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THE EFFECT OF MACRO DEVELOPMENT VARIABLES ON POVERTY RATE THROUGH ECONOMIC GROWTH OF JAMBI PROVINCE

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ABSTRACT

This study aims to analyze the influence of macro development variables (per capita development, human development index, open unemployment, and Gini index) on poverty rates through economic growth in Jambi Province. The research method used is quantitative descriptive analysis with multiple linear regression analysis tools with path analysis models. The results directly showed that the influence of macro development variables, per capita income, human development index, open unemployment rate, and Gini index had a significant effect on the poverty rate in Jambi Province. while indirectly only per capita income has a significant effect on economic growth in Jambi Province, but the variables of human development index, open unemployment rate, and Gini index do not have a significant effect on economic growth in Jambi Province, but economic growth indirectly does not affect poverty in Jambi Province

Keywords: *Per Capita Income, Human Development Index, Open Unemployment Rate, Gini Ration, Poverty and Economic Growth*

1. INTRODUCTION

Development is a process of change planned to improve various aspects of people's lives. Traditionally, development has meant a continuous increase in a country's Gross Domestic Product. For regions, the traditional meaning of development is focused on increasing the Gross Regional Domestic Product (GRDP) of a province, district, or city (Kuncoro, 2004). The development process occurs in all aspects of people's lives, economic, social, cultural, and political, which takes place at the macro (national) and micro (community/group) levels. The significance of development is progress, growth, and diversification. Poverty is understood as a state of lack of money and goods to ensure survival. One of the causes of poverty is the lack of income and assets to meet basic needs such as food, clothing, housing and acceptable levels of health and education. In addition, poverty is also related to limited employment opportunities and usually, those who are categorized as poor (the poor) do not have jobs (unemployment), and their level of education and health is generally inadequate. Tackling poverty cannot be done in isolation from unemployment, education, health, and other issues that are explicitly closely related to poverty. In other words, the approach must be carried out across sectors, and across actors in an integrated and coordinated and integrated manner (www.bappenas.go.id).

Local governments realize that regional development is one of the efforts to achieve the goals of a just and prosperous society. In line with these objectives, various development activities have been directed at regional development, in relatively underdeveloped areas. Regional development is carried out in an integrated and sustainable manner according to the priorities and needs of each region with roots and national development targets that have been determined through long-term and short-term development. Therefore, one of the main indicators of the success of national development is the rate of decline in the number of poor people. Effectiveness in reducing the number of poor people is a major growth in choosing development strategies or instruments. This means that one of the main criteria for choosing the focus sector or mainstay sector of national development is effectiveness in reducing the number of poor people (Kakisina, 2021). Poverty in Indonesia is one of the diseases in the economy, so there must be a solution or policy to reduce the poverty rate. The problem of poverty is complex and multidimensional. Therefore, policies made for poverty alleviation must also be carried out thoroughly and integrated. The term poverty is when a person or group is unable to meet the needs of economic prosperity following the standard of living in a particular region (Kuncoro, 2012). Poverty in Indonesia is caused by various factors, namely low employment rates, slow economic growth, and capital accumulation that forms low savings and investments, (Kuncoro, 2012).

According to Todaro (2013) states that variations in poverty in developing countries are caused by several factors, namely: (1) geographical differences, population and income levels, (2) historical differences, some colonized by different countries, (3) differences in natural resource wealth and the quality of human resources, (4) differences in the role of the private sector and the state, (5) differences in industrial structure, (6) differences in degrees of dependence on the economic and political power of other countries and (7) differences in the division of power, domestic political and institutional structures. The high level of poverty in Jambi Province is inseparable from the development strategy implemented. Development strategies are implemented by prioritizing high economic growth as a solution to overcome various social and political problems, but experience shows that the expected trickle-down effect is not perfect, the economic growth achieved has not been followed by a decrease in the number of poverties so that the poverty rate is also still high (RPJMD, 2022).

Based on research conducted by Jannah & Sari (2023) factors that can have a significant effect on poverty are per capita income, human development index, open unemployment, and Gini index. One of the ways human resources under development is solved is by increasing the quantity and quality of education and health. The higher the quality of education and the more secondary and higher education graduates, the more capable humans are of contributing to development. The higher the quality of education and the quality of health, the greater the opportunity for the community or population to find work and create jobs, to reduce the amount of poverty. The problem of poverty is widely associated with economic development. However, in the implementation of economic development, sometimes less attention is paid to the situation in the long term. Overcoming this, sustainable development can be a form of design that can be used. Sustainable development is a development that pays attention to sustainability for the long term. Sustainable development is a development model that considers resources and the environment. Research conducted by Hindun et al (2019), Hassan et al (2015), and Kunenengan et al (2023) found that the poverty rate has a significant and positive influence on income distribution inequality. This means that if the poverty rate rises, the value of inequality will also increase.

Hoover & Wallace (2003) found that the poverty rate is very sensitive to economic conditions, where an increase in unemployment leads to an increase in poverty. Humberto Lopez (2005), in his research, argues that no one doubts the importance of growth to reduce poverty, but many studies also show that pro-growth policies produce inequality, contrary to the goal of growth itself. To achieve economic growth, serious thought and action are needed because these achievements will be correlated to improving people's welfare by increasing inflation, per capita income, regional investment, human development index, and decreasing unemployment. One of the powerful variables to determine economic growth can drive the economy. Based on the theories and concepts and phenomena obtained above, the author is interested in conducting in-depth research entitled The Effect of Macro Development Variables (Percapita Income, Human Development Index, Open Unemployment, and Gini Index) on the Poverty Rate through Economic Growth in Jambi Province.

2. LITERATURE REVIEW

2.1. Theory of Economic Development

According to Schumpeter, development is a spontaneous and intermittent change, a disruption to equilibrium that always changes and replaces the state of equilibrium that existed before. This change arises from the initiative of the economy itself and appears above the horizon of trade and industry (Jhingan, 2010).

2.2. Economic Growth Theory

The theory of economic growth is a logical explanation of how the growth process occurs. Until now there is no comprehensive and complete growth theory and it is the only standard growth theory, but there are many growth theories developed by experts who are often influenced by circumstances or events that occur in their time and by the ideology they profess (Arysad, 2015).

2.3. Poverty Theory

According to Yacaoub (2012) poverty is one of the fundamental problems, because poverty involves meeting the most basic needs in life and poverty is a global problem because poverty is a problem faced by many countries.

2.4. Per Capita Income Theory

According to Todaro (2012) states that per capita income basically measures the ability of a country to enlarge its output at a faster rate than its population growth rate.

2.5. Human Development Index Theory

The Human Development Index (HDI) specifically measures the achievement of human development using several basic components of quality of life. As a measure of quality of life, HDI is built through a basic three-dimensional approach. Those dimensions include a long and healthy life, knowledge, and a decent life. These three dimensions have a very broad understanding because they are related to many factors in them. To measure the health dimension, life expectancy is used. Furthermore, to measure the dimension of knowledge, indicators of literacy rate and average length ofschooling are used combined. As for measuring the dimension of life, it is feasible to use the purchasing power parity indicator.

2.6. Open Unemployment Rate Theory

According to the Central Bureau of Statistics, what is meant by open unemployment is people who fall into the following categories: Those who do not have a job and are looking for work Activities Those who do not have a job and are preparing for business Those who do not have a job and are not looking for a job, because they find it impossible to get a job Those who already have a job, but has not yet started working Therefore, a person can be said to be open unemployment if he does not have a job, is looking for a job, is preparing for a business, or has not started working even though he already has a job.

2.7. Gini Index Theory

The Gini index (Gini ratio) is one tool that measures the level of relative income-sharing gap among residentsof a region. The phenomenon of regional income inequality has indeed become common in the development of a region and has the potential to cause financial, social, or mutually weaker relations between regions.

3. METHODOLOGY

Path analysis is used to determine the direct dependency relationship between a set of variables. In terms of causality, Path Analysis can be viewed as an analysis like regression analysis. Both analyze causality models. The difference lies in the level of complexity of the model. Regression analysis models analyze more dependent variables as an impact of independent variables. The dependent variable has no impact on other variables. When researchers are faced with a model where the dependent variable causes another dependent variable, then path analysis is more suitable to use. Ghozali (2015), states that path analysis is an extension of multiple linear analysis, or path analysis is the use of regression analysis to assess causality relationships between variables (causal models) that have been previously established based on theory. In path analysis, the first step is to translate the research hypothesis first into a path diagram. Statistical methods with path analysis are used to measure relationship patterns that show the magnitude of the influence of several consequent variables (endogenous) (Ghozali, 2015). The selection of path analysis methods is carried out with the following considerations:

1. This method can provide clarity of relationships and magnitudes between research variables which is very useful for researchers' efforts to explore more deeply the various variables studied.
2. Path analysis is used to analyze causal relationships, to determine direct influence and the direct and indirect influence of a set of causal variables (exogenous variables) on consequent variables (endogenous), both simultaneously and partially.
3. Path analysis is suitable for samples exceeding or above 100 respondents and the processed data is exploratory, and the data is observed directly in the field.

Path Analysis follows a structural pattern called a structural model. These variables are Per Capita Income (X1), Human Development Index (X2), Open Unemployment Rate (X3), Gini Index (X4) as the independent variable, Poverty Rate Inequality (Y) as the independent variable, and economic growth (Z) as the intervening variable. Other variables that are not measured or studied and affect poverty rates and economic growth are referred to as epsilon variables (ε) (Ghozali,2015)

4. FINDINGS AND DISCUSSION

Hypothesis testing in this study uses two stages, namely regression analysis and path analysis. Regression analysis is carried out to determine the influence between variables, both independent and dependent variables. Path analysisis used to measure how much influence intervening variables (Economic Growth) have in mediating the influence of per capita income, human development index, open unemployment rate, Gini index, and poverty rate. A direct relationship occurs if one variable if one variable affects another variable without a third variable mediating (intervening) the relationship between the two variables. An indirect relationship is if there is a third variable mediating the relationship of these two variables. Thus, there is an independent variable which in this case is called an exogenous variable (exogenous), and a dependent variable called an endogenous variable (endogenous). Through the analysis of this pathway, it will be found which path is the most appropriate and short independent variable to the last dependent variable, here are the models of influence above, can be arranged the trajectory of influence as follows:

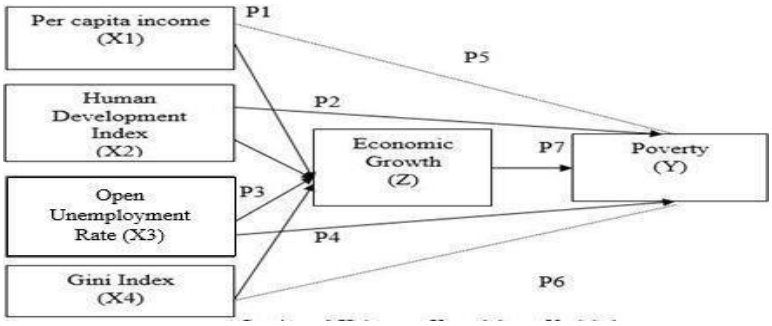

Figure 1. Causal Relationship Between Variables

Calculating path analysis using multiple regression models in this study presented a path diagram that connects between variables. Regression analysis is used to measure the relationship between variables with the help of the SPSS

program version 26.0, Before using path analysis, you must first compile a model of the relationship between variables which in this case is called a path chart. The path diagram is prepared based on a framework developed from the theory used in research. Where there are independent variables consisting of per capita income (X1), Human Development Index (X2), Open Unemployment Rate (X3), Gini Index (X4), and Poverty Rate (Y) as dependent variables, the following estimates obtained are:

Structural Relationship Between Variables of Per Capita Income, Human Development Index, Open Unemployment Rate, Gini Index to Poverty Rate

Table 1. Analysis Results of the Effect of X1, X2, X3, X4 on YModel Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.968[a]	.936	.918	.35331

a. Predictors: (Constant), GI, HDI, GDP Per capita, OUR

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.612	4	6.403	51.295	.000[b]
	Residual	1.748	14	.125		
	Total	27.360	18			

Dependent Variable: PR

Predictors: (Constant), GI, HDI, GDP Per capita, OUR

Coefficients[a]

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	66.193	9.635		6.870	.000
GDP Percapita	-10.604	1.435	-.715	-7.387	.000
HDI	.173	.046	.311	3.722	.002
OUR	.586	.092	.761	6.378	.000
GI	22.770	5.254	.541	4.334	.001

a. Dependent Variable: PR Source: Data Processed 2024

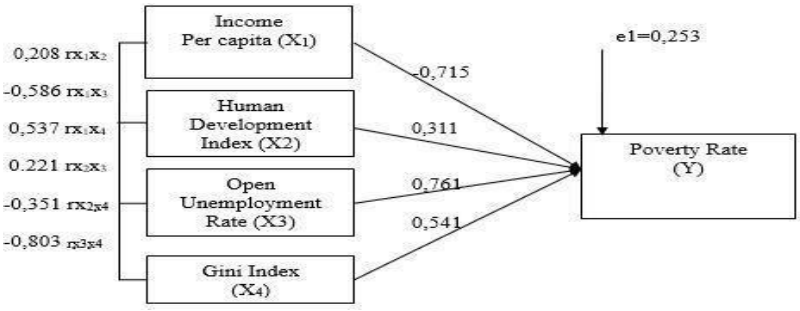

Figure 2. Structural model I

Based on Table 1 of the summary model output, the magnitude of R2 is 0.936, which means that the effect of per capita income, Human Development Index, Open unemployment rate, Gini index, ratio to poverty rate of 93.6 percent, and the remaining 6.4 percent influenced by other variables. In the ANOVA above, the F count is obtained at 51.295 > 2.39 with a significant level of 0.000<0.10, then Ho is rejected, and Ha is accepted, which means per capita income, human development index, open unemployment rate, Gini index has a significant effect on the poverty rate.

The influence between the above variables is expressed by the following equation:

1. Effect of X1 to Y
   Direct influence: X_1 Y = $(Pyx_1) \times (Pyx_1)$
   = -0,715x -0,715 = 0,511
   Indirect influence
   $X_1 \longrightarrow Y \Omega X_2 = (Pyx1) \times (rx1x2) \times (Pyx2)$
   = -0,715 x 0,208 x 0,311 = -0,046
   $X_1 \longrightarrow Y \Omega X_3 = (Pyx1) \times (rx1x3) \times (Pyx3)$
   = -0,715 x -0,586 x 0,761 = 0,319
   $X_1 \longrightarrow Y \Omega X_4 = (Pyx1) \times (rx1x4) \times (Pyx4)$
   = -0,715 x 0,537 x 0,541 = -0,208
   Total influence: Direct influence + indirect influence
   : 0,511+ -0,046 +-0,319+ -0,208 = 0.576
2. Effect of X2 to Y
   Direct influence: X_2 Y = $(Pyx_2) \times (Pyx_2)$
   = 0,311 x 0,311= 0,097
   $X_2 \longrightarrow Y \Omega X_1 = (Pyx2) \times (rx1x2) \times (Pyx1)$
   = 0,311 x 0,208 x -0,715 = -0,046
   $X_2 \longrightarrow Y \Omega X_3 = (Pyx2) \times (rx2x3) \times (Pyx3)$
   = 0,311 x 0,221x 0,761 = 0,052
   $X_2 \longrightarrow Y \Omega X_4 = (Pyx2) \times (rx2x4) \times (Pyx4)$
   = 0,311 x -0,351 x 0,541 = -0,059
   Total influence: Direct influence + indirect influence
   : 0,097 +-0,046 + 0,052 +-0,059 = 0,044
3. Effect of X_3 to Y
   Direct influence: X_3 Y = $(Pyx_3) \times (Pyx_3)$
   = 0,761x 0,761= 0,579
   $X_3 \longrightarrow Y \Omega X_1 = (Pyx3) \times (rx1x3) \times (Pyx1)$
   = 0,761 x -0,586 x -0,715 = 0,319
   $X_3 \longrightarrow Y \Omega X_2 = (Pyx3) \times (rx3x2) \times (Pyx2)$
   = 0,761 x 0,221 x 0,311= 0,052
   $X_3 \longrightarrow Y \Omega X_4 = (Pyx3) \times (rx3x4) \times (Pyx4)$
   = 0,761 x -0.803 x 0,541= -0,331
   Total influence: Direct influence + indirect influence
   : 0,579 +0,319 + 0,052 + -0,331 = 0,620

4. Effect of X_4 to Y
   Direct influence: X_4 Y = $(Pyx_4) \times (Pyx_4)$
   = 0,541 x 0,541= 0,293
   $X_4 \longrightarrow Y \Omega X_1 = (Pyx4) \times (rx1x4) \times (Pyx1)$
   = 0,541 x 0,537 x -0,715 = 0,208
   $X_4 \longrightarrow Y \Omega X_2 = (Pyx4) \times (rx4x2) \times (Pyx2)$
   = 0,541 x -0,351x 0,311= -0,059
   $X_4 \longrightarrow Y \Omega X_3 = (Pyx4) \times (rx3x4) \times (Pyx3)$
   = 0,541 x -0,803 x 0,761= -0,331
   Total influence: Direct influence + indirect influence
   : 0,293 + -0,208 + -0,059+ -0,331 = -0,305

The following is a recapitulation of direct and indirect influences on the second structural model, namely:

Table 2. Recapitulation of Direct and Indirect Influences

Variable	Direct	Indirect				Total
		X_1	X_2	X_3	X_4	
Per Capita Income	0,511		-0,046	0,319	-0.208	0.576
Human Development Index	0,097	-0,046		0,052	-0,059	0,044
Open Unemployment Rate	0,579	0,319	0,052		-0,331	0,620
Gini Index	0,293	-0,208	-0,059	-0,331		-0.305
Effect of variables X1, X2, X3, X4						0,936

Source: Data Processed 2024

From Table 2 it is known that per capita income, human development index, open unemployment rate, and Gini index have a contribution of 0.936 or 93.6 percent to the poverty rate, while 6.4 percent is influenced by other variables outside the study.

Structural relationship between variables per capita income, human development index, open unemployment rate, Gini index to economic growth

Table 3. Results of Analysis of the Effect of X1, X2, X3, X4 on Z

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.668[a]	.446	.288	1.63572

a. Predictors: (Constant), GI, HDI, GDP Per capita, OUR

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.136	4	7.534	2.816	.066[b]
	Residual	37.458	14	2.676		
	Total	67.594	18			

Dependent Variable: EG

Predictors: (Constant), GI, HDI, GDP Per capita, OUR

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	142.168	44.609		3.187	.007
	GDP Per capita	-17.111	6.645	-.734	-2.575	.022
	HDI	-.125	.215	-.143	-.582	.570
	OUR	-.313	.425	-.259	-.736	.474
	GI	8.336	24.322	.126	.343	.737

a. Dependent Variable: EG
Source: Data Processed 2024

Based on the results of Table 3, models of the influence of variables between variables as a whole can be arranged as follows:

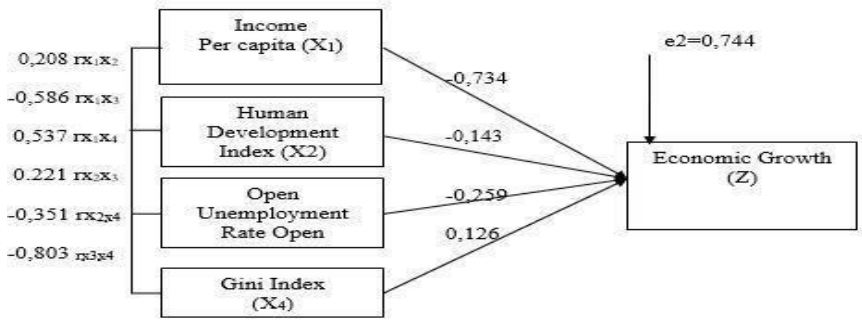

Figure 3 Structural Model II

Based on Table 3 of the summary model output, R2 is 0.446 which means that the effect of Per capita Income, Human Development Index, Open Unemployment Rate, and Gini Index on economic growth is 44.60 percent, and the remaining 55.40 percent is influenced by other variables. In the ANOVA table above, F count is obtained at 2.816 > 2.39 with a significant level of 0.066<0.10, then H0 is rejected, and Ha is accepted, which means that the regression coefficient or all independent variables, namely Per capita Income, Human Development Index, Open Unemployment Rate, Gini Ratio Index together affect economic growth in Jambi Province.

The influence between the above variables is expressed by the following equation:

1. Effect of X_1 to Z

   Direct influence: X_1 Z =(Pzx1) x (Pzx1)

   = -0,734 x -0,734 = 0,539

   Indirect influence:

   $X_1 \longrightarrow$ Z Ω X_2 = (Pzx1) x (rx1x2) x (Pzx2)

   = (-0,734) x (0,208) x (-0,143) = -0,022

   Indirect influence:

   $X_1 \longrightarrow$ Z Ω X_3 = (Pzx1) x (rx1x3) x (Pzx3)

   = (-0,734) x (-0,586) x (-0,259) = -0,111

   Indirect influence

   $X_1 \longrightarrow$ Z Ω X_4= (Pzx1) x (rx1x4) x (Pzx4)

   = (-0,734) x (0,537) x (0,126) = -0,050

   Total influence: Direct influence + indirect influence

   : 0,539 + -0,022 + -0,111 + -0,050 = 0,400

2. Effect of X_2 to Z

   Direct influence: X_2 Z =(Pzx2) x (Pzx2)

   = -0,143 x -0,143 = 0,020

   Indirect influence

   $X_2 \longrightarrow$ Z Ω X_1 = (Pzx2) x (rx2x1) x (Pzx1)

   = (-0,143) x (0,208) x (-0,734) = 0,022

   Indirect influence

   $X_2 \longrightarrow$ Z Ω X_3 = (Pzx2) x (rx2x3) x (Pzx3)

   = (-0,143) x (0,221) x (-0,259) = 0,008

   Indirect influence

   $X_2 \longrightarrow$ Z Ω X_4= (Pzx2) x (rx2x4) x (Pzx4)

   = (-0,143) x (-0,351) x (0,126) = 0,006

   Total influence: Direct influence + indirect influence

   0,020 + 0,022 + 0,008 + 0,006 = 0,057

3 Effect of X_3 to Z

   Direct influence:

   $X_3 \longrightarrow$ Z =(Pzx3) x (Pzx3)

= -0,259 x -0,259 = 0,067

Indirect Influence

$X_3 \longrightarrow Z \Omega X_1 = (Pzx_3) \times (rx_3x_1) \times (Pzx_1)$

= (-0,259) x (-0,586) x (-0,734) = -0,111

Indirect influence

$X_3 \longrightarrow Z \Omega X_2 = (Pzx_3) \times (rx_3x_2) \times (Pzx_2)$

= (-0,259) x (0,221) x (-0,143) = 0,008

Indirect influence

$X_3 \longrightarrow Z \Omega X_4 = (Pzx_3) \times (rx_3x_4) \times (Pzx_4)$

= (-0,259) x (-0,803) x (0,126) = 0,026

Total influence: Direct influence + indirect influence

0,067 + -0,111 + 0,008 + 0,026 = 0,010

4. Effect of X_4 to Z

Direct Influence

$X_4 \longrightarrow Z = (Pzx_4) \times (Pzx_4)$

= 0,126 x 0,126 = 0,016

Indirect influence

$X_4 \longrightarrow Z \Omega X_1 = (Pzx_4) \times (rx_4x_1) \times (Pzx_1)$

= (0,126) x (0,537) x (-0,734) = -0,050

Indirect influence

$X_4 \longrightarrow Z \Omega X_2 = (Pzx_4) \times (rx_4x_2) \times (Pzx_2)$

= (0,126) x (-0,351) x (-0,143) =0,006

Indirect influence

$X_4 \longrightarrow Z \Omega X_3 = (Pzx_4) \times (rx_4x_3) \times (Pzx_3)$

= (0,126) x (-0,803) x (-0,259) = 0,026

Total influence: Direct influence + indirect influence

: 0,016 + -0,050 + 0,006 + 0,026 = -0,001

The following is a recapitulation of direct and indirect influences on the second structural model, namely:

Table 4 Recapitulation of Direct and Indirect Effects

Variable	direct	Indirect				Total
		X_1	X_2	X_3	X_4	
Per capita Income	0,539		0,022	-0,111	-0,050	0,400
Human Development Index	0,020	0,022		0,008	0,006	0,057
Open Unemployment Rate	0,067	-0,111	0,008		0,026	-0,010
Gini Index	0,016	-0,050	0,006	0,026		-0,001
Effect of variables X1, X2, X3, X4						0.446
Influence of Other Variables						0.554

Source: Data Processed 2024

From Table 4 it is known that Per Capita Income, Human Development Index, Open unemployment rate, and Gini Index have a contribution of 0.446 or 44.6 percent to economic growth, while 55.40 percent are influenced by other variables outside the study.

The Structural Relationship Between Economic Growth Variables and Poverty

Table 5 Analysis Results of the Effect of Z on Y

Model Summary

Model	R	R Square	Adjusted RSquare	Std. Error of the Estimate
1	.238[a]	.057	.001	1.93685

a. Predictors: (Constant), PR

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.821	1	3.821	1.018	.327[b]
	Residual	63.773	17	3.751		
	Total	67.594	18			

Dependent Variable: PR

Predictors: (Constant), EG

Coefficients[a]

Unstandardized Coefficients		Standardized Coefficients	t	Sig.
B	Std. Error	Beta		
2.281	3.238		.705	.491
.374	.370	.238	1.009	.327

a. Dependent Variable: PR Source: Data processed 2024

So based on the results of Table 5, models of influence between variables can be arranged as follows:

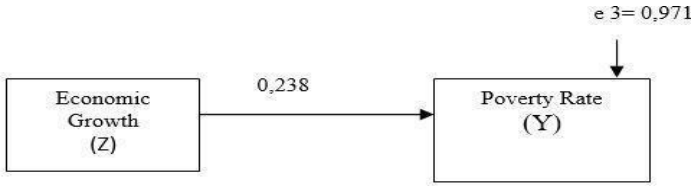

Figure 4: Structural Model III

Based on the summary model output table, the magnitude of R2 is 0.57 which means that it shows the magnitude of the influence of economic growth on poverty in Jambi Province of 5.70 percent, while the remaining 94.30 percent is explained by other variables outside the study. While Anova shows that the statistical F hypothesis test with a significance level of 90 percent then knows the statistical F value with F Table then (1.018 < 2.39) or (0.327 > 0.10), then Ho is rejected, and Ha is accepted. This means that all regression coefficients or all independent variables, namely economic growth, together do not affect the poverty of Jambi Province. The influence between the above variables is expressed by the following equation:

Z ⟶ Y = (Pyz) X (Pyz)

= 0,238 X 0,238 = 0,056

It is known that the influence of variables of 0.056 or 0.56 percent means that the influence of economic growth variables has an influence of 0.56 percent on poverty.

Direct and Indirect Effects of Per capita Income, Human Development Index, Open Unemployment Rate, Gini Index on Poverty Rate through Economic Growth in Jambi Province

From the results of the regression calculation above, it can be calculated the direct and indirect influence of Per Capita Income, Human Development Index, Open Unemployment Rate, and Gini Index on Poverty Rate through Economic Growth. The value of the path coefficient can be seen in the picture below:

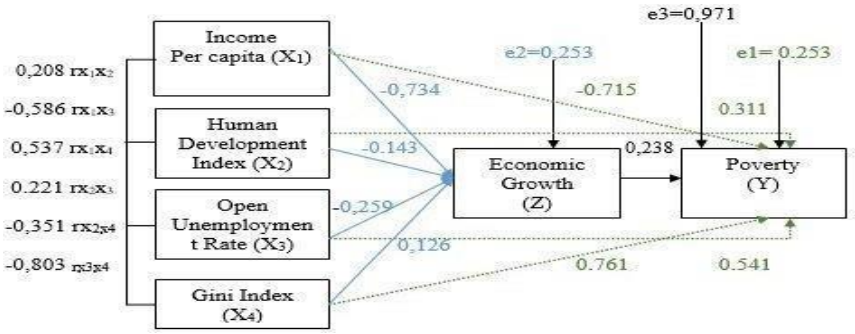

Figure 5: Influence Trajectory Model

Based on Figure 5 for indirect search is as follows:

Indirect influence (PTL) = PTL (X-Y2) =P1 x P2

Explanation:

PTL = Indirect effect of variable X on Y
P1 = Direct Effect of X on Y1
P3 = Effect of Y1 on Z
PTL (X_1-Z) = -0,715 x-0,734 = 0,524
PTL (X2-Z) =0,311 x-0,143 = -0,044
PTL (X3-Z) =0,761 x-0,259 = -0,197
PTL (X4-Z) =0,541 x 0,126= 0,068

Based on the analysis above, it can be summarized in the table below:

Table 6 Direct influence and Indirect influence

Variable	Direct Influence	Sign	Variable	Indirect Influence	Sign	Total
X1 to Y	0,524	Sign	X1 towards Z	0,715	Sign	1,239
X2 to Y	-0,044	Sign	X2 towards Z	0,311	Non sign	0,267
X3 to Y	-0,197	Sign	X3 towards z	0,761	Non sign	0,564
X4 to Y	0,068	Sign	X4 towards Z	0,541	Non sign	0,609
Z to Y	0,056				Non sign	0,056

Source: Data Processed 2024

4.1. Hypothesis Testing

4.1.1. First Equation (Testing Hypothesis 1)

To test the significance of the constant of each independent variable using the t-test, the following hypothesis is used:

Ha= Significant regression coefficient
H0=Insignificant regression coefficient

To take his decision (based on probability) is as follows:

If the Probability is >0.10 then H0 is accepted
If the Probability is <0.10 then H0 is rejected

The regression analysis based on the t test is as follows:

Table 7. Test Results t: Effect of X1, X2, X3 and X4 to Y

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	66.193	9.635		6.870	.000
	GDP Per capita	-10.604	1.435	-.715	-7.387	.000
	HDI	.173	.046	.311	3.722	.002
	OUR	.586	.092	.761	6.378	.000
	GI	22.770	5.254	.541	4.334	.001

a. Dependent Variable: TK Source: Data processed, 2024

Based on the table of 7 statistical t significant numbers in the table above, it can be concluded that the variable Per Capita income has a probability value of 0.00 < 0.10 and a calculated t value of -7.387 < 1.753 t table, it can be concluded that the variable per capita income has a negative and significant effect on the poverty rate in directly because H0 is rejected, and Ha is accepted. The human development index variable has a positive and significant effect on the poverty level of Jambi Province because the significance value is 0.002 <0.10, while the table t value is 3,722 > t Table 1.753, H0 is rejected and Ha is accepted, meaning that at the level of significance, 90 percent of the human development index variable has a positive and significant effect on the poverty level of Jambi Province. The variable Open Unemployment Rate has a positive and significant effect on the poverty rate of Jambi Province because of the significant value of 0.000<0.10. In contrast, the calculated t value of 6.378>t Table 1.753 then H0 is rejected. Ha is accepted, meaning that at the level of significance of 90 percent the variable open unemployment rate has a positive and significant effect on the poverty rate of Jambi Province. The variable Gini ratio index has a positive and significant effect on the poverty level of Jambi Province because the significance value is 0.001 <0.10, while the calculated t value is 4,334 >t Table 1,753, then H0 is rejected and Ha is accepted, meaning that at the level of significance of 90 percent of the variable Gini ratio index has a positive and significant effect on the poverty level of Jambi Province.

Table 8. Test Results t: Effect of X1, X2, X3, and X4 to Z

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	142.168	44.609		3.187	.007
	GDP Percapita	-17.111	6.645	-.734	-2.575	.022
	HDI	-.125	.215	-.143	-.582	.570
	OUR	-.313	.425	-.259	-.736	.474
	GI	8.336	24.322	.126	.343	.737

a. Dependent Variable: EG

Source: Data processed, 2024

Based on the table of 8 significant figures above, it can be seen the partial influence of each factor, it can be decided that per capita income has a probability value of 0.022<0.10, while n t calculate is -2.577> t Table 1.753 then H0 is rejected and Ha is accepted, meaning that at the level of significance, 90 percent of the variable per capita income has a negative and significant effect on the economic growth of Jambi Province. The human development index variable has a negative and insignificant effect on the economic growth of Jambi Province because the significance value is 0.570 >0.10, while the calculated t value is -0.582 < t table 1.753 then Ho is accepted and Ha is rejected, meaning that at the level of significance, 90 percent of the human development index variable has a negative and insignificant effect on the economic growth of Jambi

Province. The variable open unemployment rate has a negative and insignificant effect on the economic growth of Jambi Province because the significance value is 0.474 > 0.10, while the calculated t value is -0.736 < t Table 1.753 then ho is accepted and ha is rejected, meaning that at the level of significance of 90 percent the variable open unemployment rate has a negative and insignificant effect on the economic growth of Jambi Province. The variable Gini ratio index has a positive and insignificant effect on the economic growth of Jambi Province because the significancevalue is 0.737 > 0.10, while the calculated t value is 0.343 < t Table 1.753 then ho is accepted and ha is rejected, meaning that at the level of significance, 90 percent of the variable Gini ratio index has a positive and insignificant effect on the economic growth of Jambi Province.

Table 9 Test Results t: Effect of Z on Y

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.281	3.238		.705	.491
	EG	.374	.370	.238	1.009	.327

a. Dependent Variable: PR Source: Data Processed 2024

Based on the table of 9 significant numbers t statistics in the table above, it shows that the economic growth variable has a positive and insignificant effect on the poverty of Jambi Province because the significance value is 0.327 > 0.10, while the calculated t value is 1,009 < t Table 1,753 then ho is accepted and ha is rejected, meaning that at the level of significance of 90 percent the variable of economic growth does not have a significant effect on the poverty of Jambi Province.

4.1.2. Path Analysis (Testing Hypothesis 2)

The direct effect of the variables per capita income, human development index, open unemployment rate, and Gini index partially on the poverty rate can be explained as follows:

a) P1 Line Analysis

Per Capita Income Path to poverty rate through economic growth with a value of β 1,239, The result can be interpreted that income has a negative and significant effect on the poverty rate through economic growth. The β rate of 1,239 means that there is an increase of one percent variable per capita income, then the poverty rate through economic growth will decrease by 1,239 percent.

b) P2 Path Analysis

The path of the Human Development Index to the poverty rate through economic growth on the P2 track with a value of β = 0.267. These results can be interpreted that the variable human development index has a positive and significant effect on the poverty rate through economic growth. The β rate of 0.267 means that with every one percent increase in the variable Human Development Index, the poverty rate through economic growth will decrease by 0.267 percent.

c) P3 Path Analysis

The Unemployment Rate pathway is open to the poverty rate through economic growth in the P3 path with a value of β=0.564 percent. These results can be interpreted that the variable unemployment rate is open to the poverty rate through economic growth has a positive and significant effect on the open unemployment rate through economic growth. The β rate is 0.564, meaning that every one percent increase in the variable unemployment rate open to the poverty rate through economic growth will decrease by 0.564 percent.

d) P4 Path Analysis

The Gini Index tracks poverty rates through economic growth in the P3 path with a value of β = 0.609 and has a positive and significant effect on poverty rates through economic growth. The β rate is 0.609, meaning that every increase in the variable Gini index to the poverty rate through economic growth will decrease by 0.609 percent.

e) P5 Line Analysis

The path of economic growth to poverty on the P5 track. These results can be interpreted as economic growth hasa positive and insignificant effect on poverty, the level of $\beta = 0.056$ means that an increase of one percent in economic growth on poverty will decrease by 0.056 percent.

5. CONCLUSION

The influence of macro development variables directly shows that per capita income, human development index, open unemployment rate, and Gini index have a significant effect on the poverty rate in Jambi Province. while indirectly only per capita income has a significant effect on economic growth in Jambi Province, but the variables of human development index, open unemployment rate, and Gini index do not have a significant effect on economic growth in Jambi Province, but economic growth indirectly does not affect poverty in Jambi Province.

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