

1. Descriptive Analysis

Descriptive analysis provides an overview of the characteristics of the research variables poverty rate (Y), open unemployment rate (X_1), and economic growth (X_2) in Southeast Sulawesi Province from 2005 to 2024. The results of the descriptive statistical calculations are as follows:

Table 1 Result of Descriptive Statistic Analysis

Descriptives				
			Statistic	Std. Error
Poverty Rate (Y)	Mean		14.7370	.89753
	95% Confidence Interval for Mean	Lower Bound	12.8585	
		Upper Bound	16.6155	
	5% Trimmed Mean		14.4650	
	Median		12.8900	
	Variance		16.111	
	Std. Deviation		4.01386	
	Minimum		11.00	
	Maximum		23.37	
	Range		12.37	
	Interquartile Range		6.98	

	Skewness		1.014	.512
	Kurtosis		-.379	.992
Open Unemployment Rate (X1)	Mean		4.7820	.47424
	95% Confidence Interval for Mean	Lower Bound	3.7894	
		Upper Bound	5.7746	
	5% Trimmed Mean		4.5550	
	Median		4.2600	
	Variance		4.498	
	Std. Deviation		2.12086	
	Minimum		2.72	
	Maximum		10.93	
	Range		8.21	
	Interquartile Range		2.02	
	Skewness		1.987	.512
	Kurtosis		3.809	.992
Growth Economy (X2)	Mean		6.5045	.46582
	95% Confidence Interval for Mean	Lower Bound	5.5295	
		Upper Bound	7.4795	
	5% Trimmed Mean		6.7306	
	Median		6.8200	
	Variance		4.340	
	Std. Deviation		2.08323	
	Minimum		-.65	
	Maximum		9.59	
	Range		10.24	
	Interquartile Range		1.94	
	Skewness		-2.183	.512
	Kurtosis		7.099	.992

Source: Processed Data via SPSS, 2025

The poverty rate in Southeast Sulawesi Province during the study period ranged from 11.00% to 23.37%, with an average of 14.74%. A standard deviation of 4.01 reflects considerable year-to-year fluctuations in poverty levels.

The open unemployment rate varied from 2.72% to 10.93%, with an average of 4.78%, suggesting disparities in employment opportunities over time. Economic growth ranged from -0.65% to 9.59%, averaging 6.48%, which indicates overall regional economic expansion despite occasional contractions, likely attributable to the pandemic or global economic downturns.Overall, the variation in the three variables indicates that the data have a fairly dynamic distribution and are suitable for regression analysis.

2. Classical Assumption Test

Classical assumption tests are conducted to ensure that the regression model satisfies statistical validity requirements, thereby enhancing the reliability of the estimation results.

a) Residual Normality Test

Table 2 Result Of Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual	.156	20	.200*	.957	20	.483
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

Source : Processed Data via SPSS, 2025

The normality of the residuals was assessed using the Kolmogorov–Smirnov and Shapiro–Wilk tests. The results show significance values of 0.200 and 0.483, respectively, both of which exceed the 0.05 threshold. These findings indicate that the standardized residuals are normally distributed. Accordingly, the assumption of residual normality is fulfilled, confirming that the log-linear model used in this study is statistically appropriate and valid for further econometric analysis.

b) Multicolinearity Test

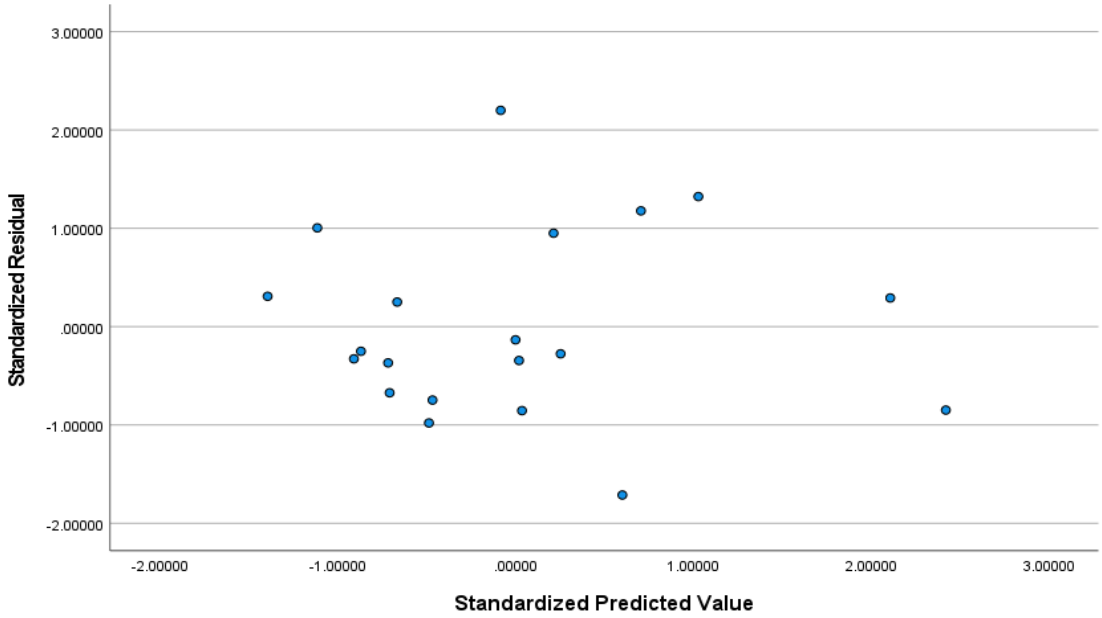
Table 3 Result of Multicolinearity Test

Collinearity Diagnostics[a]						
				Variance Proportions		
Model	Dimension	Eigenvalue	Condition Index	(Constant)	lnX1	lnX2
1	1	2.903	1.000	.00	.00	.01
	2	.082	5.937	.04	.07	.96
	3	.014	14.219	.96	.92	.03
a. Dependent Variable: lnY						

Source: Processed Data via SPSS, 2025

The collinearity diagnostics indicate that the log-linear regression model does not suffer from multicollinearity. The condition index values range from 1.000 to 14.219, all below the critical threshold of 30, indicating no serious multicollinearity. Although the variance proportions for the constant and lnX1 appear elevated in Dimension 3, the condition index of 14.219 indicates only a weak association and does not meet the criteria for problematic multicollinearity. Therefore, the independent variables in the model are statistically free from multicollinearity and are appropriate for use in the regression analysis.

c) Heteroscedasticity Test



Source : Processed Data via SPSS, 2025

Figure 2 Result of Heteroscedastisity Test

The heteroscedasticity test was conducted using a scatterplot of standardized residuals against standardized predicted values. The plot shows that the residual points are randomly scattered above and below the horizontal axis without forming any discernible pattern such as funnel-shaped widening, narrowing, or clustering. This indicates that the variance of the residuals is constant across predicted values. Therefore, the model does not exhibit heteroscedasticity, confirming that the assumption of homoscedasticity is fulfilled.

d) Autocorrelation Test

Table 4 Result of Autocorrelation Test

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.860[a]	.739	.708	.12760	1.261
a. Predictors: (Constant), lnX2, lnX1					
b. Dependent Variable: lnY					

Source: Processed Data via SPSS, 2025

The Durbin–Watson value of 1.261 falls within the acceptable range of 1 to 3, indicating that the model does not exhibit serious autocorrelation. Thus, the independence assumption of the residuals is considered fulfilled.

3. Multiple Linear Regression Analysis

Regression analysis was conducted to test the effect of the open unemployment rate (X_1) and economic growth (X_2) on the poverty rate (Y). The results of the data processing show the following regression equation:

$$Y = 1.506 + 0.607lnX_1 + 0.099lnX_2 \ldots\ldots\ldots\

c) T-Test (Partial)

Table 7 Result of T-Test

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.506	.179		8.430	.000		
	lnX1	.607	.097	.781	6.277	.000	.993	1.008
	lnX2	.099	.041	.298	2.394	.028	.993	1.008
a. Dependent Variable: lnY								

Source: Processed Data via SPSS, 2025

The coefficient for lnX1 is 0.607, with a t-value of 6.277 and a significance level of less than 0.001. This positive, highly significant effect indicates that higher unemployment is associated with higher poverty levels. Specifically, a 1% increase in the open unemployment rate raises poverty by 0.607%, holding other factors constant. The coefficient for lnX2 is 0.099, with a t-value of 2.394 and a significance level of 0.028, indicating a statistically significant positive effect. A 1% increase in economic growth increases poverty by 0.099%, suggesting that economic growth in Southeast Sulawesi has not been inclusive. This finding reflects a condition of growth without equity, in which economic expansion disproportionately benefits higher-income groups or capital-intensive sectors, thereby excluding low-income populations.

Result Discussion

The findings of this study collectively reinforce the central role of labor market conditions in determining poverty dynamics in Southeast Sulawesi Province. Unemployment emerges as the most powerful determinant of poverty, consistent with development theory, which emphasizes that joblessness directly undermines household income, reduces economic security, and increases vulnerability to poverty. Although economic growth is statistically significant, its positive effect on poverty indicates that growth in the region has not been inclusive. This growth-without-equity pattern aligns with the Kuznets hypothesis, suggesting that early-stage development may intensify inequality when economic expansion is concentrated in capital-intensive sectors. In Southeast Sulawesi, much of the economic output is driven by mining and mineral processing industries that generate high-value production but offer limited employment

opportunities, thereby restricting the transmission of growth benefits to low-income households.

This indicates that higher economic growth in Southeast Sulawesi has coincided with increased poverty rates, suggesting that economic expansion has not been inclusive. Increases in Gross Regional Domestic Product (GRDP) have not substantially reduced poverty, reflecting the phenomenon of "growth without equity," where economic gains are concentrated among specific sectors or income groups, leaving the poor excluded. Economic growth in the province is primarily driven by capital-intensive industries, particularly mining and natural resource processing, which generate high-value-added output but create limited employment opportunities. As noted by Kuncoro (2018) in Saipudin (2024), when growth is concentrated in sectors with low labour absorption, the benefits are largely captured by upper-income groups, while low-income households see minimal improvements in living standards.

Moreover, these findings reinforce the relevance of the Kuznets hypothesis, which posits that inequality may increase during the early stages of development before eventually declining as economies mature. In Southeast Sulawesi, however, the persistence of both poverty and inequality indicates that the region has not yet reached this turning point. Economic growth has not translated into broad-based improvements in income distribution due to weak linkages between high-growth sectors and the wider economy. The limited spillover effects of the mining sector, combined with inadequate investment in human capital and low technological diffusion, continue to hinder inclusive growth outcomes.

These findings further underscore the importance of employment quality as a key mechanism linking economic performance to poverty outcomes. The labor market in Southeast Sulawesi remains dominated by informal employment, where workers often lack job security, steady income, and social protection. As highlighted by the World Bank, 2023, growth in such a labor environment tends to produce uneven outcomes, as productivity remains low and most new jobs arise in low-value sectors. Without improvements in labor productivity and expansion of formal employment opportunities, economic growth is unlikely to yield meaningful reductions in poverty. This underscores the need for policies that promote labor-intensive industries, vocational skill development, and entrepreneurship as pathways to inclusive job creation.

The study also highlights the critical importance of regional economic diversification. Heavy reliance on extractive industries not only limits employment

creation but also exposes the region to global commodity price volatility. Diversification toward agriculture, fisheries, tourism, and creative industries would broaden labour absorption and create more stable income opportunities. Strengthening micro, small, and medium enterprises (MSMEs) is equally essential, as MSMEs contribute significantly to local economic resilience and social inclusion by providing livelihood opportunities to marginalized households. While economic growth remains a vital component of development, it is insufficient to alleviate poverty without deliberate efforts to ensure inclusiveness. The strong and positive elasticity of poverty with respect to unemployment reinforces that job creation and equitable distribution of growth benefits are the most effective mechanisms for reducing poverty. To achieve sustainable and inclusive development, the government of Southeast Sulawesi must adopt integrated strategies that combine macroeconomic growth policies with micro-level empowerment programs, ensuring that all social groups particularly low-income, underserved, and rural populations are able to participate in and benefit from the province's economic progress.

CONCLUSION

This study concludes that the open unemployment rate and economic growth significantly influence poverty levels in Southeast Sulawesi Province. Unemployment is the strongest determinant, as a 1% increase in unemployment raises poverty by 0.607%, indicating that limited job opportunities and unstable employment conditions directly increase household vulnerability. Economic growth also shows a positive and significant effect on poverty, suggesting that the region's economic expansion has been neither inclusive nor concentrated in capital-intensive sectors that generate limited employment. The adjusted R^2 of 0.708 indicates that both variables explain 70.8% of the variation in poverty. Overall, the findings emphasize that economic growth alone is insufficient to reduce poverty; inclusive, employment-driven growth and broader economic opportunities are essential to achieve sustainable poverty reduction.

REFERENCES

Badu, R. R., Canon, S., & Akib, F. H. Y. (2020). THE IMPACT OF ECONOMIC GROWTH AND UNEMPLOYMENT RATE ON POVERTY IN SULAWESI. http://ejurnal.ung.ac.id/index.php/equij

Elfaki, K. E., & Ahmed, E. M. (2024). TESTING TECHNOLOGICAL KUZNETS CURVE IMPLICATIONS ON ACHIEVING SUSTAINABLE

DEVELOPMENT GOAL 10 IN SEVEN ASIAN COUNTRIES. Technological Forecasting and Social Change, 209. https://doi.org/10.1016/j.techfore.2024.123785

Febrianti, N. P. A., Suryanawa, I. K., Mimba, N. P. S. H., & Ratnadi, N. M. D. (2025). THE EFFECT OF ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) PERFORMANCE ON FIRM VALUE: A COMPARATIVE STUDY BETWEEN STATE-OWNED AND NON-STATE-OWNED ENTERPRISES (AN EMPIRICAL STUDY OF COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE FOR THE 2020–2023 PERIOD). International Journal of Economics, Management and Accounting, 2(3). https://doi.org/10.61132/ijema.v2i3.724

Ghozali, I. (2018). APLIKASI ANALISIS MULTIVARIATE DENGAN PROGRAM IBM SPSS 26.

Hidayat, T., Madris, & Anwar, A. I. (2023). INFLUENCE OF POPULATION, UNEMPLOYMENT, AND POVERTY ON ECONOMIC GROWTH IN SOUTH SULAWESI PROVINCE. Pancasila International Journal of Applied Social Science, 1(01), 68–79. https://doi.org/10.59653/pancasila.v1i01.134

Janie, D. N. A. (2012). STATISTIK DESKRIPTIF & REGRESI LINEAR BERGANDA DENGAN SPSS.

Mubarak, M. S., & Sbm, N. (2020). THE IMPACT OF POPULATION, LABOR, UNEMPLOYMENT, AND POVERTY ON ECONOMIC GROWTH REGENCIES/MUNICIPALITY IN SULAWESI TENGAH PROVINCE. Jurnal Ekonomi Pembangunan, 18(01).

Muslim, C., Nur, S., Hastuti, & Muadsin, I. (2024). DAMPAK PERTUMBUHAN EKONOMI TERHADAP KEMISKINAN DI PROVINSI SULAWESI TENGGARA. Jurnal Ekonomi Aktual, 3(3), 81–86. https://doi.org/10.53867/jea.v3i3.100

Saipudin. (2024). THE RELATIONSHIP BETWEEN INCOME INEQUALITY AND ECONOMIC GROWTH. https://creativecommons.org/licenses/by/4.0

Syafa'atin, R. S. R., Wardhono, A., & Adenan, Moh. (2025). PRESCRIPTIVE ON THE IMPACT OF ECONOMIC GROWTH, FINANCIAL DEVELOPMENT AND INCOME INEQUALITY IN INDONESIA. Jurnal Ekuilibrium, 9(1), 17–27. https://doi.org/10.19184/jek.v9i1.46422

World Bank. (2023). PATHWAYS TOWARD ECONOMIC SECURITY: INDONESIA POVERTY ASSESSMENT.