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The Impact of Poverty, Economic Inequality, and Unemployment on Crime Rates in Central Java Province from 2000 to 2021

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Abstract

In Central Java Province, this study intends to examine how inequality, poverty, and unemployment affect crime. The panel data regression approach is used in this study. The panel regression coefficient for the variable POV in this study was -1.924016 with a probability value of 0.3494, exceeding the significance level of 0.05. These findings demonstrate that the crime variable in Central Java is not significantly impacted by the poverty variable. The panel regression coefficient for the DISP variable is 297.2485, greater than the significance level of 0.05, and has a probability value of 0.0887. These findings support the hypothesis that the inequality variable in Central Java Province between 2000 and 2021 has no appreciable impact on the crime rate variable. With a probability of 0.1089 and a panel regression coefficient of 5.090524 on the UNEMP variable, it can be concluded that the panel regression coefficient above the significance level of 0.05. Based on these findings, it is clear that the crime variable in Central Java Province between 2000 and 2021 is not significantly impacted by the unemployment variable UNEMP. The amount of poverty, inequality, and unemployment in Central Java Province has no discernible impact on crime.

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INTRODUCTION

The fourth-largest population in the world is found in the developing nation of Indonesia. According to the BPS, Indonesia would have 275.77 million residents by the middle of 2022. Based on this population, Indonesia continues to face issues with social inequality, poverty, and inequality of opportunity. In Indonesia, the issue of poverty is still a severe one that requires quick attention. The percentage of impoverished people or the amount of poverty in Indonesia is, nevertheless, occasionally declining.

Indonesia is still dealing with a multifaceted issue called poverty. Inability to attain a minimal standard of living is what is meant by poverty (Kuncoro, 2010). Geographically, Indonesia's poverty rate reduced by 12.29% in rural areas and 7.50% in urban areas (Ministry of Finance, 2022). Maintaining the selling price of domestic energy is one of the government's current policies, which it does to avoid seeing the population's poverty rate rise.

One of the provinces that has been successful in lowering the poverty rate is the Central Java Province. It is predicted that the poverty rate in Central Java will fall by 0.32% in 2022 based on data from the Central Bureau of Statistics for Central Java Province. This suggests that there are now 102.57 thousand fewer persons who are impoverished. This drop was caused by a number of causes, including the provincial government's goal to reduce poverty, the improvement of the Covid-19 epidemic, and the development of MSMEs in Central Java.

Economic disparity and the problem of poverty in Central Java are both close-knit issues. An unbalanced condition in society known as income inequality or economic inequality results in discrepancies, particularly in terms of income between the high and lower strata of society (Anser et al., 2020). The Gini coefficient shows that there is 0.368 percent income inequality in Central Java as of September 2021. Urban areas have a higher level of inequality than rural areas, according to the distribution of urban and rural areas in Central Java. In Central Java, the Gini coefficient for urban areas in September 2021 was 0.393, while it was 0.324 for rural regions (Bank Indonesia, 2022).

Economic development disparities will lead to inequality in a given area. This is demonstrated by the existence of both developed and swiftly developing regions as well as relatively underdeveloped and slowly emerging parts. The degree of community welfare in a given area will be impacted by the presence of inequality, which will lead to new issues like jealously among residents of different regions and the instigation of criminal activity (Prawidya & Syahputri, 2016). Consequently, there is a need for serious handling through the establishment of governmental policies, particularly those that deal with how economic development is distributed.

Economic inequality and poverty continue to be difficult issues to solve, and they are directly tied to the issue of unemployment given that Central Java's unemployment rate is still rather high. According to information provided by the Central Java Province Central Statistics Agency, 1.19 million individuals were unemployed as of February 2022. In comparison to February 2021, this figure has climbed by 6.26% (BPS, 2022). Eight city districts, including Cilacap, Tegal, Banyumas, Klaten, Magelang, Semarang, Sragen, and Magelang City, had an increase in the region's unemployment rate. This is driven by a number of things, including a lack of employment possibilities, a decline in market demand, insufficient capacities, a lack of skills, and a slow pace of job transformation (Sabiq & Apsari, 2021b).

According to Sandra *et al.,* (2015) research, high crime rates in American cities occur in places with populations that are in the range of poverty and a high number of unemployed. The high number of unemployed is also mentioned as a factor in the genesis of crime. According to this study, national crime-reduction initiatives will boost domestic and foreign investment and reduce inequality, both of which will benefit the economy of the nation.

The high prevalence of unemployment in the regions is a problem that is intimately tied to both the social and economic facets. People's actions when they are unhappy with something might potentially incite criminal activity. According to Fahrizal *et al.,* (2019*)*, a threat to environmental security is posed by the fact that a large number of people fall into the productive group yet are unable to find employment or a reliable source of income.

Based on the foregoing context, this study seeks to examine the relationship between poverty, inequality, unemployment, and crime in Central Java's district and city administrative areas from 2000 to 2021. This study used a quantitative descriptive methodology with a panel data regression model because it has a number of benefits, including the ability to explicitly account for individual heterogeneity with individual-specific variables. In addition, when employing a large number of observations, panel data regression models have implications for data that are more informative, varied, collinearity across data is fewer, and degrees of freedom are higher, allowing for more accurate estimation results.

RESEARCH METHODS

With a total of 35 regions made up of 29 regencies and 6 cities, this study employs a quantitative methodology and uses secondary panel data. The data used for this study spans the years 2000 to 2021 and includes a combination of annual time series and cross section data. The information used in this study is briefly described below:

Table 1 Research Variables and Data

Data	Unit	Symbol	Source
Poverty	%	POV	BPS
Inequality	%	DISP	BPS
Unemployment	%	UNEMP	BPS
Crime	%	K	BPS

To examine and estimate statistically the relationship between the independent factors and the dependent variable in this study, a research framework that has been established and several references to earlier works will be used. Panel data regression was employed as the analysis model in this study. When expressed mathematically, the data estimation model used in this investigation is as follows:

$K_{it} = \beta_0 + \beta_1 POV_{it} + \beta_2 DISP_{it} + \beta_3 UEMP_{it} + \varepsilon_{it}$ …… (1)

Explanation:

K_{it} : crime Index in region i in year t

β_0 : constant

$\beta_1, \beta_2, \beta_3,$: independent variable coefficient

POV_{it} : poverty level in region i in year t

$DISP_{it}$: inequality in region i in year t

$UEMP_{it}$: unemployment in region i in year t

i : region (district/city)

t : year

Common Effect Model **(CEM)**

The Common Effect Model, which combines cross section data with time series data as one unit without examining differences in time and entity, is the simplest method for estimating panel data regression parameters. This strategy employs the Ordinary Least Square (OLS) method, where it will be assumed that 0 will remain constant (the same) for each times series and cross section data, or that the intercept and slope (the independent dependent variable's coefficient of influence) do not change over time or between individuals. The following is a formulation of the common effect model:

$Y_{it} = a + X_{it}^1 \beta_{it} + \varepsilon_{it}$ ………………………… (2)

Fixed Effect Model **(FEM)**

According to this approach, variations in intercepts can be used to account for individual differences. The dummy variable technique is used by the fixed effect model to obtain intercept differences between companies when estimating panel data. A common name for the fixed effect estimating model is the least squares dummy variable (LDSV) method. If the mathematical formulation of the fixed effect model is as follows:

$Y_{it} = a + ia_1 + X_{it}^1 \beta_{it} + \varepsilon_{it}$ ……………………………………………… (3)

Random Effect Model **(REM)**

When disturbance factors can be related to one another through time and between individuals, the Random Effect Model is a model that will estimate panel data. The error term for each person in this model accounts for variations in intercepts. The benefit of utilizing this model is that it solves the heteroscedasticity issue. The Generalized Least Square (GLS) method or the Error Component approach are other names for this approach. Assuming the following mathematical form:

$$Y_{it} = X_{it}^{1}\beta_{it} + v_{it} \text{ .... } (4)$$

The three models mentioned above can be chosen using a variety of tests for estimating panel data. These tests include:

Chow Test

The Chow test is a test used to identify which fixed effect or common effect model will be most effective for this study. The F-calculated and F-critical test values show the outcomes of this test. It can be inferred that the fixed effect model should be used in this analysis if the F-calculated value is higher than the F-critical value. The following is the Chow test hypothesis applied in this study:

H_0 : *Common Effect Model*

H_1 : *Fixed Effect Model*

Hausman Test

A statistical technique called the Hausman test is used to determine which model fixed effect or random effect is the most suitable for use. The fixed effect model was used for this investigation if the Hausman statistical result was greater than the crucial chi-squares value, and vice versa. The following are the hypotheses generated by the Hausman test:

H_0 : *Random Effect Model*

H_1 : *Fixed Effect Model*

Lagrange Multiplier Test

A statistical technique called the Lagrange multiplier test is used to decide whether the common effect model or the random effect model is more appropriate. The computed LM-value and chi-squares value can be used to determine the results of this test; if the calculated LM-value is higher than the crucial chi-squares value, the random effect model should be utilized in this study, and vice versa. The following is the hypothesis developed for the lagrange multiplier test:

H_0 : *Common Effect Model*

H_1 : *Random Effect Model*

RESULTS AND DISCUSSION

Several data estimate models were utilized in this study's panel data regression model selection process, and the model that best matches the study's data will be chosen. The Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) are the estimate models.

1. Common Effect Model (CEM)

Table 2 Common Effect Model Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	306.5545	81.29125	3.771063	0.0002
POV	-10.21884	1.649298	-6.195874	0.0000
DISP	20.30557	198.0071	0.102550	0.9183
UNEMP	11.76357	3.523892	3.338233	0.0009

Root MSE	252.3885	R-squared	0.097059
Mean dependent var	226.9013	Adjusted R-squared	0.093523
S.D. dependent var	265.7798	S.E. of regression	253.0466
Akaike info criterion	13.91021	Sum squared resid	49048954
Schwarz criterion	13.93434	Log likelihood	-5351.429
Hannan-Quinn criter.	13.91949	F-statistic	27.44632
Durbin-Watson stat	0.433859	Prob(F-statistic)	0.000000

Based on Table 2, it is clear that data analysis using the common effect model (CEM) model estimation yields an R-squared (R2) value of 0.097059, which shows the size of the proportion of variance in variable Y that can be explained by variable X. The regression model will perform better or be more practical if the R2 value approaches 1, therefore, a low R2 number does not necessarily indicate that the research findings are inaccurate or poor. Additionally, it does not imply that the suitability of the estimating model to be employed in a study will be determined by a high or low R2 value (Sarwono, 2016).

2. Fixed Effect Model (FEM)

Table 3 Fixed Effect Model Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	176.6004	30.99545	5.697624	0.0000
POV	-0.959426	0.743847	-1.289816	0.1975
DISP	229.9978	70.10152	3.280924	0.0011
UNEMP	-0.160229	1.112142	-0.144073	0.8855
	Effects Specification			
Cross-section fixed (dummy variables)				
	Weighted Statistics			
Root MSE	158.5956	R-squared		0.443148
Mean dependent var	425.6577	Adjusted R-squared		0.415001
S.D. dependent var	201.6653	S.E. of regression		162.6601
Sum squared resid	19367485	F-statistic		15.74413
Durbin-Watson stat	1.342419	Prob(F-statistic)		0.000000
	Unweighted Statistics			
R-squared	0.627419	Mean dependent var		226.9013
Sum squared resid	20239097	Durbin-Watson stat		1.040104

According to Table 3, data analysis using the Fixed Effect Model estimates results in an R-squared value of 0.443148, meaning that 44.31% of the variation in the Y variable (crime rate) in Central Java Province can be explained by the POV, DISP, and UNEMP variables (Sarwono, 2016).

3. Random Effect Model (REM)

Table 4. Random Effect Model Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	137.7345	86.51165	1.592092	0.1118
POV	-1.924016	2.054774	-0.936363	0.3494
DISP	297.2485	174.3761	1.704640	0.0887
UNEMP	5.090524	3.171382	1.605144	0.1089
	Effects Specification			
			S.D.	Rho
Cross-section random			194.7780	0.5796
Idiosyncratic random			165.8795	0.4204
	Weighted Statistics			

Root MSE	165.7439	R-squared	0.023059
Mean dependent var	40.53548	Adjusted R-squared	0.019233
S.D. dependent var	167.7976	S.E. of regression	166.1761
Sum squared resid	21152711	F-statistic	6.026762
Durbin-Watson stat	1.000882	Prob(F-statistic)	0.000465
	Unweighted Statistics		
R-squared	0.052141	Mean dependent var	226.9013
Sum squared resid	51488975	Durbin-Watson stat	0.411183

The results of data analysis utilizing the Random Effect Model (REM estimation model) are shown in Table 3 above. The R2 value is 0.023059, as can be seen from the table above. Therefore, it can be inferred that the POV, DISP, and UNEMP variables can account for 2.31% of the variation in the Crime variable. The chow test and Hausman test must be performed to identify which estimation model best fits the data used in panel data regression analysis after the data has been analyzed using the three estimation models mentioned above (Sarwono, 2016).

Chow Test, Hausman Test, and Lagrange Multiplier

The Chow Test is used to select the appropriate estimating model from the Common Effect Model (CEM) and the Fixed Effect Model (FEM). The Hausman Test is then applied to choose the Fixed Effect Model (FEM) and Random Effect Model (REM) model estimations. The Chow Test and Hausman Test models' estimates or hypotheses are as follows:

- Chow Test
  - H_0 :The model used is *Common Effect*
  - H_1 : The model used is *Fixed Effect*
- Hausman Test
  - H_0 : The model used is *Random Effect*
  - H_1 : The model used is *Fixed Effect*
- Lagrange Multiplier Test
  - H_0 : The model used is Common Effect Model
  - H_1 : The model used is *Random Effect Model*

Table 5. Chow Test Result

Effects Test	Statistic	d.f.	Prob.
Cross-section F	15.325124	(34,732)	0.0000

Table 5 displays the results of the Chow test using data for Central Java for the years 2000 to 2021 on crime (K), poverty (POV), inequality (DISP), and unemployment (UNEMP). The Chow test is a technique used to identify model estimates that are appropriate for use in panel data regression data analysis. The best CEM or FEM model estimates are determined using the Chow test. You can view the result of the Chi-square Cross-section in the probability (prob.) column to determine which FEM or CEM model estimations are the most appropriate. The conclusion that FEM is more consistent with CEM and vice versa might be drawn if the result is less than 0.05. It is known from the output results above that the results of the prob. According to Irvan, (2016), the Chi-square cross-section has a value of 0.000 0.05, rejecting H0 and accepting H1, indicating that the Fixed Effect Model is preferable to the Common Effect Model.

Table 6. Hausman Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.741762	3	0.1249

Table 6 contains the results of the Hausman Test, which compares the estimates of the Fixed Effect and Random Effect models to determine which is better appropriate for use in this panel data regression study. It may be observed from the Cross-Table which model estimate is most appropriate. The output table 5 from the probability section's random section reveals the outcomes of the prob. In this Hausman test, H0 is accepted and H1 is refused, indicating that the Random Effect Model is more appropriate for use in this study (Irvan, 2016). The random cross-section is 0.1249, which indicates that this value is bigger than the value employed in this research, namely 0.05.

Table 7. Lagrange Multiplier Test Result

	Test Hypothesis Cross-section	Time	Both
Breusch-Pagan	2460.081 (0.0000)	108.5754 (0.0000)	2568.657 (0.0000)
Honda	49.59921 (0.0000)	10.41995 (0.0000)	42.43996 (0.0000)
King-Wu	49.59921 (0.0000)	10.41995 (0.0000)	38.84070 (0.0000)
Standardized Honda	51.80958 (0.0000)	11.14337 (0.0000)	39.54140 (0.0000)
Standardized King-Wu	51.80958 (0.0000)	11.14337 (0.0000)	35.86104 (0.0000)
Gourieroux, et al.	--	--	2568.657 (0.0000)

This test will compare the estimates of the Common Effect model to the Random Effect model to see which is better appropriate for use in this panel data regression research. Table 6 is a table of Lagrange Multiplier output results. The Cross-Table random portion of the Probability section's output table 6 reveals which model estimate is the most appropriate for this purpose. The Lagrange multiplier test rejects H0 and accepts H1, meaning that the Random Effect Model is more appropriate for use in this study (Irvan, 2016).. The Breusch-Pagan cross-section is 0.0000, which indicates that this value is smaller than the value employed in this research, namely 0.05.

Hypothesis Testing

This study uses the partial test (t test), simultaneous test (F test), and coefficient of determination (R2) to examine hypotheses. The table of panel data regression analysis results with the estimated Random Effect model shows the outcomes of these tests.

Table 8 Results of the Selected Random Effect Model for Estimation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	137.7345	86.51165	1.592092	0.1118
POV	-1.924016	2.054774	-0.936363	0.3494
DISP	297.2485	174.3761	1.704640	0.0887
UNEMP	5.090524	3.171382	1.605144	0.1089
	Effects Specification			
			S.D.	Rho
Cross-section random			194.7780	0.5796
Idiosyncratic random			165.8795	0.4204
	Weighted Statistics			
Root MSE	165.7439	R-squared		0.023059
Mean dependent var	40.53548	Adjusted R-squared		0.019233
S.D. dependent var	167.7976	S.E. of regression		166.1761
Sum squared resid	21152711	F-statistic		6.026762
Durbin-Watson stat	1.000882	Prob(F-statistic)		0.000465
	Unweighted Statistics			
R-squared	0.052141	Mean dependent var		226.9013
Sum squared resid	51488975	Durbin-Watson stat		0.411183

According to the analysis's findings utilizing the Random Effect Model estimation, the regression model is as follows:

$Y_{it} = 137{,}7345 - 1{,}924016X1_{it} + 297{,}2485X2_{it} + 5{,}090524X3_{it} +_{ui} +\lambda_{it}$ ………………………………………………………………… ………………………………… (5)

It is clear from the regression equation's findings that:

Partial Test (t-test)

The independent variable significantly influences the dependent variable, and vice versa, if the t-count significance value is smaller than the error rate =0.05 or t-count is more than t-table. The results of the t test on the output table above indicate that:

Results of the t test for Central Java, 2000–2021, on the poverty variable (POV) and the crime rate variable (K).

The panel regression coefficient on variable X1 (POV) is -1.924016, greater than the significance level of 0.05, and has a probability value of 0.3494. These findings demonstrate that the crime variable in Central Java is not significantly impacted by the poverty variable.

The Central Java Province's 2000–2021 findings of the t test on the inequality variable (DISP) on the crime rate variable (K)

The panel regression coefficient for the X2 DISP variable is 297.2485, greater than the significance level of 0.05, and has a probability value of 0.0887. These findings support the hypothesis that the inequality variable in Central Java Province between 2000 and 2021 has no appreciable impact on the crime rate variable.

The Central Java Province's 2000–2021 t test findings on the unemployment variable (UNEMP) and the crime variable (K)

With a probability of 0.1089 and a panel regression coefficient of 5.090524 on the UNEMP variable, it can be concluded that the panel regression coefficient above the significance level of 0.05. These findings show that, in the Central Java Province, between 2000 and 2021, the unemployment variable (UNEMP) does not significantly affect the crime variable.

Simultaneous Test (F-test)

If the F-count value is greater than the F-table and the significance level is less than 0.05, the results of the F test in the Random Effect Model are simultaneously explained; conversely, if the F-count value is less than the F-table and the significance level is greater than 0.05, it can be inferred that the independent variables collectively have no significant impact on the dependent variable. It can be concluded that the POV, DISP, and UNEMP variables simultaneously or collectively have a significant effect on the K variable (criminality) in Central Java Province in 2000–2021 based on the F-count in this study, which was 6.026762 with a significance level of 0.000465 and the F-table value of 2.87. This means that the F-count value is greater than the F-table and the significance value is less than = 0.05.

Coefficient of Determination (R2)

Based on the analysis of the data in this study, it can be seen that the Adjusted R-squared value is 0.019233. This indicates that, between 2000 and 2021, 1.92 percent of the crime rate in Central Java Province will be influenced by the variables POV, DISP, and UNEMP, with the remaining 98.08 percent being influenced by other variables not included in this study. The larger the independent variable's impact on the dependent variable, the nearer it is to number 1.

The Impact of Poverty (POV) on Crime (K) in the Province of Central Java from 2000 to 2021

According to Soekamto (2005), poverty is a state in which a person cannot support himself in accordance with the standard of living of a group and is unable to make use of everything in his environment, leading to deficits in fulfilling his standard of living. The issue of poverty is brought on by the inability to provide for basic needs, which leads to homelessness and loss of employment. In essence, poverty is a problem that ultimately leads to additional issues in the neighborhood, such theft, fraud, and other crimes that result in losses for neighboring neighborhoods.

Based on the findings of the data estimation in this study, it was determined that the crime rate variable was not significantly influenced by the poverty level in the Central Java Province between 2000 and 2021. This indicates that factors other than poverty contribute to criminal behavior, especially theft and fraud. The findings of this study are consistent with research by Stepanus (2014) and Rahmi & Adry (2018), as well as research by Winda & Sentosa (2022), which claims that poverty has a negative and negligible impact on crime in Indonesia. Because high levels of case resolution and security can reduce the number of criminal episodes in a given area, poverty does not have an impact on the level of crime. As a result, poverty is not the root of the issue. Government help and policies can still be used to address the poverty issue, allowing for an effective response to criminal activity that results from it.

Because poverty is one of the primary causes of crime, this research contradicts studies by Dulkiah & Nurjanah (2018) and Rahmalia & Aryusni (2019), which claim that poverty levels have a major impact on crime in a community. To make ends meet is the driving force for crime, which is caused by real poverty. The rate of crime increases as poverty levels rise.

Economic Inequality's Effects on Crime (DISP) in Central Java Province, 2000–2021

Since the workforce is still not performing to its full potential, one of the causes of economic disparity is that it is still linked to the issue of poverty. In addition, a shortage of job possibilities contributes to economic inequality (Adelman & Morris, 1973). Economic disparity is a result of a number of factors, including the concentration of economic activity in some regions. One of the things that leads people to commit crimes in an effort to survive is the high level of economic inequality in a place that develops as a result of social components that have not performed their roles as intended (Reksohadiprojo & Karseno, 1985).

According to research by Kelly (2000), economic inequality causes opportunities for crime to increase in a community. Crime statistics for the city of Medan from 2000 to 2017 support this claim. This study produced different results, but it is consistent with Herfandi's (2017) assertion that rising crime rates are a result of widening economic disparity. The level of economic inequality does not considerably affect the level of crime in Central Java Province, according to the results of the data estimation.

According to Mehanna (2004) and Newmaayer (2005) research, there is no statistically significant evidence that economic inequality affects crime. This study supports those findings. According to the social disorganization theory, crime happens when social control is compromised by factors including poverty, family instability, and population migration (Shaw & McKay, 1942).

The Impact of Crime (K) on Unemployment (UNEMP) in Central Java Province, 2000–2021

Based on the results of data estimation, this study concluded that, between 2000 and 2021, the crime rate in Central Java Province is significantly influenced by the unemployment rate. According to Wulansari (2017), one of the causes of crimes including theft, mugging, fraud, and hold-up is rising unemployment in a community. Because an unemployed person has no income, it is expected that the utility of committing a crime will be greater than the utility of his lawful income. According to the findings of this study, the number of unemployed individuals in the Central Java Province reached 1.21 million in 2020, and this number will fall to 1.13 million in 2021. In Central Java Province, there was a drop in both the number and the crime rate.

According to studies by Periyatna (2016) and Rahmalia, Ariusni, and Triani (2019), the unemployment rate is a contributing factor to the rise in crime in a community. This research supports their findings. The results of research from Firdaus (2016) and Harahap (2014), which claim that the unemployment rate does not affect the crime rate in a region, are different from those of this study. This is due to the fact that most unemployed persons are aware of the law and would be unlikely to break it. Therefore, other reasons like a lack of knowledge or environmental impacts are to blame for the rise in crime.

CONCLUSION

It is greater than a significance value of 0.05 since the panel regression coefficient on variable X1 (POV) is -1.924016 with a probability value of 0.3494. These findings demonstrate that the crime variable in Central Java is not significantly impacted by the poverty variable. The panel regression coefficient for the X2 DISP variable is 297.2485, greater than the significance level of 0.05, and has a probability value of 0.0887. These findings support the hypothesis that the inequality variable in Central Java Province between 2000 and 2021 has no appreciable impact on the crime rate variable. With a probability of 0.1089 and a panel regression coefficient of 5.090524 on the UNEMP variable, it can be concluded that the panel regression coefficient above the significance level of 0.05. These findings show that, in the Central Java Province, between 2000 and 2021, the unemployment variable (UNEMP) does not significantly affect the crime variable. In Central Java Province between 2000 and 2021, the POV, DISP, and UNEMP variables alone or collectively have a substantial impact on the K variable (criminality).

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