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Analysis of macroeconomic factors affecting poverty levels in Indonesia using a dummy regression model approach

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ABSTRACT

Poverty in Indonesia remains a complex macroeconomic issue, influenced by various social, economic, and regional disparities. This study employed a dummy variable regression model to analyze the factors affecting poverty more comprehensively, allowing for the identification of categorical geographic effects. This study examines the influence of the Gender Empowerment Index, Expected Years of Schooling, Gini Ratio, Open Unemployment Rate, and Formal Employment on the percentage of the poor population in Indonesia, while considering regional classifications in Western, Central, and Eastern Indonesia. The results show that the Gender Empowerment Index and proportion of Formal Employment have a significant negative effect on poverty, while the Gini Ratio has a significant positive effect. Additionally, the Western and Central regions exhibit significantly lower poverty rates than the eastern region. The dummy regression model explains 83,64% of the variation in poverty across provinces, making it a relevant basis for formulating region-specific and macro-economically informed poverty alleviation policies.

Keywords: Regression, Dummy variables, Poverty, Macroeconomics, Indonesia.

1. INTRODUCTION

Poverty remains one of the most pressing socioeconomic challenges faced by many countries, including Indonesia. It not only reflects the inability of individuals or households to meet basic needs, such as food, clothing, housing, education, and healthcare, but is also closely linked to persistent social and economic inequalities. Limited access to employment opportunities, stagnant productivity, and weak purchasing power exacerbate this situation. In Indonesia, regional development disparities contribute significantly to widening inequality, where economically advanced regions tend to have lower poverty rates than underdeveloped areas. Enhancing female participation in economic and political spheres is also a crucial component of poverty alleviation. The Gender Empowerment Index (GEI), a sustainable development goal (SDG) indicator, illustrates the extent to which women can participate in decision-making processes, political representation, and income distribution. Furthermore, education plays a fundamental role in shaping the quality of human capital. Indicators such as Expected Years of Schooling (EYS) and Mean Years of Schooling (MYS) reflect individuals' capacity to adapt to increasingly complex socioeconomic changes (Rahminawati, 2023).

Income inequality, which is often measured using the Gini Ratio, is another key factor in poverty analysis. A higher Gini coefficient indicates a greater disparity in income distribution across social groups, which in turn reduces overall welfare and hampers progress in achieving the Human Development Index (Riani et al., 2021). On the other hand, open unemployment, as a form of economic incapacity, directly affects individuals' ability to meet their living needs independently (Ardian et al., 2022). The proportion of formal employment, which signifies job stability and access to social security, is also a critical indicator of household economic resilience (Budiman & Gumawang, 2025). From a macroeconomic perspective, analyzing these phenomena is essential for formulating data-driven policy interventions (Hayati et al., 2024). This study employed a multiple linear regression model with regional dummy variables (Western, Central, and Eastern) to investigate how geographic characteristics influence the relationship between macroeconomic indicators and poverty levels. The inclusion of dummy variables enables a more comprehensive analysis of regional effects as categorical data (Prisnadela et al., 2025). Through this modeling approach, the research not only evaluates the influence of each independent variable, but also observes significant interregional differences in poverty determinants.

Based on the above background, this study examines the effects of selected macroeconomic factors on poverty levels in Indonesia, focusing on the Gender Empowerment Index, Expected Years of Schooling, Gini Ratio, Open Unemployment Rate, and the proportion of formal employment. Additionally, this study incorporates regional dummy variables to capture interregional disparities across the Indonesian archipelago. The findings of this study are expected to provide empirical insights for more targeted and regionally adaptive poverty alleviation policies.

2. METHOD

This study utilizes secondary cross-sectional data from 38 provinces in Indonesia for the year 2024. All data were obtained from the official website of Statistics Indonesia (Badan Pusat Statistik or BPS). A macroeconomic approach is adopted in this research, as the unit of analysis is aggregated regions (provinces), rather than individuals or households. Furthermore, poverty, as the dependent variable, is a macroeconomic issue that is closely related to income distribution inequality and the effectiveness of public policy at the national level.

The variables employed in this study included one response (dependent) variable, five predictor (independent) variables, and two regional dummy variables. The variables are defined as follows: the percentage of the poor population (Y), Gender Empowerment Index (X_1), Expected Years of Schooling (X_2), Gini Ratio (X_3), Open Unemployment Rate (X_4), and the proportion of formal employment (X_5). The regional dummy variables were constructed based on Indonesia's time-zone divisions, which comprised three categories: Western Indonesia Time (WIB), Central Indonesia Time (WITA), and Eastern Indonesia Time (WIT). According to the rule that the number of dummy variables must be one less than

the number of categories, two dummy variables are included in the model. Eastern Indonesia was selected as the reference or baseline category because this region generally has the lowest level of development compared to other regions in the country. Choosing this baseline enables the analysis to assess whether other regions, such as Western and Central Indonesia, demonstrate statistically significant advantages in terms of poverty.

Data analysis was conducted using RStudio statistical software, a powerful open-source tool for data processing and regression analysis, supporting a wide range of relevant statistical packages. The model applied in this research is a multiple linear regression model that incorporates regional dummy variables to represent the geographic location of the provinces in Indonesia. The analytical procedures used in this study are outlined as follows:

1) Collecting data for all variables used in the analysis
2) Defining the dummy variables
3) Conducting descriptive statistical analysis
4) Building the multiple linear regression model
5) Performing classical assumption tests
6) Conducting the F-test (simultaneous test) and t-test (partial test)
7) Identifying the best-fit model
8) Drawing conclusions and formulating recommendations

3. RESULTS AND DISCUSSION

3.1 Descriptive Statistics

Descriptive statistics aims to provide a general overview of the data under investigation. The following section presents the results of the descriptive statistical analysis.

Table 1. Descriptive Statistics of Independent Variables

Variable	*Min*	Q_1	*Median*	*Mean*	Q_3	*Max*
Y	3,80	5,78	9,57	10,67	12,61	29,66
$\mathbf{X_1}$	55,20	64,94	71,33	70,42	75,30	84,50
$\mathbf{X_2}$	9,49	12,91	12,91	13,27	13,77	15,71
$\mathbf{X_3}$	0,23	0,31	0,34	0,34	0,36	0,43
$\mathbf{X_4}$	1,32	3,22	4,19	4,38	5,71	6,75
$\mathbf{X_5}$	4,24	35,03	40,09	40,54	46,77	68,45
$\mathbf{D_1}$	0	0	0	0,47	1	1
$\mathbf{D_2}$	0	0	0	0,32	1	1

Based on Table 1, the average percentage of the poor population (Y) in Indonesia by 2024 is 10.67%, with provincial variations ranging from 3.8% to 29.66%. The Gender Empowerment Index (X_1) has an average value of 70.42, indicating a relatively strong level of female participation, although disparities remain across regions, with values ranging from 55.20 to 84.50. The Expected Years of Schooling (X_2) shows a national average of 13.27 years; however, there are provinces with values as low as 9.49 years, suggesting educational inequality. Income inequality, measured using the Gini Ratio (X_3), has an average of 0.3406, with a range of 0.2350 to 0.4310, indicating a moderate level of inequality. The Open Unemployment Rate (X_4) varied between 1.32% and 6.75%, with an average of 4.38%. Meanwhile, the proportion of formal employment (X_5) averages 40.54%, reflecting the dominance of the informal sector in many regions, with a wide range, from 4.24% to 68.45%. Regarding the regional dummy variables, the largest proportion of observations was found in Western Indonesia (D1) at 47.37%, followed by Central Indonesia (D2) at 31.58%, with Eastern Indonesia serving as the reference category. These statistics highlight substantial disparities among the provinces across Indonesia.

3.2 Classical Assumption Test

Classical assumption tests were conducted to evaluate several critical aspects of the regression model, including the normality of residuals, absence of autocorrelation, absence of heteroscedasticity, and absence of multicollinearity among independent variables. The purpose of these tests is to ensure that the relationship between the independent and dependent variables, as captured by the regression model, accurately reflects the actual conditions and can be reliably used for prediction or decision-making. The four assumptions used in this study are as follows:

3.2.1 Normality Test

The normality test determines whether the residuals of the regression model are normally distributed. In this study, the Shapiro-Wilk test with the hypotheses is defined as follows:

H_0 : Residuals are normally distributed
H_1 : Residuals are not normally distributed
Decision Criterion : Reject H_0, if the p-value $< \alpha$ (0,05)

Based on the data processing, the results of the Shapiro-Wilk test are presented in Table 2.

Table 2. Results of the Shapiro-Wilk Test

Test	*P-Value*
Shapiro-Wilk	0,3886

Based on Table 2, the p-value is 0,3886, which is greater than the significance level $\alpha = 0{,}05$. Therefore, H_0 is accepted. This indicates that the residuals were normally distributed.

3.2.2 Heteroscedasticity Test

The purpose of the heteroscedasticity test is to determine whether the variance in the residuals remains constant across all values of the independent variables. The Breusch-Pagan test was used to test the following hypotheses:

H_0 : There is no heteroscedasticity (homoscedastic variance)
H_1 : There is heteroscedasticity (heteroscedastic variance)
Decision Criterion : Reject H_0, if the p-value $< \alpha$ (0,05)

The results of the Breusch-Pagan test based on the data processing are presented in Table 3.

Table 3. Results of the Breusch-Pagan Test

Test	*P-Value*
Breusch-Pagan	0,2918

Based on Table 3, the p-value is 0.2918, which is greater than the significance level $\alpha = 0{,}05$. Therefore, H_0 is accepted. This indicates that heteroscedasticity is not present, meaning that the residuals have constant variance and there is no evidence of differing characteristics across observations.

3.2.3 Autocorrelation Test

The autocorrelation test aims to detect whether there is a relationship between the residuals of one observation and those of the other. In this study, the Durbin-Watson test was used to test the following hypotheses.

H_0 : No autocorrelation exists

H_1 : Autocorrelation exists
Decision Criterion : Reject H_0, if the p-value $< \alpha$ (0,05)

The results of the Durbin-Watson test based on data processing are presented in Table 4.

Table 4. Results of the Durbin-Watson Test

Test	*P-Value*
Durbin-Watson	0,7126

Based on Table 4, the p-value is 0,7126, which is greater than the significance level $\alpha = 0{,}05$. Therefore, H_0 is accepted. This indicated that no autocorrelation was present in the residuals.

3.2.4 Multicollinearity Test

The multicollinearity test aims to detect whether there is a high correlation between the independent variables in the regression model. In this study, multicollinearity was assessed by examining Variance Inflation Factor (VIF) values with the following hypotheses:
H_0 : No multicollinearity exists
H_1 : multicollinearity exists
Decision Criterion:

1) If VIF < 10, there is no indication of multicollinearity
2) If VIF > 10, multicollinearity is indicated

The VIF values for each independent variable based on the data analysis are presented in Table 5.

Table 5. Results of VIF values

Variable	X_1	X_2	X_3	X_4	X_5	D_1	D_2
VIF-value	1,39	1,43	1,09	1,87	2,45	2,71	3,16

Based on Table 5, all independent variables had VIF values of less than 10, indicating that no multicollinearity was present. This suggests that the regression model does not suffer from high correlation among the independent variables.

3.3 Simultaneous Test

A simultaneous test was used to determine whether all independent variables collectively had a significant influence on the dependent variable in the regression model. The main objective was to evaluate the overall explanatory power of the model by accounting for the variation in the dependent variable. In this study, the F-test was employed to test the following hypotheses:
H_0 : None of the independent variables have a significant effect on the percentage of the poor population in Indonesia
H_1 : At least one independent variable has a significant effect on the percentage of the poor population in Indonesia
Decision Criterion : Reject H_0, if the p-value $< \alpha$ (0,05)

The results of the F-test (simultaneous) based on the data analysis are presented in Table 6.

Table 6. Results of the Simultaneous Test

Test	*P-Value*
F-stat	0,000

Based on Table 6, the p-value is 0,000, which is less than the significance level $\alpha = 0{,}05$. Therefore, H_0 is rejected and H_1 is accepted. This indicates that, simultaneously, the variables Gender Empowerment Index, Expected Years of Schooling, Gini Ratio, Open Unemployment Rate, Proportion of Formal Employment, Western Indonesia dummy, and Central Indonesia dummy have a statistically significant effect on the poverty rate in Indonesia.

3.4 Partial Test

The partial test measures the individual effect of each independent variable on the dependent variable while controlling for the influence of other variables in the model. In this study, a partial significance test was conducted using the t-test with the following hypotheses:

1) Hypothesis 1 for Variable X_1 (Gender Empowerment Index)

   $H_0 : (\beta_1 = 0)$ The Gender Empowerment Index has no significant effect on the percentage of the poor population in Indonesia

   $H_1 : (\beta_1 \neq 0)$ The Gender Empowerment Index has a significant effect on the percentage of the poor population in Indonesia

2) Hypothesis 2 for Variable X_2 (Expected Years of Schooling)

   $H_0 : (\beta_2 = 0)$ Expected Years of Schooling has no significant effect on the percentage of the poor population in Indonesia

   $H_1 : (\beta_2 \neq 0)$ Expected Years of Schooling has a significant effect on the percentage of the poor population in Indonesia

3) Hypothesis 3 for Variable X_3 (Gini Ratio)

   $H_0 : (\beta_3 = 0)$ The Gini Ratio has no significant effect on the percentage of the poor population in Indonesia

   $H_1 : (\beta_3 \neq 0)$ The Gini Ratio has a significant effect on the percentage of the poor population in Indonesia

4) Hypothesis 4 for Variable X_4 (Open Unemployment Rate)

   $H_0 : (\beta_4 = 0)$ The Open Unemployment Rate has no significant effect on the percentage of the poor population in Indonesia

   $H_1 : (\beta_4 \neq 0)$ The Open Unemployment Rate has a significant effect on the percentage of the poor population in Indonesia

5) Hypothesis 5 for Variable X_5 (Western Indonesia)

   $H_0 : (\beta_5 = 0)$ Formal Employment has no significant effect on the percentage of the poor population in Indonesia

   $H_1 : (\beta_5 \neq 0)$ Formal Employment has a significant effect on the percentage of the poor population in Indonesia

6) Hypothesis 6 for Variable D_1 (Western Indonesia Region)

   $H_0 : (\beta_6 = 0)$ The Western Indonesia Region dummy variable has no significant effect on the percentage of the poor population in Indonesia

   $H_1 : (\beta_6 \neq 0)$ The Western Indonesia Region dummy variable has a significant effect on the percentage of the poor population in Indonesia

7) Hypothesis 7 for Variable D_2 (Central Indonesia Region)

H_0 : $(\beta_7 = 0)$ The Central Indonesia Region dummy variable has no significant effect on the percentage of the poor population in Indonesia

H_1 : $(\beta_7 \neq 0)$ The Central Indonesia Region dummy variable has a significant effect on the percentage of the poor population in Indonesia

Decision Criterion : Reject H_0, if the p-value $< \alpha$ (0,05)

The results of the t-test based on data analysis are presented in Table 7.

Table 7. Results of the Partial Test

Parameter	β_0	β_1	β_2	β_3	β_4	β_5	β_6	β_7
Estimation	33,677	-0,225	-0,249	34,666	0,146	-0,316	-4,899	-3,631
P-Value	0,000	0,003	0,612	0,000	0,723	0,000	0,001	0,030

Based on Table 7, it can be concluded that the parameters of $\beta_0, \beta_1, \beta_3, \beta_5, \beta_6$ and β_7 have p-values less than the significance level $\alpha = 0{,}05$. Therefore, H_0 is rejected and H_1 is accepted for these variables. This indicates that the variables that have a statistically significant effect on poverty rates in Indonesia are the Gender Empowerment Index (X_1), Gini Ratio (X_3), Formal Employment (X_5), Western Indonesia Region (D_1), and Central Indonesia Region (D_2).

3.5 Estimation of the Best Dummy Regression Model

Based on the results of partial significance tests, five independent variables were found to have a statistically significant effect on the dependent variable. These variables are the Gender Empowerment Index (X_1), Gini Ratio (X_3), Formal Employment (X_5), western Indonesian region (D_1), and central Indonesian region (D_2). The variables Expected Years of Schooling (X_2) and Open Unemployment Rate (X_4) were found to be statistically insignificant and therefore removed from the final model to produce a more efficient and valid estimation.

$$\hat{Y} = \beta_0 + \beta_1 X_1 + \beta_3 X_3 + \beta_5 X_5 + \beta_6 D_1 + \beta_7 D_2 + \varepsilon$$

Alternatively, the estimation results can be expressed as follows.

$$\hat{Y} = 33{,}677 - 0{,}225 X_1 + 34{,}666 X_3 - 0{,}316 X_5 - 4{,}899 D_1 - 3{,}631 D_2 + \varepsilon$$

3.6 Evaluation of the Best Dummy Regression Model

The coefficient of determination, commonly referred to as *R-squared* (R^2), is a statistical measure that indicates the proportion of the variance in the dependent variable that is explained by the regression model. In simple terms, the R^2 value reflects how well the model fits the observed data. A value close to 1 indicates that the model explains a large proportion of the variability in the data, whereas a value close to 0 suggests that the model has a limited ability to explain the relationships among the variables. Based on the data analysis, the R^2 values of the best dummy regression model are presented in Table 8.

Table 8. Results of the Coefficient of Determination

Multiple R-Squared	***Adjusted R-Squared***
0,8673	0,8364

Based on Table 8, the Multiple R-squared value of 0,8673 indicates that approximately 86,73% of the variation in the percentage of the poor population can be explained by the independent variables used in the regression model, including regional dummy variables. Meanwhile, the Adjusted R-squared value of 0,8364 suggests that approximately 83,64% of the variation in the data could still be accurately explained

after adjusting for the number of predictors. Thus, the resulting dummy regression model demonstrates strong explanatory power and is considered to be highly relevant.

3.7 Interpretation of the Best Dummy Regression Model

Based on the best dummy regression model obtained in Table 7, the interpretation is as follows.

1) The constant term (β_0) is 33,678, which means that if all independent variables are equal to zero, the predicted percentage of the poor population is 33,67%.
2) The Gender Empowerment Index (X_1) has a negative relationship with poverty, with a coefficient $\beta_1 =$ -0,225. This result indicates that a one-point increase in the index reduces the poverty rate by 0,225%. Therefore, greater female participation in social and economic activities tends to reduce regional poverty.
3) The Gini Ratio (X_3) has a positive effect on poverty, with a coefficient $\beta_3 =$ 34,666. This finding implies that increased income inequality, as represented by the Gini Ratio, significantly increases poverty levels. Specifically, an increase of 0,01 in the Gini Ratio results in a 0,34666% increase in poverty, indicating that economically unequal regions tend to have a higher proportion of poor people.
4) The Formal Employment (X_5) variable shows a negative relationship, with a coefficient $\beta_5 =$ 0,316. This means that a 1% increase in formal employment reduces the poverty rate by 0,316%, highlighting the importance of the formal sector in ensuring the economic stability of the population.
5) For the regional dummy variables, provinces located in Western Indonesia (D_1) have a poverty rate that is 4,899% lower than those in Eastern Indonesia, while provinces in Central Indonesia (D_2) have a 3,632% lower poverty rate than the eastern region. This suggests that geographical location continues to influence regional welfare, with the eastern region lagging behind the Western and Central regions in terms of development.

4. CONCLUSION

Based on the analysis results, it can be concluded that the macroeconomic factors influencing the percentage of the poor population in Indonesia are the Gender Empowerment Index (X_1), Gini Ratio (X_3), Formal Employment (X_5), and two regional dummy variables: the Western Indonesia Region (D_1) and the Central Indonesia Region (D_2). Higher female participation in development and a larger proportion of formal workers are associated with lower poverty levels, whereas increased income inequality contributes to higher poverty rates. Furthermore, provinces in Western and Central Indonesia region are proven to have significantly lower poverty rates compared to those in Eastern Indonesia, with differences of 4,899% and 3,632%**,** respectively. Meanwhile, the other two variables are Expected Years of Schooling (X_2) and Open Unemployment Rate (X_4) do not show a significant effect on poverty levels in this model. The resulting dummy regression model to explain 83,64% of the variation in poverty levels across provinces, making it a valid tool for informing poverty reduction policies in Indonesia.

Ethical Approval
Ethical approval was not required for this study.

Informed Consent Statement
Informed consent was not obtained for this study.

Authors' Contributions
Conceptualization, NRS; methodology, VAS and NRS; validation, NRS; formal analysis, VAS and NRS; resources, NRS; writing – original draft preparation, VAS and MJ; writing – review and editing, NRS; visualization, NS; supervision, NRS.

Disclosure Statement
The authors report no potential conflicts of interest was reported by the author(s).

Data Availability Statement
The data presented in this study are available upon request from the corresponding author for privacy reasons.

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Nabila Safitri is an undergraduate student of Statistics at Universitas Tadulako, Indonesia. She is particularly interested in data presentation, visual communication, and infographic design for research dissemination. Her experience includes creating visual aids, statistical charts, and presentation materials for academic projects. For this paper, she was responsible for designing and preparing the visual infographics that accompanied the research findings, ensuring that complex statistical results were communicated clearly and effectively to readers.

REFERENCES

Ardian, R., Syahputra, M., & Dermawan, D. (2022). The effect of economic growth on the open unemployment rate in Indonesia. *Journal of Economics, Business and Management*, 1(3), 190–198. https://doi.org/10.58192/ebismen.v1i3.90

Budiman, I. F., & Gumawang, I. R. (2025). Analysis of the effect of tax compliance level and the number of formal workers on income tax (PPh) revenue in Indonesia. *Journal of Tax Application (JAP)*, 6(1). https://doi.org/10.29303/jap.v6i1.95

Hayati, F., Luqianna, A., Oktavina, M., & Abadi, M. T. (2024). Overview of Islamic macroeconomics. Journal of Business Economics and manajemen, 2 (1), 122-128, https://doi.org/10.59024/jise.v2i1.553

Kusuma, I. M. C., & Bendesa, I. K. G. (2022). Analysis of the effect of life expectancy, mean years of schooling, and poverty rate on welfare in regencies/cities in Bali Province. *E-Journal of Development Economics, Udayana University*, 11(11), 4059. https://doi.org/10.24843/EEP.2022.v11.i11.p04

Prisnadela, Prasaja, M. G., & Utomo, A. S. (2025). The effect of financial literacy, lifestyle, and gender on student financial management behavior (Study at Muhammadiyah University of Purworejo). *Volatility Journal*, 7(2). https://doi.org/10.37729/volatilitas.v7i2.6236

Rahminawati, N. (2023). Strategies for increasing expected years of schooling (EYS) and mean years of schooling (MYS). *Journal of Islamic Education*, 12(2), 1411–8173. https://doi.org/10.29313/tjpi.v12i2.12852

Riani, I. A. P., Sumreskosu, Y., & Purwadi, M. A. (2021). The influence of economic growth, poverty rate, and Gini ratio on the human development index in Papua Province during the 2011–2020 period. *Journal of Economic Studies and Development Review*, 8. https://doi.org/10.56076/jkesp.v8i1.2102