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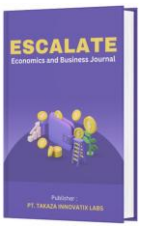

Determination of Poverty Levels in Jambi Province: A District/City Panel Data Approach

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Abstract: *Poverty remains one of the major development challenges in Jambi Province, Indonesia, despite a gradual decline in the overall poverty rate. Significant disparities in poverty levels across districts and municipalities indicate the need to identify the key factors influencing regional poverty. This study aims to analyze the trends of the Human Development Index (HDI), Open Unemployment Rate (OUR), population growth, and poverty, as well as to examine the effects of these variables on poverty levels in Jambi Province. A quantitative approach was employed using balanced panel data from 11 districts/municipalities covering the period 2020–2024. Secondary data were obtained from Statistics Indonesia (BPS) of Jambi Province and analyzed using panel data regression. Model selection was conducted through the Chow, Hausman, and Lagrange Multiplier tests, followed by classical assumption and hypothesis testing. The findings indicate that the Random Effects Model (REM) is the most appropriate estimation model. The Human Development Index has a negative and statistically significant effect on poverty, indicating that improvements in human development contribute to poverty reduction. Population growth also exhibits a negative and significant relationship with poverty, whereas the Open Unemployment Rate has no statistically significant effect. Collectively, the independent variables significantly influence poverty, explaining 39.57% of its variation. These findings suggest that strengthening human development through improvements in education, health, and living standards should remain a priority in poverty reduction policies, accompanied by balanced regional development and enhanced local economic capacity.influence of these three variables on the poverty rate in*

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Introduction

Poverty is a major problem in economic development that Indonesia still faces. The poverty rate is one indicator of the success of economic development (Mustaqimah et al., 2017). Rod Hick (2013) defines poverty as the inability of individuals or families to meet basic needs, while Todaro & Smith view poverty as limited financial resources to meet living needs. According to Sugiharti et al. (2022), poverty is multidimensional because it encompasses economic, social, health, educational, and political aspects, thus requiring government policies that can improve community welfare.

Jambi Province continues to face poverty challenges, despite the decline in the poverty rate from 7.58 percent in 2023 to 7.10 percent in 2024. However, poverty rates between districts and cities continue to show disparities, with Tanjung Jabung Timur Regency having the highest average at 10.85 percent and Sungai Penuh City the lowest at 3.06 percent. Furthermore, the increase in poverty in 2021 due to the COVID-19 pandemic demonstrates the need for further optimization of poverty alleviation efforts.

Differences in poverty rates between regions indicate that poverty is influenced by various factors, one of which is the Human Development Index (HDI). According to Lestari et al. (2025), improving the quality of human resources through the HDI can reduce poverty. This is evident in the increase in the average HDI in Jambi Province from 70.37 in 2020 to 74.23 in 2024. Nabila et al. (2026) also stated that increasing the HDI strengthens the quality of human resources and economic capabilities, thereby reducing poverty sustainably.

In addition to the Human Development Index (HDI), the Open Unemployment Rate (TPT) also contributes to poverty. The average TPT in Jambi Province decreased from 4.70 percent in 2020 to 4.17 percent in 2024, reflecting improved labor absorption post-pandemic. According to Nabila et al. (2026), unemployment reflects a failure to provide jobs, while Lestari et al. (2025) state that high unemployment among productive-age individuals contributes to increased poverty.

Population growth is also a factor related to poverty. Jambi Province's population growth rate fluctuated between 2020 and 2024, potentially becoming a burden on development if not balanced by increased economic capacity. Mulyadi stated that high population growth can hinder development, while Malthus's theory, as cited in Deliarnov, explains that population growth that exceeds production capacity will increase the risk of poverty.

Based on these conditions, this study aims to analyze the development of the Human Development Index (HDI), the Open Unemployment Rate (UPR), population growth, and the poverty rate, as well as the influence of these three variables on the poverty rate in Jambi Province. This research is important considering the persistent poverty gap between regions. The novelty of this study lies in the use of a panel data approach across districts and cities in Jambi Province to analyze the determinants of poverty rates during the study period.

Research methods

This study uses a quantitative approach with secondary data obtained indirectly through documents or publications (Sugiyono, 2019). The analysis used is panel data regression, combining time series and cross-section data (Djali, 2020). The time series data covers the period 2020 to 2024, while the cross-section data consists of 11 districts and cities in Jambi Province, with variables such as poverty rate, Human Development Index (HDI), Unemployment Rate (TPT), and population growth.

The research data was obtained from the Jambi Province Central Statistics Agency through its official website, the publication "Jambi in Figures," and journals. Descriptive analysis was used to describe the development of the HDI, TPT, population growth, and poverty rates. Furthermore, panel data regression analysis was used to examine the effect of the HDI, TPT, and population growth on poverty rates (Sugiyono, 2012; Firdaus, 2020; Juanda & Junaidi, 2012).

Panel data regression model selection was performed using the Chow Test, the Hausman Test, and the Lagrange Multiplier Test to determine the best estimation model. Following this, heteroscedasticity and multicollinearity tests were performed. Hypothesis testing was performed using

the F-test, the t-test, and the Adjusted R-square coefficient of determination to measure the ability of the independent variables to explain poverty levels (Hardani et al., 2020).

The study population included all regencies and cities in Jambi Province. The sample used census techniques, so all 11 regencies and cities served as units of analysis, with an observation period of 2020 to 2024.

The research began with secondary data collection from the Jambi Province Central Statistics Agency. The data was then organized into panel data and analyzed descriptively. Next, panel data regression models were selected, classical assumption tests were tested, hypotheses were tested, and results were interpreted to explain the influence of the Human Development Index (HDI), the Unemployment Rate (TPT), and population growth on poverty levels in Jambi Province.

Results and Discussion

1. Growth of the Human Development Index (HDI) in Jambi Province

Table 1: Human Development Index (HDI) in Jambi Province

No.	Regency/City	Year					Average
		2020	2021	2022	2023	2024	
1	Kerinci	71.21	71.45	71.99	73.77	74.33	72.55
2	Merangin	69.19	69.53	69.98	71.81	72.65	70.63
3	Sarolangun	69.86	70.25	70.89	73.05	73.76	71.56
4	Batang Hari	69.84	70.11	70.51	72.5	73.12	71.22
5	Muaro Jambi	69.18	69.55	70.18	72.26	73.11	70.86
6	East Tanjung Jabung	64.43	64.91	65.77	69.85	72.01	67.39
7	West Tanjung Jabung	67.54	68.16	68.79	71.44	70.77	69.34
8	Tebo	69.14	69.35	69.78	71.99	72.67	70.59
9	Bungo	69.92	70.15	70.55	73.57	74.44	71.73
10	Jambi City	78.37	79.12	79.58	80.93	81.77	79.95
11	Full River City	75.42	75.7	76.17	77.2	77.93	76.48
Average		**70.37**	**70.75**	**71.29**	**73.49**	**74.23**	**72.03**
Development		**-**	**0.54**	**0.76**	**3.08**	**1.01**	**1.35**

Based on the table, the Human Development Index (HDI) in Jambi Province during the 2020–2024 period shows an upward trend. The average HDI rose from 70.37 in 2020 to 74.23 in 2024, with a five-year average of 72.03. The largest increase occurred in 2023, at 3.08 percent, while the average HDI growth during the study period reached 1.35 percent, indicating an improvement in the quality of human development.

Based on the average HDI across districts and cities, Jambi City had the highest score at 79.95, followed by Sungai Penuh City at 76.48. Meanwhile, Tanjung Jabung Timur Regency had the lowest average HDI at 67.39, despite experiencing significant improvement during the study period.

Overall, all regencies and cities in Jambi Province experienced an increase in their Human Development Index (HDI) between 2020 and 2024. However, disparities in human development persist between regions, necessitating continued improvement in the quality of education, health, and living standards.

2. Growth in the Open Unemployment Rate (TPT) in Jambi Province

Table 2: Open Unemployment Rate (TPT) in Jambi Province

No.	Regency/City	Year					Average
		2020	2021	2022	2023	2024	
1	Kerinci	2.43	2.32	2.63	2.48	2.51	2.47
2	Merangin	4.86	4.83	4.69	4.35	4.18	4.58
3	Sarolangun	5.71	5.52	5.22	5.09	5.03	5.31
4	Batang Hari	4.42	4.26	3.53	3.85	4.49	4.11
5	Muaro Jambi	5.43	5.59	5.35	5.4	5.27	5.41
6	East Tanjung Jabung	1.41	1.56	1.32	1.67	2.06	1.60
7	West Tanjung Jabung	2.16	2.53	2.88	2.95	3.2	2.74
8	Tebo	2.95	2.83	1.38	1.71	2.5	2.27
9	Bungo	5.94	5.86	5.5	5.23	4.67	5.44

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No.	Regency/City	Year					Average
		2020	2021	2022	2023	2024	
10	Jambi City	10.49	10.66	8.95	8.27	7.38	9.15
11	Full River City	5.56	3	2.49	3.8	4.3	3.83
Average		4.67	4.45	3.99	4.07	4.14	4.27
Development		-	-4.67	-10.25	1.96	1.76	-2.80

Based on the table, the Open Unemployment Rate (TPT) in Jambi Province during the 2020–2024 period showed a fluctuating trend, but generally a downward trend. The average TPT fell from 4.67% in 2020 to 4.14% in 2024, with a five-year average of 4.27%. The largest decline occurred in 2022, at -10.25%, while the average development during the study period was -2.80%, indicating an improvement in employment conditions.

Based on the average TPT of regencies and cities, Jambi City has the highest unemployment rate at 9.15%, although it continues to decline from 10.49% in 2020 to 7.38% in 2024. In contrast, Tanjung Jabung Timur Regency has the lowest average TPT at 1.60%, followed by Tebo Regency and Kerinci Regency.

Overall, several regions have consistently managed to reduce the unemployment rate, particularly Jambi City, Merangin Regency, Sarolangun Regency, and Bungo Regency. However, disparities in unemployment rates persist between regions, requiring continued improvement in equal employment opportunities and labor absorption in Jambi Province.

Table 3: Population Growth Rate

Regency/City	Population Growth Rate (Percent)					
	2020	2021	2022	2023	2024	Average (Area)
Kerinci	0.84	0.49	0.82	0.70	0.68	0.71
Merangin	0.59	0.35	0.57	1.45	1.43	0.88
Sarolangun	1.60	0.92	1.58	1.51	1.48	1.42
Batang Hari	2.18	1.24	2.16	1.08	1.29	1.59
Muaro Jambi	1.55	0.89	1.53	1.50	1.47	1.39
East Tanjung Jabung	1.10	0.64	1.08	1.08	1.05	0.99
West Tanjung Jabang	1.27	0.73	1.25	1.47	1.45	1.23
Tebo	1.23	0.71	1.20	1.39	1.36	1.18
Bungo	1.74	1.00	1.72	1.29	1.37	1.42
Jambi City	1.27	0.74	1.25	1.28	1.25	1.16
Full River City	1.56	0.90	1.54	1.18	1.15	1.27
Average	**1.36**	**0.78**	**1.34**	**1.27**	**1.27**	**1.20**

According to data from the Jambi Province Central Statistics Agency, the population growth rate during the 2020–2024 period exhibited a fluctuating pattern. The average population growth rate in Jambi Province was 1.20%, with a decline from 1.36% in 2020 to 0.78% in 2021, then increasing to 1.34% in 2022 and stabilizing at 1.27% during 2023–2024.

Based on the average for each regency and city, Batang Hari Regency had the highest population growth rate at 1.59%, followed by Sarolangun Regency and Bungo Regency at 1.42% each, and Muaro Jambi Regency at 1.39%. Conversely, Kerinci Regency had the lowest average population growth rate at 0.71%, followed by Merangin Regency at 0.88% and Tanjung Jabung Timur Regency at 0.99%.

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Overall, all regencies and cities experienced a decline in population growth in 2021, before rebounding and stabilizing in the following years. However, differences in population growth rates remain between regions, necessitating continued improvement in equitable development and population management in Jambi Province.

3. Development of Poverty Levels in Jambi Province

Table 4: Development of Poverty Levels in Jambi Province

No.	Regency/City	Year					Average
		2020	2021	2022	2023	2024	
1	Kerinci	7.30	7.71	7.57	7.54	6.93	7.41
2	Merangin	8.63	9.11	8.70	8.90	8.40	8.75
3	Sarolangun	8.42	8.87	8.48	8.54	8.36	8.53
4	Batang Hari	9.65	10.05	9.63	9.45	8.63	9.48
5	Muaro Jambi	3.83	4.53	4.47	4.43	3.65	4.18
6	East Tanjung Jabung	10.95	11.39	10.91	10.85	10.14	10.85
7	West Tanjung Jabung	10.29	10.75	10.00	9.79	9.54	10.07
8	Tebo	6.26	6.68	6.34	6.46	6.12	6.37
9	Bungo	5.80	6.23	5.38	5.29	5.06	5.55
10	Jambi City	8.27	9.02	8.33	8.24	7.73	8.32
11	Full River City	3.03	3.41	2.97	3.00	2.92	3.07
Average		**7.49**	**7.98**	**7.53**	**7.50**	**7.04**	**7.51**
Development		**-**	**6.45**	**-5.66**	**-0.35**	**-6.07**	**-1.41**

Based on the table, the poverty rate in Jambi Province during the 2020–2024 period showed a fluctuating but downward trend. The average poverty rate increased from 7.49% in 2020 to 7.98% in 2021, then declined to 7.04% in 2024, with a five-year average of 7.51%. Overall, the average poverty rate growth was -1.41%, indicating a decline in poverty rates during the study period.

Based on the average poverty rate across districts and cities, Tanjung Jabung Timur Regency has the highest poverty rate at 10.85%, followed by Tanjung Jabung Barat Regency at 10.07% and Batang Hari Regency at 9.48%. Conversely, Sungai Penuh City has the lowest poverty rate at 3.07%, followed by Muaro Jambi Regency at 4.18% and Bungo Regency at 5.55%.

In general, almost all districts and cities experienced an increase in poverty rates in 2021, then decreased in subsequent years. Despite the improvement, disparities in poverty rates between regions persist, necessitating more optimal efforts to accelerate poverty reduction, particularly in areas with relatively high poverty rates.

4. Descriptive statistics

Table 5: 4.Descriptive statistics

Date: 07/14/26
Time: 20:04
Sample: 2020 2024

	Y_TK_____	X1_IPM_____	X2_TPT_____	X3_PP_____
Mean	7.507818	72.02727	4.266364	1.204545
Median	8.270000	71.44000	4,300,000	1,250,000
Maximum	11.39000	81.77000	10.66000	2.180000
Minimum	2.920000	64.43000	1.320000	0.350000
Std. Dev.	2.397291	3.694637	2.116268	0.388071
Skewness	-0.447342	0.659107	1.028849	0.024409
Kurtosis	2.157224	3.443086	4.266878	2.994853
Jarque-Bera	3.462092	4.432116	13.38128	0.005522
Probability	0.177099	0.109038	0.001242	0.997243
Sum	412.9300	3961,500	234.6500	66.25000
Sum Sq. Dev.	310.3381	737.1185	241,8439	8.132364

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Observations	55	55	55	55

Based on the results of descriptive statistics in this study using 55 observations derived from data during the 2020–2024 period. The Y_TK variable has an average value (mean) of 7.507818, a median value of 8.270000, a maximum value of 11.390000, a minimum value of 2.920000, and a standard deviation of 2.397291. The X1_IPM variable has an average value of 72.027270, a median value of 71.440000, a maximum value of 81.770000, a minimum value of 64.430000, and a standard deviation of 3.694637. Furthermore, the X2_TPT variable has an average value of 4.266364, a median value of 4.300000, a maximum value of 10.660000, a minimum value of 1.320000, and a standard deviation of 2.116268. Meanwhile, the X3_PP variable has an average value of 1.204545, a median value of 1.250000, a maximum value of 2.180000, a minimum value of 0.350000, and a standard deviation of 0.388071. In general, all variables have a standard deviation value that is smaller than their average value, which indicates that the data distribution is relatively good and the level of data variation in each variable is not too high so that the research data is representative enough for further analysis.

5. Model Selection

Table 6: Chow Test

Redundant Fixed Effects Tests
Equation: Untitled
Cross-section fixed effects test

Effects Test	Statistics	df	Prob.
Cross-section F	304.102441	(10.41)	0.0000
Cross-section Chi-square	237.587343	10	0.0000

Based on the results of the Chow Test, it can be seen that the probability is at 0.0000 < 0.05, therefore the Fixed Effect Model (FEM) is more suitable for use in testing than the Random Effect Model (REM).

Table 7: Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Cross-section random effects test

Test Summary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
Random cross-section	1.389198	3	0.7081

Based on the results of the Hausman Test, it can be seen that the probability is at 0.7081 > 0.05, therefore the Random Effect Model (REM) is more suitable for use in testing than the Fixed Effect Model (FEM).

Table 8: LM Test

Lagrange Multiplier Tests for Random Effects
Null hypothesis: No effects
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

	Hypothesis Test		
	Cross-section	Time	Both
Breusch-Pagan	96.71950 (0.0000)	1.307664 (0.2528)	98.02716 (0.0000)
Honda	9.834607 (0.0000)	-1.143532 (0.8736)	6.145518 (0.0000)
King Wu	9.834607 (0.0000)	-1.143532 (0.8736)	4.290358 (0.0000)
Standardized Honda	11.58635	-0.826961	4.616161

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	(0.0000)	(0.7959)	(0.0000)
Standardized King Wu	11.58635	-0.826961	2.673367
	(0.0000)	(0.7959)	(0.0038)

Based on the results of the LM test, it can be seen that the probability is at 0.0000 < 0.05, therefore the Random Effect Model (REM) is more suitable for use in testing than the Common Effect Model (CEM).

6. Classical Assumptions

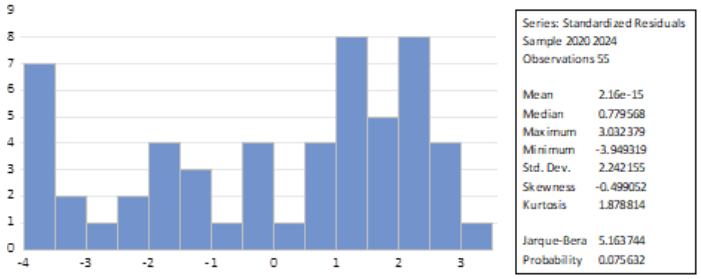

Figure 1 Normality Test

Based on the results of the normality test using Jarque-Bera, the Jarque-Bera value was obtained at 5.163744 with a probability value of 0.075632. This probability value is greater than 0.05 (0.075632 > 0.05), so H_0 is not rejected. Thus, it can be concluded that the residuals in the regression model are normally distributed, so the model has met the normality assumption. In addition, the residual histogram shows a distribution pattern that is relatively similar to a normal distribution and there are no significant deviations. Therefore, the regression model is suitable for further analysis.

Table 9: Heteroscedasticity Test

Dependent Variable: ABS(RESID)
Method: Panel EGLS (Cross-section random effects)
Date: 07/14/26 Time: 19:48
Sample: 2020 2024
Periods included: 5
Cross-sections included: 11
Total panel (balanced) observations: 55
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.331731	1.728790	1.348765	0.1834
X1_IPM_____	-0.008112	0.023125	-0.350785	0.7272
X2_TPT_____	0.010200	0.060599	0.168319	0.8670
X3_PP_____	0.134206	0.132377	1.013820	0.3155

Based on the results of the heteroscedasticity test using the Glejser method, the probability values for the variables X1_IPM were 0.7272, X2_TPT 0.8670, and X3_PP 0.3155. All probability values are greater than the 0.05 significance level. This indicates that there are no independent variables that significantly influence the absolute value of the residual. Thus, it can be concluded that the regression model does not experience symptoms of heteroscedasticity or in other words the residual variance is constant (homoscedastic), so the regression model has met one of the classical assumptions and is suitable for further analysis.

Table 10: Multicollinearity Test

Variance Inflation Factors
Date: 07/14/26 Time: 19:53
Sample: 1 55
Included observations: 55

Variable	Coefficient Variance	Uncentered VIF	Centered VIF

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C	49.19528	545.3584	NA
X1_IPM_____	0.010469	603.6346	1.555372
X2_TPT_____	0.032597	8.166261	1.588935
X3_PP_____	0.628247	11.13475	1.029777

Based on the results of the multicollinearity test using the Variance Inflation Factor (VIF) method, the Centered VIF value for the X1_IPM variable is 1.555372, X2_TPT is 1.588935, and X3_PP is 1.029777. All Centered VIF values are less than 10, thus indicating that there is no high correlation between the independent variables in the regression model. Thus, it can be concluded that the regression model does not experience symptoms of multicollinearity and has met one of the classical assumptions, so that the independent variables can be used together in the regression analysis.

Table 11: Autocorrelation Test

Weighted Statistics

R-squared	0.429310	Mean dependent variable	0.380381
Adjusted R-squared	0.395740	SD dependent var	0.362734
SE of regression	0.281968	Sum squared residual	4.054807
F-statistic	12.78849	Durbin-Watson stat	1.746103
Prob(F-statistic)	0.000002		

Based on the Durbin-Watson test results, the DW value was 1.746103. This value indicates that the regression model does not experience autocorrelation because it is between dU and 4-dU. Therefore, the residuals are independent and the model meets the classical assumption of autocorrelation. Thus, the regression model is suitable for further analysis.

7. Panel Data Regression Analysis

Table 12: Panel Data Regression Analysis

Dependent Variable: Y_TK_____
Method: Panel EGLS (Cross-section random effects)
Date: 07/14/26 Time: 19:45
Sample: 2020 2024
Periods included: 5
Cross-sections included: 11
Total panel (balanced) observations: 55
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	16.63936	1.956524	8.504555	0.0000
X1_IPM_____	-0.121276	0.024293	-4.992121	0.0000
X2_TPT_____	-0.002212	0.066010	-0.033518	0.9734
X3_PP_____	-0.321225	0.135784	-2.365711	0.0218

1) X1_IPM (-0.121276): Every 1 unit increase in X1_IPM will decrease Y by 0.121276 units, assuming other variables are constant.
2) X2_TPT (-0.002212): Since it is not significant, this coefficient is statistically considered to have no real influence on Y.
3) X2_TPT (-0.321225): Every 1 unit increase in X1_IPM will decrease Y by 0.321225 units, assuming other variables are constant.

8. Hypothesis

Table 13: T-Test

Dependent Variable: Y_TK_____
Method: Panel EGLS (Cross-section random effects)
Date: 07/14/26 Time: 19:45

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Sample: 2020 2024
Periods included: 5
Cross-sections included: 11
Total panel (balanced) observations: 55
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	16.63936	1.956524	8.504555	0.0000
X1_IPM_____	-0.121276	0.024293	-4.992121	0.0000
X2_TPT_____	-0.002212	0.066010	-0.033518	0.9734
X3_PP_____	-0.321225	0.135784	-2.365711	0.0218

1) The X1_IPM variable has a probability value of 0.0000 < 0.05, which means it has a significant partial effect on the dependent variable.
2) The X2_TPT variable has a probability value of 0.9734 > 0.05, which means it does not have a significant partial effect on the dependent variable.
3) The variable X3_PP has a probability value of 0.0218 < 0.05, which means it has a significant partial effect on the dependent variable.

Table 14: F Test

Weighted Statistics

R-squared	0.429310	Mean dependent variable	0.380381
Adjusted R-squared	0.395740	SD dependent var	0.362734
SE of regression	0.281968	Sum squared residual	4.054807
F-statistic	12.78849	Durbin-Watson stat	1.746103
Prob(F-statistic)	0.000002		

Based on the results of the F-test, the F-statistic value obtained was 12.78849 with a probability value (Prob(F-statistic)) of 0.000002. Because the probability value is much smaller than the significance level limit of 0.05 ($p < 0.05$), the null hypothesis is rejected. In conclusion, all independent variables simultaneously (together) have a significant influence on the dependent variable. This also proves that the regression model formed is declared feasible (meets the goodness of fit criteria) for use in further analysis.

Table 15: R Square Test

Weighted Statistics

R-squared	0.429310	Mean dependent variable	0.380381
Adjusted R-squared	0.395740	SD dependent var	0.362734
SE of regression	0.281968	Sum squared residual	4.054807
F-statistic	12.78849	Durbin-Watson stat	1.746103
Prob(F-statistic)	0.000002		

Based on the results of the coefficient of determination test, the Adjusted R-squared value obtained was 0.395740. This indicates that 39.57% of the variation (rises and falls) of the dependent variable can be explained simultaneously by the independent variables used in the model. Meanwhile, the remaining variation of 60.43% (obtained from 100% - 39.57%) is influenced or explained by other factors not included in this research model.

Conclusion

This study shows that the poverty rate in Jambi Province during the period 2020 to 2024 tends to decrease although it increased in 2021. The results of panel data regression analysis with a Random Effect Model indicate that the Human Development Index (HDI) has a negative and significant effect on the poverty rate, which means that improving the quality of human development can reduce the poverty rate. Population growth also has a negative and significant effect on the poverty rate, while the

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Open Unemployment Rate (TPT) has no significant effect. Simultaneously, the HDI, TPT, and population growth have a significant effect on the poverty rate with the model's ability to explain poverty variations of 39.57 percent, while the remainder is influenced by other factors outside the research model.

This study has limitations due to the use of only three independent variables, secondary data, and a limited observation period of 2020 to 2024. Therefore, it is not able to explain all factors influencing poverty levels in Jambi Province. Therefore, further research is recommended to add other relevant variables and use a longer observation period to produce a more comprehensive model. Practically, the results of this study can provide input for the Jambi Provincial Government and district and city governments in formulating poverty alleviation policies by improving the quality of human development, equitable development between regions, and strengthening economic development programs that can improve community welfare.

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