

Domestic Investment, GDP and Inflation: Their Impact on Extreme Poverty in Indonesia

Fitria Nur Aini¹⁾, Sutrisno²⁾, Moh Mustofa³⁾

^{1),2),3)} Ekonomi Pembangunan, Universitas Bojonegoro, Bojonegoro

Email: Fitrianuraini2431@gmail.com¹⁾, sutrisnoxanyarnyar@gmail.com²⁾, mohtofa123@gmail.com³⁾

ABSTRACT

This research aims to analyze how domestic investment, gross domestic product and inflation influence extreme poverty in Indonesia during the 2004-2024 period. In the future, it is hoped that this research can become the basis for further research on comprehensive economic policies that focus on increasing domestic investment and GDP as well as controlling inflation to reduce extreme poverty in a sustainable manner. Secondary data sources were obtained through BPS and Word bank, using a quantitative approach and multiple linear regression analysis with the help of data processing through the EViews 13 program. It was found that the research results showed that domestic investment had an effect but was not significant, while GDP and inflation had a significant effect on extreme poverty in Indonesia. This study finds that growth in domestic investment and GDP has an influence in reducing extreme poverty by increasing people's purchasing power and income. Inflation, on the other hand, exacerbates extreme poverty by suppressing the purchasing power of vulnerable groups. This emphasizes the importance of increasing domestic investment, inclusive economic growth and controlling inflation. These findings highlight the need for policies that maintain stable PMDN growth, encourage inclusive economic growth, and control inflation to effectively reduce extreme poverty in Indonesia. The implications of this research suggest that the government needs to integrate economic strategies that focus on stability and controlling inflation in poverty alleviation policies, especially to improve the welfare of low-income groups.

Keywords: Domestic Investment; Gross domestic product; Inflation; Extreme Poverty

ABSTRAK

Penelitian ini bertujuan untuk menganalisis bagaimana penanaman modal dalam negeri, produk domestik bruto dan inflasi mempengaruhi kemiskinan ekstrem di Indonesia selama periode 2004-2024. Penelitian ini di masa depan diharapkan dapat menjadi landasan bagi penelitian yang lebih lanjut kebijakan ekonomi komprehensif yang berfokus pada peningkatan penanaman modal dalam negeri dan PDB serta pengendalian inflasi untuk mengurangi kemiskinan ekstrem secara berkelanjutan. Sumber data sekunder diperoleh melalui BPS dan Word bank, Menggunakan pendekatan kuantitatif dan analisis regresi linier berganda dengan bantuan olah data melalui program EViews 13. Ditemukan Hasil penelitian menunjukkan penanaman modal dalam negeri berpengaruh namun tidak signifikan, sedangkan PDB dan inflasi berpengaruh signifikan terhadap kemiskinan ekstrem di Indonesia. Studi ini menemukan bahwa pertumbuhan penanaman modal dalam negeri dan PDB mempunyai pengaruh dalam mengurangi kemiskinan ekstrem dengan meningkatkan daya beli masyarakat dan pendapatan. Sebaliknya, inflasi memperburuk kemiskinan ekstrem dengan menekan pembelian kekuatan kelompok rentan. Hal ini menekankan pentingnya peningkatan penanaman modal dalam negeri, pertumbuhan ekonomi inklusif, dan pengendalian inflasi. Temuan ini menyoroti perlunya kebijakan yang menjaga pertumbuhan PMDN yang stabil, mendorong pertumbuhan ekonomi inklusif, dan pengendalian inflasi untuk secara efektif mengurangi kemiskinan ekstrem di Indonesia. Implikasi dari penelitian ini menyarankan bahwa pemerintah perlu mengintegrasikan strategi ekonomi yang fokus pada stabilitas dan pengendalian inflasi dalam kebijakan pengentasan kemiskinan, terutama untuk meningkatkan kesejahteraan kelompok berpenghasilan rendah.

Kata Kunci: Penanaman Modal Dalam Negeri; Produk Domestik Bruto; Inflasi; Kemiskinan Ekstrem

1. Introduction

The problem of poverty is a problem faced by every country in the world. Widespread and high levels of poverty are at the core of all development problems, especially in Indonesia (Sauki and Sudihartono 2023). The national poverty line is currently set by the World Bank as Low-Income Countries (LIC) at \$3.00 per day (equivalent to around IDR 546,400 per month after taking into account Indonesia's cost of living), Lower-Middle-Income Countries (LMIC) at \$4.20 per day

(equivalent to around IDR 765,000 per person per month), and Lower-Middle-Income Countries (UMIC) at \$8.30 per day (equivalent to around IDR 1,512,000 per person per month). Where in 2023, Indonesia will officially be upgraded to an upper middleincome country (UMIC) (World Bank, 2025).

Developing countries prioritize poverty as one of their national development goals because it is a specific issue. The problem of poverty is a major concern for Indonesia, in line with the Sustainable Development

Goals (SDGs) which state the goal of "Ending poverty in all its forms everywhere" (Nainggolan 2020). Extreme poverty is also described as a condition of uncertainty regarding sustainable living including malnutrition and hunger, limited access to education, social discrimination, and lack of involvement in decision making (Ningsih and Prasodjo 2024).

Franzen & Bahr (2024) Economic growth and increased employment opportunities can help reduce poverty. However, the benefits of this growth are often uneven, especially for low-income groups, so that poverty persists or even increases in some levels of society. If the poverty rate in a particular region of a country increases while the poverty rate in other regions remains stable, subgroup consistency suggests that overall poverty in the country will not decrease. (Dutta et al., 2021). Meanwhile, Kis-Katos & Sparrow (2015) Changes in poverty levels will also be influenced by overall economic growth and targeted social policies. These factors can vary depending on the initial poverty level (due to policy convergence or focus) and economic conditions at the local level.

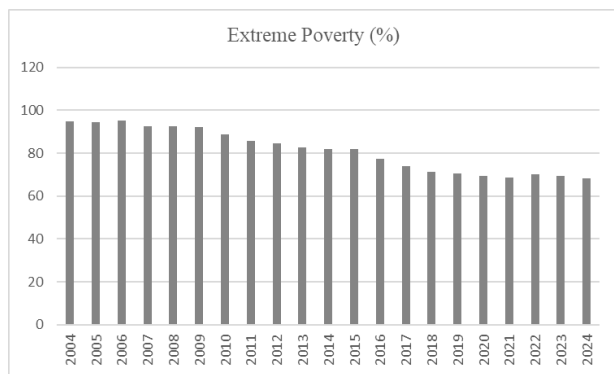


Figure 1 Extreme Poverty Tahun 2004-2024

Source: World Bank (2025)

From the picture above, it can be concluded that the level of extreme poverty in Indonesia during the 2004-2024 period shows a significant downward trend, although there are fluctuations in certain years. At the beginning of the period, in 2004, the severity of poverty was still around 94.8%. This reflects relatively large inequalities among the poor. In the following three years, the extreme poverty rate remained high and reached its peak in 2006, where the graph shows 95.3%. The increase in the severity of poverty can be caused by various global economic factors or domestic policies that worsen the situation of the poor.

After peaking in 2006, there was a gradual decline until 2013, when the extreme poverty rate began to stabilize at around 82.6%. From 2014 to 2019, the graph shows small fluctuations, but overall, it still shows stability, tending to increase from the previous year. In 2020 to 2021, there was a slight increase due to Covid-19, followed by government policies regarding social restrictions which hampered people's economic mobility, causing poverty levels to increase. From 2022 to 2023 it will experience a decline. According to CNBC 2024, the Indonesian government is aggressively providing social

assistance to the poor through direct cash assistance (BLT), as well as various government programs such as the Family Hope Program and Beneficiary Families (KPM). These government efforts are indicated to reduce poverty rates.

In 2024, the extreme poverty rate falls to nearly 68.3%, lower than at the start of the period. Overall over the last twenty years, Indonesia has made progress in overcoming high poverty among the poor, despite facing global and domestic economic challenges. Apart from that, from the data above, this study is in line with (Puspitasari et al., 2024) which estimates that strong economic resilience and sustainable growth in the RCEP area will reduce severe poverty between 2020 and 2035, from 0.98% to 0.12%.

The Indonesian government is still trying to reduce the rate of extreme poverty in this country. Continuing to encourage investment is an initiative that is being carried out. Speculation can be described as the use or expenditure made by investors or companies in acquiring capital goods and assembly equipment to build the production capacity of labor and goods for the economy. Better infrastructure will open the door to business opportunities, reduce poverty levels, and investment will have an impact on the Development process (Nst and Sari 2024). Investments such as capital investment are carried out by domestic investors building businesses with domestic capital throughout the Unitary State of the Republic of Indonesia. Both individuals and businesses are capable of doing this. In reducing poverty rates, PMDN has a positive impact which is in line with research (Suryatno Wiganepdo and Soegoto 2022).

According to (Laborde Debucquet and Martin 2018) With high economic growth poverty can be reduced in developing countries, especially in rural areas. However, a slowdown in gross domestic product (GDP) can lead to more poverty because GDP per capita has a direct impact on income and welfare. Macroeconomic indicators such as gross domestic product (GDP) per capita greatly influence the level of welfare, which shows the level of progress and advancement of the region where they live.

Macroeconomic stability, which is the main condition for the success of reform, is also demonstrated by the inflation rate, which is an important component in driving economic growth (Pafadnam 2024). If the inflation rate continues to increase, this can make a person feel less in control of their life, which can impact their quality of life, because low perceptions of control are often associated with a poorer quality of life.

Most policymakers and economists failed to predict how strong and persistent the surge in inflation would be and took action too late. In 2022, inflation has become a pressing issue for central banks in many countries, prompting the most coordinated tightening of monetary policy in history. Both developed and developing countries raised their policy interest rates, and as quickly as inflation rose, global inflation began to

case, falling to 5.8 percent in the fourth ease, falling to 2023 on an annualized basis (Dao et al. 2024).

Monetary policy that focuses on increasing welfare will be more effective if it provides a strong response to output rather than focusing on stabilizing inflation (Ikeda and Kurozumi 2019). Monetary policy that keeps expectations of future increases in marginal costs stable will be effective in avoiding prolonged deflation despite a significant decline in economic activity and increased financial stress (Del Negro, Giannoni, and Schorfheide 2015).

It has been proven theoretically and empirically that inflation uncertainty tends to increase in periods of high inflation (Conrad and Hartmann 2019). When inflation is high and fluctuating, prices tend to change more often with smaller magnitudes, whereas when inflation is low and stable, prices tend to change less frequently, but with larger magnitudes (Wulfsberg 2016). Findings from (Apergis et al. 2021) shows that inflation contributes to inflation uncertainty, which means that one of the most significant impacts of high inflation rates is increasing inflation uncertainty. Meanwhile, according (Ajide and Alimi 2023), inflation instability creates economic uncertainty which has a stronger impact on social stability than constant inflation.

This research offers something new by analyzing domestic investment (PMDN), Gross Domestic Product (GDP) and inflation's impact on extreme poverty in Indonesia, using 20 years of data (2004-2024). The long-term approach fills the gap in previous research. And in contrast to other research which tends to focus on macroeconomic aspects in general, this research specifically links macroeconomic dynamics with extreme poverty, which is rarely the main focus. Therefore, this research offers a new perspective on the relationship between domestic investment, gross domestic product and inflation in order to alleviate poverty more effectively. Moreover, this research also offers an empirical basis for designing more comprehensive and needs-oriented economic policies for the poor in Indonesia.

This research can serve as a basis for the government in formulating more effective poverty alleviation policies, especially in maintaining domestic investment levels, encouraging inclusive economic growth, and controlling inflation. In the future, it is hoped that this research can encourage further development in exploring economic and social strategies to reduce extreme poverty in a sustainable manner.

2. Theoretical Basis

Extreme Poverty

As cited in Lestari et al., (2023), the UN (1996) defines extreme poverty as the inability to meet a person's basic needs, which include access to food, clean water, adequate sanitation, health services, shelter, education, and information. These barriers to poverty include access to social services and financial resources. Poverty can be viewed from a material perspective as the

degree to which a person feels they have the amount of resources necessary to meet the needs of a comfortable life, based on economic and social considerations (Aryani and Rachmawati 2019).

To determine the poverty line, the National Team for the Acceleration of Poverty Reduction (TNP2K) uses a consistent and cross-time measure of absolute poverty, set by UN countries. Where according to the world bank the national poverty line set by Low-Income Countries (LIC) is now \$3.00 per day (equivalent to around IDR 546,400 per month after taking into account Indonesia's cost of living). Lower-Middle-Income Countries (LMIC), at \$4.20 per day (around IDR 765,000 per person per month), and Lower-Middle-Income Countries (UMIC) at \$8.30 per day (around IDR 1,512,000 per person per month) (World Bank, 2025)

In particular, efforts to eradicate extreme poverty in Indonesia are based on the direction of the President of the Republic of Indonesia to integrate, determine and ensure the achievement of appropriate goals through cooperation (Pramasha and Restianita 2024). To carry out these countermeasures, special efforts are made through various interventions consisting of two main objectives. When various social security and subsidy programs reduce expenditure on poor and vulnerable groups and when these groups are empowered to increase their productivity with the aim of increasing their income or economic capacity.

Domestic Investment

Investment is the allocation of resources to gain future profits. In economics, investment encourages growth, creates jobs, and increases production capacity, both through physical assets such as infrastructure, and financial assets such as shares and bonds.

Domestic Investment (PMDN) is investment by local investors in their own region, which plays an important role in encouraging industrialization, reducing unemployment and creating jobs. Increasing PMDN can accelerate the growth of strategic sectors such as manufacturing, infrastructure and technology, while increasing state revenue through taxes. Although both support economic growth, PMA and PMDN have differences in terms of capital origin and impact: PMA brings in foreign capital to accelerate development, while PMDN strengthens national economic independence. Both complement each other in supporting sustainable economic development (Pratama & Rofiuddin, 2023).

According to (Elilian, 2021), several factors that influence PMDN include: government policy support such as incentives and ease of regulation; political and economic stability that provides certainty for investors; availability of infrastructure and natural resources that support production activities; and easy access to financing through financial institutions or capital markets, thereby encouraging domestic investment interest.

As cited in Ainurrahmi & Tutik, (2025), the Mankiw (2010) defines domestic investment as

including all expenditure on capital goods that can be used to make products and services in the country. In the context of PMDN, this investment is not only limited to purchasing physical assets, but also includes expenditure on research and development (R&D) which aims to increase productivity and innovation in the production process.

Based on the provisions of Article 5 Paragraph 1 of Law Number 25 of 2007 concerning Capital Investment, Domestic Investment (PMDN) can be carried out in various forms of business entities, such as Regional Companies (PD), cooperatives, State-Owned Enterprises (BUMN), and individual business entities and limited liability companies (PT). PMDN supports technology transfer, equitable development, and improving the quality of human resources to support long-term and sustainable economic growth (Adrianto, Sembiring, and Faried 2025). In addition, PMDN can encourage the development of local communities by providing opportunities for small and medium business owners to get involved in the economy. So it is important to create inclusive and sustainable growth.

Domestic Investment (PMDN) plays an important role in alleviating poverty through creating jobs and increasing people's income. This investment encourages growth in the industrial and infrastructure sectors, opens up economic opportunities in underdeveloped areas, and reduces disparities between regions. Apart from that, PMDN also helps improve the quality of education and skills of the workforce, thereby strengthening competitiveness and increasing opportunities to obtain decent work.

Gross Domestic Product

The impact of gross domestic product on extreme poverty can be explained through the neo-causal growth theory pioneered by the Solow-Swan growth model. According to this theory, the economic growth model reflected through an increase in Gross Domestic Product (GDP) can improve people's welfare through effective resource allocation and increased productivity. The context of neoclassical theory (Bandiera et al. 2022) shows how the transformation of labor from the agricultural sector to industry and the service sector contributes to increasing labor productivity and living standards, thereby reducing extreme poverty through increasing income. This theory also states that economic growth is driven by an increase in Gross Domestic Product (GDP) allowing the government to allocate more budget to sectors such as education, health, and infrastructure that support low-income groups (Ajide and Alimi 2023). Apart from that, the theory according to Harrod-Domar in (Panggabean 2023) says that to achieve ambitious economic growth goals, capital generation (investment) is needed. A strong economy is driven by high investment (steady growth).

The solution to overcoming extreme poverty through Gross Domestic Product (GDP) lies in a combination of inclusive economic growth and effective redistribution policies. This study argues that Gross

Domestic Product (GDP) growth is supported by equitable growth. The results can have a greater impact on reducing extreme poverty in Indonesia. emphasizes that a balanced approach between GDP growth and equity is needed to maximize the positive impact of GDP on poverty, especially through improving the quality of life and economic access for everyone

Inflation

The impact of inflation on extreme poverty can be explained using Keynesian theory to explain the impact of inflation on extreme poverty. According to this theory, active monetary policy that keeps inflation expectations stable can be used to control inflation, preventing economic uncertainty that could endanger people's welfare (Del Negro, Giannoni, and Schorfheide 2015). Policies that focus on price stability and inflation expectations can help reduce the negative effects of inflation on the purchasing power of society and vulnerable groups. Furthermore (Adam, Pfäuti, and Reinelt 2025) states that ideal monetary policy should set higher average inflation to respond to a decrease in natural interest rates and instability. Monetary policy should also help stabilize price fluctuations caused by changes in demand, with a stronger reaction to price increases than to price decreases. This means that an effective monetary policy must be the ability to maintain society's expected stable inflation. This stability protects the economy from uncertainty that can disrupt investment and consumption decisions. When inflation expectations are maintained, people will feel more secure about their future purchasing power, which helps the economy expand further.

Hypothesis

- H1: Domestic investment (PMDN) has a positive but insignificant impact on extreme poverty in Indonesia.
- H2: Gross Domestic Product (GDP) has a significant effect on extreme poverty in Indonesia.
- H3: Inflation has a significant effect on extreme poverty in Indonesia.
- H4: The combination of macroeconomic factors such as PMDN, GDP, and inflation influences extreme poverty simultaneously.

3. Methodology

This research uses a quantitative approach. The data used comes from secondary data collected from publications such as the Central Statistics Agency (BPS) and World Bank. The data analyzed is time series data from Indonesia from 2004 to 2024.

3.1 Data

Domestic investment (X1), Gross Domestic Product (GDP) (X2), Inflation (X3), and extreme poverty (Y) in Indonesia are all secondary data used. For the independent variable X1, the data used is domestic investment (billion), for the independent variable X2, the data used is the GDP growth indicator (%), and for the

independent variable X3, the data used is the inflation indicator (%). The indicator used for the dependent variable is the ratio of the number of people experiencing extreme poverty in Indonesia.

3.2 Analysis Method

Classical Assumption Test

The statistical requirement for multiple linear regression analysis is the classical assumption test. It is important to verify that the selected regression function or model meets its fundamental assumptions. Normality, Autocorrelation, Heteroscedasticity and Multicollinearity tests reflect classic assumption tests. With the eviews 13 tool, it is applied in four ways as follows:

Normality Test

Normality assumption to test whether the residuals are standard from a regression model normally distributed or not. The normality test can be carried out using the analytical method normal probability plot graph. In this approach, the residuals are usually distributed when the dotted line representing the actual data follows or closes the line diagonal (Gio 2019).

Multicollinearity Test

The multicollinearity assumption is used to determine whether the independent variables exist or not in a correlated (independent) regression model. A good regression model should be there is no correlation between independent variables. Multicollinearity test was determined based on VIF (variance inflation factor) and tolerance. Tolerance is a measure where the independent variable is not included in other independent variables. Mark low tolerance is the same as a high VIF value because $VIF = 1/\text{tolerance}$. Threshold value What is commonly used to indicate the presence of multicollinearity is value tolerance > 0.01 or VIF value 10 (Sungkono and Nugrahaningsih 2017). If value The correlation between independent variables is greater than 0.8, so there is a sign multicollinearity (Aziz and Yanto 2023).

Autocorrelation Test

Autocorrelation is defined as when there is a correlation between the variables themselves in different perspectives. To test autocorrelation, the Breach-Godfrey Serial Correlation Lagrange Multiplier Test (LM-test) was used. This test can be used at the degree level and is very useful for finding autocorrelation problems. Autocorrelation is said to occur if the probability value is 0.05 or 5% (Sari 2025).

Heteroscedasticity Test

The assumption of heteroscedasticity occurs when residual variations from one observation to another other observations remain constant, while heteroscedasticity occurs when the variance changes. If this assumption is not met, then it is said that there is determining heteroscedasticity what is the residual of one observation and the residual of another observation

in the regression model have the same variance (Sukestiyarno and Agoestanto 2017).

Hypothesis Testing

Partial Test (T Test)

The univariate t test is used to test how big the influence of the independent variables is used in this research individually explains partially dependent variable. The basic decision making used in the t-test is as follows:

1. If the significance probability value is > 0.05 then the hypothesis is rejected. Hypothesis that rejected means the independent variable has no significant effect on the variable dependent.
2. If the probability value is significant < 0.05 then the hypothesis is accepted. Hypothesis no can be rejected, which means the independent variable has a significant effect on dependent variable (Aziz and Yanto 2023).

Simultaneous Test (F Test)

The simultaneous test, also known as the F test, is carried out to measure the influence of independent variables on the dependent variable simultaneously. According to (Imaniar and Rajriyah 2023), the F test decision making criteria are as follows:

If the F statistic is F table, then H_0 is accepted, meaning that together there is no influence between the independent variables on the dependent variable.

If $F \text{ statistic} > F \text{ table}$, then H_0 is rejected, meaning that together there is an influence between the independent variables on the dependent variable.

Determination Test (R^2)

In regression, the coefficient of determination is an important measure that shows how good or bad the estimated regression model is. The coefficient of determination value shows how much variation in variable X can be explained by variable Y (Ferdiansyah 2025).

The coefficient of determination is a measure of how far the model's ability to explain variations in the dependent variable. The coefficient of determination values are 0 and $1:0 \leq R^2 \leq 1$. A low coefficient of determination (R^2) value indicates that the ability of the independent variable is close to one, which means that the independent variable provides almost all the information needed to predict variations in the dependent variable (Sari 2025).

Multiple linear regression

A linear regression model that combines several independent and predictor variables is called Multiple linear regression. In English this term is known as multiple linear regression. In this research, the objects studied include domestic investment (PMDN), Gross Domestic Product (GDP) and Inflation with a focus on Poverty. Three independent variables and one dependent variable are in this research. Therefore, here is how to mathematically represent Multiple Linear Regression:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Information:

Y : extreme poverty

A : Constant number

X1 : domestic investment

X2 : gross domestic product

X3 : Inflation

b1, b2, b3 : regression coefficient for each independent variable

e : error

This research design uses a regression model to analyze the relationship between poverty and economic factors such as domestic investment (X1), Gross Domestic Product (GDP) (X2), and inflation (X3). In this model, the dependent variable is the poverty level (Y) which is influenced by three independent variables: domestic investment (b1) which reflects the impact of increasing investment on poverty, Gross Domestic Product (GDP) (b2) which shows the contribution of economic growth to poverty, and inflation (b3) which affects people's purchasing power. The coefficient of each variable provides information on how much influence it has on the poverty rate, and the error term (e) includes variations that are not explained by the model.

4. Results and Discussion

4.1 Classical Assumption Test

Normality Test

The researcher used the Jarque-Bera test approach to test the assumption of normality of errors. Table 1 is the output of EViews with the Jarque Bera normality test. Based on the results of the Jarque-Bera test, a statistical value of 4.084272 was obtained. and can also conclude that the normality assumption is met. Meanwhile, looking at the probability that the result is $0.12 > 0.05$, it can also be concluded that the normality assumption is met.

Table 1 Normality Test Results/ Jarque-Bera Test Results (Source: Processed data, 2023)

Series: Residual Sampel 2004-2024 Observation 21	
Mean	3.570017
Median	-0.040813
Maximum	0.307190
Minimum	-0.120457
Std. Dev	0.019513
Skewness	1.019513
Kurtosis	3.714222
Jarque-Bera	4.084272
Probability	0.129751

Multicollinearity Test

Table 2 shows that all independent variables have VIF values below 10. The VIF value for the domestic investment variable is 1.070713, the gross domestic product variable is 1.376304, and inflation is 1.413143. These results indicate the absence of multicollinearity in the regression model, thereby ensuring that there is no strong interdependence between independent variables which could endanger the validity of the model.

Table 2 Multicollinearity Test Results (VIF)

Variable	Koefisien Variance	Uncentered VIF	Centered VIF
C	0.007316	9.000662	NA
Domestic Investment	6.840016	1.521088	1.070713
GDP	0.000177	6.014429	1.376304
Inflation	0.000648	9.525162	1.413143

This assumption is used to detect multicollinearity, a correlation matrix approach for independent variables can be used. If the correlation value between independent variables is greater than 0.8 then there is a sign of multicollinearity. Based on Table 3, it can be seen that the correlation value between PMDN and GDP is -0.18, PMDN and Inflation is -0.24, GDP and Inflation 0.51. This shows that the multicollinearity test results are no more than 0.8, which means that no symptoms occur

Table 3 Multicollinearity Test Results

	DI	GDP	Inflation
DI	1.000000	-0.189213	-0.246855
GDP	-0.189213	1.000000	0.519080
Inflation	-0.246855	0.519080	1.000000

Heteroscedasticity Test

The homoscedasticity assumption states that there is a constant variance error at each level or level of the independent variable. If the homoscedasticity assumption is not met, then the event is called heteroscedasticity. Detection of symptoms of heteroscedasticity can be done using the Park (heavy) test, the Glejser test and the White test.

Table 4 Homoscedasticity Test Results (Heavy)

Variable	coefficient	t-statistik	Prob.
C	-6.268723	-3.517244	0.0026
DI	-3.770007	-0.692683	0.4979
GDP	0.033258	0.120263	0.9057
Inflation	0.185495	0.350330	0.7304

Based on table 4, the eviews output produces a homoscedasticity assumption test with a heavy test. The probability values of the regression coefficients for domestic investment LOG, GDP LOG, Inflation LOG are respectively 0.4979, 0.9057, 0.7304 which are not statistically significant at the 0.05 significance level.

Thus, it can be concluded that the homoscedasticity assumption is met.

Table 5 Homoscedasticity Test Results (Glejser)

Variable	coefficient	t-statistik	Prob.
C	0.068392	1.301441	0.2105
DI	-6.420009	-0.399718	0.6943
GDP	-0.005583	-0.683659	0.5034
Inflation	0.016423	1.050266	0.3083

Based on table 5, eviews output for the homoscedasticity assumption test with the Glejser test. The probability values for the regression coefficients for PMDN, GDP and inflation are 0.6943, 0.5034, 0.3083 respectively, all three of which are not statistically significant at the 0.05 significance level. then it is concluded that the homoscedasticity assumption is met.

Table 6 Homoscedasticity Test Results (White)

	score
R-Square	0.470860
Obs*R-Square	9.88806
Prob.Chi-Square (9)	0.3596

Based on Table 6, EViews output for the homoscedasticity assumption test with the White test. Calculation of the product between the coefficient of determination (R-Squared) and the sample size (sample size) $0.470860 \times 21 = 9.88806$. The probability value is $0.35 > 0.05$, so it is concluded that the null hypothesis is accepted, which means that heteroscedasticity does not occur.

Autocorrelation Test

Based on Table 7, The autocorrelation test result of 0.2643 is a value greater than 0.05 so it can be concluded that there is no autocorrelation tendency in the regression equation or the autocorrelation test has been fulfilled.

Multiple Linear Regression Analysis

Table 7 autocorrelation test results

Prob.F (2,15)	0.3619
Prob. Chi Square (2)	0.2643

Based on Table 7, The partial t test is used in regression analysis to determine whether the coefficient of each independent variable is greater or less than zero. The domestic investment variable has a t value of 0.775023 with prob. amounting to 0.4490 (>0.05), so it can be concluded that the variable Domestic Investment (PMDN) has an effect but is not significant on Poverty. The Gross Domestic Product (GDP) variable has a t value of 2.278884 with Prob. Amounting to 0.0359 (<0.05), so it can be concluded that the Gross Domestic

Product (GDP) variable has a significant effect on poverty. The Inflation Variable has at value of 2.484858 with a Prob value of 0.0237 (<0.05), so it can be concluded that Variable Inflation has a significant effect on Poverty.

Next, the F test is used to test the significance of the overall model. It is known that the F-statistic value is 7.568874 with Prob. (F-statistics) value 0.001991 (<0.05), it is concluded that the Independent variable (X) has a significant influence together (simultaneously) on the variable (Y).

And the coefficient of determination test is used to assess how well the regression model explains data variations. The ability of the regression model to explain data variance was evaluated using the coefficient of determination test. It is known that the Adjusted R square value is 0.496306 so it can be concluded that the Independent Variable has an effect on the Dependent Variable simultaneously (together) is 49.6%. Meanwhile, the remaining 50.4% is influenced by other variables outside of learning.

Table 8 Estimated influence of domestic investment, gross domestic product, inflation on extreme poverty

Variable	Koefisien	t-test	Prob.
C	0.190137	2.227876	0.0397
DI	2.040008	0.775023	0.4490
GDP	0.030429	2.278884	0.0359
Inflation	0.062854	2.484858	0.0237
R-Squared	0.571860	Mean dependent var	0.546667
Adjusted R-squared	0.496306	S.D. dependent var	0.184264
S.E. from regression	0.130775	Akaike info criterion	-1.061034
Log likelihood	0.290736	Hannan-quinn stat	-1.017855
F-statistic	7.568874	Durbin-Watson stat	1.344859
Prob(F-statistic)	0.001991		

4.2 Discussion

The Effect of Domestic Investment on Extreme Poverty in Indonesia

The findings of this research show that domestic investment (PMDN) has an influence but is not significant on extreme poverty, with a t-statistic value of 0.775023 and a probability of 0.4490. This result is in accordance with the proposed hypothesis, namely that increasing PMDN will reduce extreme poverty. Higher PMDN reflects economic growth which produces more jobs and increases in people's income

This situation arises because domestic investment capital increases production capacity, which creates jobs in the surrounding environment. Widespread employment opportunities improve people's welfare so that they can reduce poverty. According to (Sikandar et al. 2021) domestic investment has a fairly large positive influence on poverty alleviation by increasing

agricultural productivity and employment prospects in developing countries.

However, the uneven distribution of investment, especially not reaching remote areas, can make poverty alleviation less than optimal. PMDN can contribute to reducing poverty in urban areas and areas with sufficient infrastructure, the effect is less pronounced in remote areas which are most vulnerable to extreme poverty. Limited access to infrastructure, public services and weak investment distribution networks are the main factors that make the impact of PMDN insignificant. policies need to focus on equity and investment access to remote areas so that the benefits of PMDN can be more evenly distributed and its impact on poverty reduction.

The Effect of Gross Domestic Product (GDP) on Extreme Poverty in Indonesia

The findings of this research show that Gross Domestic Product (GDP) has a significant negative impact on extreme poverty, with a t-statistic value of 2.278884 and a probability of 0.0359. This result is in accordance with the proposed hypothesis, namely that increasing GDP will reduce extreme poverty. Higher GDP reflects economic growth that generates more jobs, helps household incomes and increases the poor's ability to spend.

The relationship between GDP and extreme poverty shows that economic growth makes a direct contribution to poverty alleviation. When GDP increases, national income increases, which allows the government to allocate more budget to sectors that are important for poverty alleviation, harm reduction, such as infrastructure, health services, and education. In addition, steady economic expansion gives the private sector the confidence to invest more, thereby creating new job opportunities that can help poor communities increase their income.

The government also uses revenues from economic growth to provide social programs and assistance for certain groups such as social assistance programs, food subsidies, or skills training to increase employment opportunities (Putra and Anzaikhan 2023). Ensuring that everyone in society, especially those living below the poverty line, can benefit from economic progress is very important. Additionally, higher GDP is often associated with overall economic stability, which helps create macroeconomic conditions conducive to social development.

The relationship between Gross Domestic Product (GDP) and the alleviation of extreme poverty can be explained through economic growth theory. Economic growth increases national income, which allows the government to increase public spending in sectors that support the poor, for example such as education, health and infrastructure. (Capuno 2022) states that economic growth plays a role in reducing poverty, especially in connection with progressive income transfers. Redistribution policies that are right on target help ensure that the benefits of increasing Gross Domestic Product (GDP) can be felt by society at all

levels, especially people who are below the poverty line. Apart from that, the increase in Gross Domestic Product (GDP) is often associated with the economy. stability that has a positive impact on the welfare of society. (Farzanegan and Gholipour 2023) emphasize that a stable Gross Domestic Product (GDP) will reduce the risk of instability which is important for creating economic conditions that support poverty alleviation.

Another interesting finding is that there is an increase in Gross Domestic Product (GDP) per capita driven by technological innovation and urbanization contributing to inclusive economic growth. (Byaro and Rwezaula 2024) show that technological innovation and urbanization increase productivity, create new jobs, and expand people's purchasing power. Urbanization, in particular, can increase people's access to public facilities and basic services that support poverty alleviation in the long term.

The Effect of Inflation on Extreme Poverty in Indonesia

The findings show that inflation has a significant positive influence on extreme poverty, with a t-statistic value of 2.484858 and a probability of 0.0237. This result is in accordance with the hypothesis, namely that high inflation worsens the conditions of poor people by reducing their income and purchasing power. When inflation increases, the prices of basic necessities also rise, making it increasingly difficult for poor people to meet their basic needs, thereby exacerbating the level of extreme poverty.

The relationship between inflation and extreme poverty reflects the negative impact of price pressures on vulnerable groups. High inflation increases the prices of goods and services, especially basic needs such as food and energy which are the main expenses of poor people. As a result, their purchasing power decreases, and their allocation of funds for other needs decreases. such as education and health, are becoming increasingly limited. Apart from that, high inflation also creates economic uncertainty which can hamper the growth of investment and employment, thereby further deteriorating the economic situation of the poor.

High inflation is often caused by cost pressures in critical sectors, such as food and energy, which are felt more by vulnerable groups. This price instability disrupts the financial planning of poor households and increases the risk of economic insecurity. Apart from that, high inflation also affects people's price expectations, thereby creating a cycle of instability that is difficult to control without effective monetary policy intervention.

The relationship between inflation and price dispersion suggests that a lower and more stable inflation target can help strengthen people's inflation expectations, thereby reducing future price uncertainty. In accordance with the findings (Fukuda and Soma 2019). Setting a clear inflation target can reduce uncertainty, but its effectiveness depends heavily on the government's ability to control inflation around that target.

This is consistent with the argument (Dao et al. 2024) emphasizing that the increase in prices of basic necessities is felt more by vulnerable groups. On the other hand, research (Sheremirov 2020) states that inflation is also related to an increase in price distribution which has an impact on a general decline in welfare, especially in developing countries such as Indonesia. In this analysis, it was also found that an increase in price volatility in the basic needs sector has the potential to disrupt social and economic stability. This is because unpredictable price changes can trigger public dissatisfaction and give rise to demands for more effective and fair pricing policies.

5. Conclusion

This research found that fluctuations in domestic investment (PMDN), Gross Domestic Product (GDP), and inflation significantly influenced extreme poverty in Indonesia during the 2004-2024 period. Increasing domestic investment (PMDN) helps create jobs, economic empowerment through increased income in order to reduce extreme poverty. An increase in Gross Domestic Product (GDP) creates new jobs and increases household income, while high inflation worsens the conditions of the poor by reducing the real purchasing power of vulnerable households. These findings suggest that economic policy must be more specific. Domestic investment needs to be directed at developing leading sectors, increasing access to financing and incentives, especially in less-developed, as well as strengthening infrastructure. Economic growth must be directed towards sectors that have the capacity to accept workers from poor communities, such as MSMEs and agriculture. Inflation must be controlled with a more effective and well targeted food price stabilization policies and targeted subsidies for the basic needs of the poor. This research has several limitations. The first is the use of secondary data covering the period 2004–2024, which may not include other relevant data. The second is the use of linear regression models, which may not fully describe the complexity of interactions between variables, such as lag effects or interactions between variables. Therefore, future research can expand its analysis using a panel data approach involving provinces in Indonesia to understand regional dynamics. In addition, the influence of other variables, for example due to access to education or income inequality in extreme poverty, could be further explored.

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