

The Influence of Income Inequality, Open Unemployment Rate, Education and GDP on Crime Rates in Lampung Province (2019-2022)



Gilar Cahya Andromeda

University of Lampung, Lampung, Indonesia

ABSTRACT: This study to analyze the influence of income inequality, Open Unemployment Rate (OUR), Education, and Gross Domestic Product (GDP) on Crime Rates in Lampung Province from 2019 to 2022. The research employs a quantitative approach with a correlational design. The data utilized in this study are secondary data, consisting of income inequality measured by the Gini Ratio index, the open unemployment rate, education proxied through the Gross Enrollment Rate, GDP per capita, and crime rates in the form of time-series data from 2019 to 2022, analyzed using cross-sectional data from districts and cities in Lampung Province. The data analysis methods used include multiple linear regression and Klassen typology analysis to understand patterns and economic structures across different regions. The findings reveal that income inequality, OUR, education, and GDP significantly influence crime rates. The increasing trend in crime rates in Lampung Province is predominantly driven by income inequality, OUR, education levels, and GDP. Through the Klassen typology analysis, regions with high economic inequality (Gini Ratio) and high crime rates include Bandar Lampung City, East Lampung, and Central Lampung. The analysis of OUR and crime rates shows that regions with high OUR and crime rates are South Lampung, North Lampung, and Bandar Lampung City. The analysis of GDP and crime rates indicates that regions with high GDP and crime rates include South Lampung, East Lampung, Central Lampung, and Bandar Lampung City. Furthermore, the analysis of education levels and crime rates reveals that regions with high education levels and high crime rates include East Lampung, Central Lampung, and Bandar Lampung City. Based on these findings, the Lampung Provincial Government needs to prioritize addressing economic growth issues (income inequality and GDP) by resolving social problems such as unemployment, access to education, and crime.

KEYWORDS: Crime Rate, Income Inequality, Open Unemployment Rate, GDP, and Education Level

I. INTRODUCTION

Crime is a serious problem faced by both developed and developing countries (1). The crime rate is a major concern in maintaining national security. Based on the World Population Review (WPR) report, Venezuela recorded the highest crime index (84.36), followed by Papua New Guinea (80), .04 and South Africa (77.29). High crime rates usually occur in areas with high poverty and limited job opportunities. (2).

The Central Statistics Agency (BPS) reported that crime rates in Indonesia fluctuated in 2019–2022. High crime rates create security instability, reduce investor confidence, and limit employment opportunities, which impacts people's welfare. In 2021, Lampung was ranked 6th as the province with the highest crime rate (9,674 cases), below North Sumatra, DKI Jakarta, and East Java (GoodStats, 2022).

In 2022, Lampung's crime rate reached 122 cases per 100,000 population, up from 113 in 2020. This trend shows increasing security risks, especially in Bandar Lampung (3,266 cases), North Lampung (1,152 cases), and Central Lampung (945 cases). Economic factors such as income inequality also play a role. Urban areas such as Bandar Lampung with high living costs have a greater income gap, which triggers social frustration and crime. (3).

Income inequality can affect crime rates. The Gini ratio is the main indicator, where 0 indicates perfect equality, while 1 reflects total inequality (Dulkiah, 2020). Lampung's Gini ratio in 2019–2022 ranged from 0.314–0.330 (BPS Lampung Province, 2023). Bandar Lampung City recorded the highest ratio throughout 2019–2022 (>0.3) and had a relatively high crime rate.

Through the Gini ratio data for Bandar Lampung, North Lampung, and Central Lampung, the implications of income inequality on crime rates in each region can be analyzed. The relatively high Gini ratio in Bandar Lampung indicates a large economic gap

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between community groups, with a small portion of the population receiving most of the income. This condition allows for groups of people who feel economically marginalized. This can lead to increased frustration and the possibility of criminal activity as a way to meet economic needs or as an expression of dissatisfaction with unfair economic conditions. The Gini ratio in North Lampung and Central Lampung Regency, which is lower than Bandar Lampung, still allows for inequality that causes social frustration that needs attention.

Several studies that support this explanation include Hariani & Syahputri, (2016) who investigated the relationship between income inequality and crime rates in Indonesia using a panel data approach. The results showed that there is a positive relationship between income inequality and crime rates in Indonesia. Research by Rahmalia et al., (2016) concluded that economic inequality has a significant effect on crime. Research by Gunarto & Marselina, (2016) showed a similar conclusion that the Gini ratio has a positive and significant effect on crime. However, research by Sugiharti et al., (2022) concluded that income inequality does not have a significant relationship with high criminal activity, as well as research by Wahyu et al., (2021)

Many factors and backgrounds of criminals need to be revealed so that their characteristics are known regarding the opportunity to commit crimes. Likewise, research by Brenes-Camacho and Cuestas, (2018) found that income inequality was not positively related to crime rates in the area. Several of these studies support the explanation that income inequality can contribute to crime rates, with higher levels of inequality tending to correlate with crime rates.

rates can exacerbate crime rates through income inequality and the unemployed tend to have lower incomes than those who are employed. However, this relationship can vary depending on various other factors (Astari et al., (2019)). OUR in Lampung Province in 2019 was 4.03 percent, in 2020 it was 4.67 percent, in 2021 it was 4.69 percent and in 2022 it was 4.52. The OUR condition in Bandar Lampung City showed the highest percentage, namely 7.91 percent, followed by North Lampung Regency at 6.15 percent and South Lampung Regency at 5.31 percent. The problem of unemployment is also closely related to the social sector, unemployed people and those without income mean they do not have expectations of benefits from legal work, which is why they tend to commit crimes (10).

Bandar Lampung City as the provincial center and the largest city in Lampung, tends to be the main destination for migration from other areas in the province. Rapid urbanization is often accompanied by increased unemployment because infrastructure and job opportunities do not grow in proportion to population growth. The conditions in North Lampung and South Lampung Regencies experienced lower net migration compared to Bandar Lampung, which can explain the lower OUR. South Lampung, which is closer to large industrial and agricultural areas, may provide more jobs for its residents. Socially and economically, Bandar Lampung has a higher OUR, possibly due to rapid urbanization, economic diversity that produces unstable job sectors, and tight job competition. Studies that support this explanation include Rahmalia et al., (2016) which shows that an increase in OUR tends to be followed by an increase in crime rates. Meanwhile, Anata's research, (2013), indicates that an increase in OUR has a strong impact on increasing various types of crime, including theft and violence, especially in urban areas that experience a heavier economic impact during the recession. These two studies provide strong empirical evidence that OUR is related to increased crime rates, which is relevant to the situation in Bandar Lampung, North Lampung, and South Lampung.

The unemployment rate can affect the crime rate. Unemployment can increase frustration and social instability and become a risk of increasing crime. The government's efforts to reduce the crime rate, Gini ratio and open unemployment are carried out through the policies of the Regional Government as explained on the official website of the Lampung Province Bappeda in 2023, namely; Direction of development policy, achievement of economic growth at 4.5% to 5.5%, Human Development Index 70.6-70.9, OUR down from 4.0 to 3.8%, Gini Ratio 0.293-0.314, poverty rate also down from 11.4 to 10.9%, then inflation 3+1%, and per capita income at 45 to 46 million. Furthermore, the economic stabilization strategy is carried out by maintaining and improving the investment climate in the region, optimizing household consumption spending, and improving the quality of government spending.

In fact, the policy has not been able to provide a significant impact on reducing crime rates. Based on the data that has been displayed previously, it can be described in graphic form how the tendency of the three elements increases. The graph is:

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Figure 1. Crime rate, Gini Ratio and OUR in North Lampung, Central Lampung and Bandar Lampung

Figure 1 shows the crime rate, Gini ratio, and Open Unemployment Rate (OUR) in 2022 in the three regions with the highest rates: North Lampung Regency, Central Lampung Regency, and Bandar Lampung City. The graph indicates that regions with high Gini ratios and OUR tend to have high crime rates, while regions with lower Gini ratios and OUR show lower crime rates.

The relationship between these variables is complex and can vary across geographic, cultural, and temporal contexts. Some studies have found a correlation between economic inequality and crime rates, but the relationship is not always consistent. Similar research supports a link between the Gini ratio and the OUR and crime rates. The dynamic nature of social inequality and recent policy changes underscore the importance of the 2019–2022 study period. This period covers the socio-economic impacts of the COVID-19 pandemic, which has affected social habits and economic activity.

In addition to income inequality and OUR, education level and GDP also play an important role in influencing crime rates. Education can be a protective factor because individuals with higher education tend to have adequate skills to get jobs, thus reducing the risk of involvement in criminal activities. Conversely, low access to education can increase the risk of crime due to limited job opportunities.

The Central Statistics Agency (BPS) Lampung Province data shows the level of elementary, junior high, and senior high school education from 2019 to 2022. The elementary school education rate tends to be stable above 100%, reflecting broad access. However, the junior high school rate has decreased in several regions, while the senior high school rate is lower with significant disparities between regions. This phenomenon indicates challenges to the sustainability of education, such as dropping out of school or limited access, which contribute to high crime rates in areas with low levels of education.

GDP reflects the economic well-being of a region. An increase in GDP indicates better economic growth, more jobs, and infrastructure that supports the community. Regions with low GDP often face socio-economic disparities that trigger crime rates. Data from the Lampung Province BPS recorded GDP per capita in Lampung in 2019–2022. Central Lampung Regency had the highest GDP, followed by Bandar Lampung, while regions such as Metro and West Lampung had lower GDP. Regions with low GDP have limited economic access that increases the risk of crime.

This study utilizes the latest data to analyze the relationship between income inequality, OUR, education, GDP, and crime in Lampung. Previous studies may not be fully relevant to current conditions due to changes in policy or social dynamics. This study aims to provide data-based recommendations to reduce crime rates through increasing access to education, economic equality, and reducing inequality.

However, many other factors such as government policies and socio-economic conditions also influence this relationship. Therefore, this study is important to provide an empirical picture of the influence of income inequality, OUR, education, and GDP on crime rates in Lampung.

II. LITERATURE REVIEW

1. Crime rate

Crime rate is human behavior that will cause a lot of psychological material losses and disrupt community life. Crime rate is usually measured by the number of crimes reported in an area during a certain period of time, which is often expressed as a crime rate per thousand population using a number unit. The formula is as follows:

$$\text{Crime Rate} = \frac{\sum \text{Crime}}{\sum \text{Population}} \times 1000 \quad (12)$$

2. Inequality Income

Income inequality is a picture of overall equality starting from income to distribution of both individuals and households in a region, which is influenced by their productivity. Income inequality is measured by the Gini ratio. The Gini Ratio value ranges

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from 0 to 1, where a low *Gini ratio value* (approaching 0) reflects a fairer socio-economic condition, while a high *Gini ratio value* (approaching 1) indicates an uneven distribution of income and has the potential to trigger social problems such as crime. The Gini ratio is a statistical measure used to measure income inequality in a population whose unit is the index value. The general formula used is:

$$GR = 1 - \sum_{i=1}^n f_{pi} \times (F_{ci} + F_{ci-1}) \quad (13)$$

Information:

GR = Gini Coefficient

f_{pi} = frequency of population in the i th expenditure class

F_{ci} = cumulative frequency of total expenditure in the i -th expenditure class

F_{ci-1} = cumulative frequency of total expenditure in the expenditure class $(i - 1)$.

3. Open Unemployment Rate

Unemployment Rate is the percentage of the number of unemployed to the number of the workforce. Unemployment is people who are not working but are looking for work or are preparing a new business, or people who are not looking for work because they have already got a job but are not working. The Open Unemployment Rate (OUR) measures the percentage of the workforce that is not working but is actively looking for work so the unit used is percent. The general formula is:

$$OUR = \frac{\sum \text{Open Unemployment}}{\sum \text{Labor Force}} \times 100\% \quad (14)$$

4. Education

Education is an effort to bring about a learning process for students in order to advance their potential to have skills. This education is proxied by the gross participation rate (GPR). GPR is often used because it reflects the level of involvement or individual access to formal education in an area. GPR measures the number of students at a certain level of education (eg elementary school, junior high school, high school) regardless of age, compared to the official age group population for that level. Other studies that use GPR as a proxy for education are Khairani and Ariesa's (2019) and Edwart and Azhar's (2019) research. GPR allows for a broader evaluation of access to education. The measurement used is a percentage. The formula used is:

$$GPR = \left(\frac{\text{Number of students at each level of education}}{\text{Total population of appropriate age}} \right) \times 100\% \quad (15)$$

5. GDP

GDP is the total gross added value generated by economic entities in an inland area. Or it is the sum of the total value of final products and services generated by all economic activities in an area. The unit used is the rupiah value. The general formula used is the production approach formula as follows:

$$GDP = \sum (\text{Output} - \text{Intermediate Input})$$

III. RESEARCH METHODOLOGY

This study uses a quantitative method with a correlational research design. The research data is *time series data* for four years, starting from 2019 to 2022. The *cross-section* data in this study involved 15 districts so that the total data used was 60 data. All data used in this study were obtained from the BPS of Lampung Province. The variable description is shown in the following table:

Table 1: Variable Description

Variables	Description	indicator	Source
	<i>Gini Ratio</i>	Index	Central Statistics Agency of Lampung Province
Income inequality			

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Open Unemployment Rate (OUR)	Comparison of the number of unemployed with the number of workforce	%	Central Statistics Agency of Lampung Province
Level of Education (Edu)	Comparison of the number of students at any level of education with the total population of the appropriate age	%	Central Statistics Agency of Lampung Province
GDP	The sum of the outputs minus the intermediate inputs	Rp/capita	Central Statistics Agency of Lampung Province

Source: processed by researchers (2025)

This research model uses panel data equations to test the influence of income inequality , OUR, education and GDP and crime rates (15) :

$$\text{Credit}_{it} = \beta_0 + \beta_1 \text{Gini}_{it} + \beta_2 \text{OUR}_{it} + \beta_3 \text{Edu}_{it} + \beta_4 \text{GDP}_{it} + \mu_{it}$$

Information:

Crime _{it}	= Crime Rate (number)
Gini Ratio _{it}	= Income inequality (index)
OUR _{it}	= Open Unemployment Rate (%)
Edu _{it}	= Education (%)
GDP _{it}	= Gross Domestic Product (Rupiah)
B ₀	= Constants
β _{1,2,3,4}	= Coefficient
i	= Regency/City
μ	= Residual (error term)
t	= Time

The Klassen typology approach is used to obtain socio-economic patterns and structures in various regions and is applied through a regional approach.

IV. RESULTS AND DISCUSSION

Statistical Results

Table 2. Regression Equation Results

Model	Unstandardized Coefficients		t	Sig.	F(sig,)
	B	Std. Error			
1 (Constant)	-2761.273	629,941	-4.383		
GR	4825.036	2321.231	2,079	.043	35,603
OUR	166,356	40.170	4.141	.000	(0,000)
GDP	.014	.004	3,490	.001	
GPR	12.142	5,076	2.392	.020	

The calculation results obtained the following equation:

$$\text{Crime}_{it} = -2761.27 + 4825.03 (GR)_{it} + 166.35 (OUR)_{it} + 0.014 (GDP)_{it} + 12.14 (GPR)_{it}$$

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The constant ($\beta_0 = -2761.27$) shows the initial value of the crime rate when all independent variables (income inequality/ *Gini Ratio* , OUR, GPR, and GDP) are zero or constant. In a practical context, this value is theoretical because variables such as income inequality/ *Gini Ratio* , OUR, GDP, or GPR will not actually be zero.

The regression coefficient of income inequality/ *Gini Ratio* = 4825.03, shows that every 1 unit increase in the income inequality index/ *Gini Ratio* will increase the crime rate by 4825.03 cases, assuming other variables remain constant. This shows that the higher the income inequality, the higher the crime rate.

The regression coefficient of OUR = 166.35 shows that every 1% increase in OUR will increase the crime rate by 166.35 cases. This indicates that unemployment contributes positively to the crime rate.

The regression coefficient of GDP of 0.014 indicates that every 1 billion rupiah increase in GDP will reduce the crime rate by 0.014 cases, assuming other variables remain constant. Although the coefficient value is small, it shows that non-inclusive economic growth can contribute to crime.

The regression coefficient of education proxied by the Gross Enrollment Rate = 12.14 shows that every 1% increase in GPR will reduce the crime rate by 12.14 cases. This may reflect the complex impact of access to education on crime patterns, perhaps because education has not been optimally integrated into crime prevention. Based on these results, it can be explained that income inequality / *Gini Ratio* has the greatest impact on crime rates compared to other variables, indicating the importance of income equality in reducing crime.

The partial hypothesis test results obtained a t value of the income inequality (GR) variable of 2.079 with a *sig.* 0.043 indicating that the income inequality (GR) variable has a significant effect on the crime rate. The t value of the OUR variable is 4.141 with a *sig.* 0.000 indicating that the OUR variable has a significant effect on the crime rate. The t value of the GDP variable is 3.490 with a *sig.* 0.001 meaning that GDP has a significant effect on the crime rate and the t value of the education variable proxied by GPR is 2.392 with a *sig.* 0.020 indicating that the education variable (GPR) has a significant effect on the crime rate.

The results of the simultaneous hypothesis test obtained an F value of 35.603, which indicates that variations in crime rates can be significantly explained by variations in the independent variables used (income/ *Gini Ratio* , Open Unemployment Rate, Gross Regional Domestic Product and education as proxied by the Gross Participation Rate).

Class Typology

Plotting Income Inequality and Crime Rates.

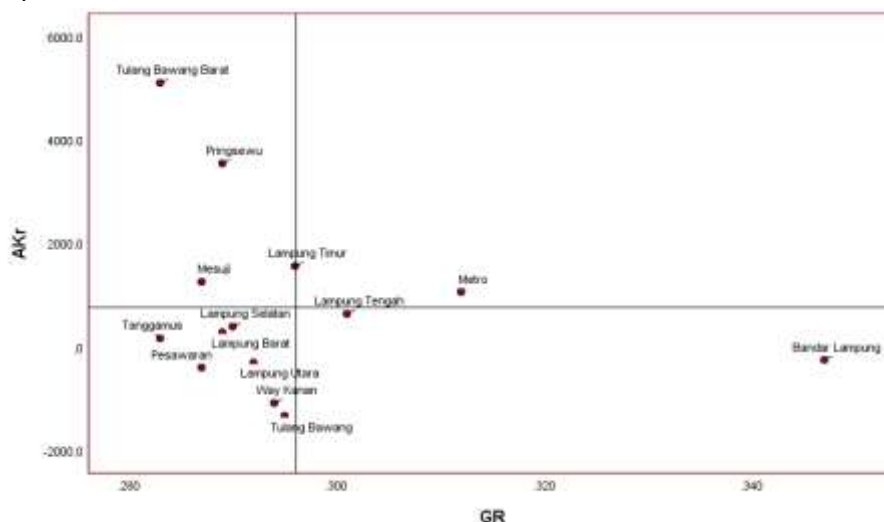


Figure 2. Class Typology Based on Income Inequality and Crime Rates

The Klassen typology diagram based on economic inequality and crime rates explains the 4 quadrants with the following explanation:

- 1) Quadrant I, which shows high income inequality and high crime rates, shows significant economic disparities and high crime rates. Sharp income inequality can trigger social conflict and crime due to feelings of injustice in society. Several districts included in this quadrant are East Lampung Regency, Pringsewu Regency, West Tulang Bawang Regency and Mesuji Regency. The districts included in Quadrant I show major challenges in the form of high income inequality and significant crime rates. Sharp economic disparities can trigger social conflict and increase the risk of crime due to feelings of injustice. To overcome this, strategic steps are needed.

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First, reducing income inequality is a priority. The government can encourage investment in potential sectors, such as modern agriculture, fisheries, and creative industries, according to regional characteristics. Vocational training and education need to be improved to improve workforce skills. Empowering MSMEs is also important through access to capital and management training.

Second, handling crime can be done by improving community welfare and strengthening law enforcement. Integrated social assistance, access to health and education services, and patrols in vulnerable areas need to be strengthened. Public education about the dangers of crime can also help prevention.

Third, strengthening economic infrastructure such as roads, bridges, and local economic centers, such as traditional markets or agricultural and fishery product distribution centers, can support economic activities and increase community income.

Fourth, community involvement in development is very important. Community-based programs can encourage local innovation and independent solutions. Dialogue between communities, government, and stakeholders can produce joint solutions.

The success of these measures requires cross-sector collaboration between government, the private sector, and non-governmental organizations. With an integrated approach, income inequality can be reduced, crime can be suppressed, and equitable and safe socio-economic conditions can be created.

- 2) Quadrant II shows high income inequality but low crime rates, despite income inequality, crime rates remain low, this can occur due to social intervention, certain cultural values, or effective government policies in maintaining order and security. The area included in the quadrant II typology is Metro City. Areas included in Quadrant II with high income inequality but low crime rates indicate positive factors such as social intervention, cultural values, or government policies that have succeeded in maintaining security and order. Although this condition is relatively stable, strategic steps are still needed to reduce income inequality without disrupting social harmony. Local governments can strengthen economic empowerment programs, such as job skills training, MSME development, and providing access to capital for vulnerable groups. In addition, there needs to be strengthening of inclusive policies that ensure that low-income groups can feel the benefits of development, such as through education subsidies, health, and social assistance programs. To maintain low crime rates, it is important to maintain existing social interventions, strengthen local cultural values that support social harmony, and increase community participation in maintaining security. With this combination of steps, Metro City can continue to be a safe and prosperous region despite facing the challenges of economic inequality.
- 3) Quadrant III shows low income inequality but high crime, meaning that income distribution is more even, but crime rates are high. This phenomenon can be caused by other factors such as social, cultural, or geographic issues, which play a role in the high crime rate. The areas included in this quadrant are South Lampung Regency, Tanggamus Regency, West Lampung Regency, Pesawaran Regency, and North Lampung, Way Kanan Regency and Tulang Bawang Regency. Strategic steps that can be taken include strengthening education and community empowerment, especially through character education programs and job skills training to reduce unemployment. In addition, it is important to improve public facilities and services, such as transportation, health, and accessibility to remote areas, in order to minimize regional disparities. Strengthening law enforcement and security must also be a priority, including adding security personnel in vulnerable areas and increasing patrols. Crime prevention socialization programs involving community leaders and traditional institutions can strengthen the role of local cultural values in creating social harmony. With this comprehensive approach, crime in these areas can be significantly reduced.
- 4) Quadrant IV shows low income inequality and low crime rates. This condition indicates a good level of welfare with economic equality and maintained security. The Klassen typology based on income inequality and crime rates can help map regions based on a combination of income inequality and crime rates, so that it can be used to understand the relationship between income distribution and social stability. Bandar Lampung City, which is in Quadrant IV, shows low income inequality and crime rates, reflecting welfare with equitable economic distribution and social stability. To maintain this condition, the government can strengthen existing policies, support economic empowerment through the development of productive sectors, ensure equal access to education and health, and invest in infrastructure that supports growth without disrupting social harmony. Security can be increased through security posts and community-based environmental monitoring. Social education to maintain order is also important so that Bandar Lampung City remains an example of success for other regions.

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Plotting OUR and Crime Rates.

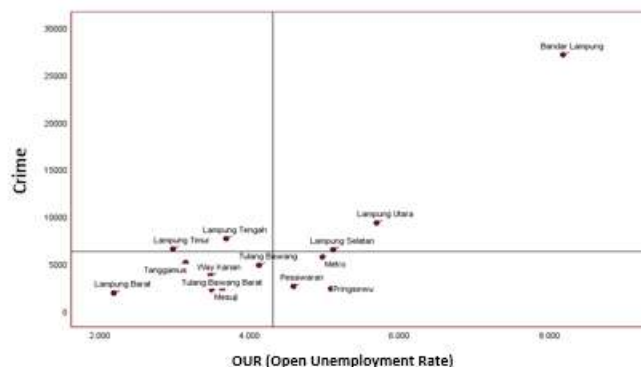


Figure 2. Class Typology Based on OUR and Crime Rates

The explanation of the class typology based on OUR and crime rates consists of the following 4 quadrants:

- 1) Quadrant I shows high OUR and high crime, meaning that this region faces serious problems, both socially and economically. High unemployment can trigger an increase in crime due to limited job opportunities. Regencies/Cities included in this category are Central Lampung Regency and East Lampung Regency. Regions in Quadrant I with a high Open Unemployment Rate (OUR) and high crime rates face serious challenges in social and economic aspects. High unemployment triggers crime due to limited job opportunities and economic pressures in society. To address this issue, the main strategic step is to create new jobs through investment in potential sectors, such as agriculture, small industries, and local tourism. The government can encourage job skills training p OUR (Open Unemployment Rate) t needs to improve workforce competency. In addition, it is necessary to strengthen community empowerment programs, such as capital assistance for MSMEs and village cooperatives. The government can also accelerate infrastructure development to support economic activities, while attracting new investment. Socially, efforts to maintain security through routine patrols and increased cooperation with the community, such as through the community police (polmas) program, can help reduce crime. An integrated approach between the economic, education, and security sectors is expected to reduce unemployment and create better social stability.
- 2) Quadrant II shows high OUR but low crime. Despite economic challenges, this area is relatively safe. There may be other factors such as culture, community values, or social interventions that are effective in maintaining social stability. The areas included in this quadrant are North Lampung Regency, South Lampung Regency and Bandar Lampung City. Areas in Quadrant II with a high Open Unemployment Rate (OUR) but low crime rates indicate that despite significant economic challenges, social stability is maintained. Factors such as strong cultural values, social interventions, or effective local policies likely play a role in maintaining the security of this area. Strategic steps that can be taken are to accelerate efforts to reduce unemployment by creating new job opportunities through job skills training programs, developing local economic sectors, and increasing access to the labor market. The government can also encourage investment in productive sectors such as agribusiness, tourism, and the creative industry to create new jobs. Socially, it is necessary to continue to maintain positive factors such as community harmony and community involvement in maintaining security. Community-based empowerment programs, such as cooperatives or village-based economic activities, can also help improve welfare. This approach is expected to reduce unemployment rates while maintaining existing social stability.
- 3) Quadrant III shows low OUR but high crime, this is possible because social problems such as income inequality or other factors can trigger crime even though job opportunities are available. The areas included in this quadrant are Tanggamus Regency, Way Kanan Regency, Tulang Bawang, West Tulang Bawang, West Lampung and Mesuji. Areas in Quadrant III with a low Open Unemployment Rate (OUR) but high crime rates indicate that even though job opportunities are available, other factors such as income inequality, weak law enforcement, or social problems can trigger crime. Strategic steps that can be taken are to strengthen programs that support economic equality, such as targeted social assistance, increasing access to public services, and empowering low-income communities. In addition, it is important to identify the root of social problems that trigger crime, such as low education or lack of legal supervision, and address these issues in an integrated manner. The government can also improve law enforcement and security by strengthening the presence of officers in vulnerable areas, conducting routine patrols, and involving community leaders in crime prevention programs. Public education on the importance of social harmony and community cooperation values also needs to be improved to create a safer environment. With this approach, crime can be reduced even though unemployment rates are already low.

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- 4) Quadrant IV shows low unemployment and low crime. This area experiences good social and economic welfare, with stable job availability and security conditions. The areas included in quadrant IV are Metro City, Pesawaran and Pringsewu. This Klassen typology table based on OUR and crime rates helps identify areas with a combination of unemployment and crime, and provides policy guidance to address problems in each category. Areas in Quadrant IV with low unemployment and crime rates reflect areas with good social and economic welfare. The availability of adequate jobs and stable security indicate success in economic and social management in this area. To maintain and improve these conditions, strategic steps that can be taken are to ensure the sustainability of existing development programs. The government can continue to encourage investment in leading sectors to create more job opportunities, while maintaining inclusive economic growth. On the other hand, there needs to be a strengthening of the community-based security system to prevent potential increases in crime along with regional development. Community education programs on the importance of maintaining social harmony and active involvement in development can also be expanded. These steps will help ensure that Metro City, Pesawaran, and Pringsewu remain successful examples for other regions in achieving social and economic prosperity.

Plotting Education and Crime Rates

Modification of the Klassen typology that plots education against crime rates as follows:

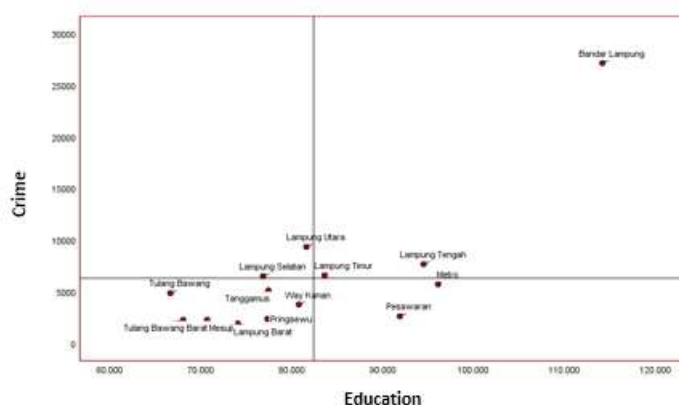


Figure 4. Class Typology Based on Education and Crime Rates

The explanation of each quadrant of the Klassen typology that plots between education and crime rates shows that:

- 1) Quadrant I indicates a relatively high level of education but also a high crime rate. The areas included in this quadrant are North Lampung and South Lampung Regencies. These areas may have good access to education, but other factors such as social inequality, unemployment problems, or rapid urbanization can cause an increase in crime rates. Areas included in Quadrant I show a high level of education but also a high crime rate. This indicates that good access to education is not enough to reduce crime rates, because it may be influenced by other factors such as social inequality, urbanization, or a lack of job opportunities that match the level of education of the community. Strategic steps that can be taken are to ensure that education not only increases knowledge, but also provides skills that are relevant to the needs of the labor market, so that people can use their education productively. In addition, strengthening law enforcement and supervision of vulnerable areas needs to be done to maintain security. This effort can be complemented by economic empowerment programs and equitable public services, in order to reduce social inequality which is one of the roots of the problem of crime. Education about social values and harmony in community life is also important to create a safer and more stable environment.
- 2) Quadrant II indicating higher education with low crime rates are Central Lampung Regency, East Lampung, Metro City and Bandar Lampung City where these areas have relatively good social welfare, with broad access to education and an effective security system. Higher education can play a role in increasing legal awareness and preventing crime. Areas in Quadrant II show that higher education contributes to low crime rates, reflecting good social welfare. This shows that broad access to education and an effective security system support each other to create social stability. Strategic steps that can be taken are to maintain and improve the quality of education by ensuring equal access across all levels of society. In addition, education programs based on moral values and legal awareness can be strengthened to prevent potential crime in the future. Strengthening community-based security systems also needs to be continuously encouraged to maintain the stability that has been achieved. These efforts will help these areas become models of success in managing education and security.
- 3) Quadrant III shows areas with low education and high crime rates. Areas in this quadrant face major challenges, including

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limited access to education that can affect job opportunities, social inequality, and the potential for crime. Areas in this quadrant are Tulang Bawang, Tanggamus, Way Kanan, Pringsewu, West Tulang Bawang, Mesuji and West Lampung Regencies. Areas in Quadrant III face major challenges in the form of low education and high crime rates. Low access to education can affect limited job opportunities, exacerbate social inequality, and increase the risk of crime. Strategic steps that can be taken are to improve access and quality of education through the construction of educational facilities in remote areas, providing scholarships for underprivileged students, and job skills training for the community. In addition, there needs to be economic empowerment efforts to create local jobs that can reduce the potential for crime. Law enforcement and socialization programs about the importance of education and social stability also need to be strengthened to create more conducive conditions in these areas.

- 4) Quadrant IV shows low education but also low crime rates, meaning that this area has strong social capital, such as a supportive community and social values that maintain stability even though access to education is still limited. The district included in this quadrant is Metro City. Areas in Quadrant IV show low education but low crime rates, indicating strong social capital in the community, such as social values that support stability and order even though access to education is limited. Strategic steps that can be taken are to improve the quality of education by expanding access and educational facilities in the area, as well as integrating community empowerment programs that can strengthen social capacity.

Plotting GDP and Crime Rates

The modification of the Klassen Typology quadrant table based on the GDP crime rate is as follows:

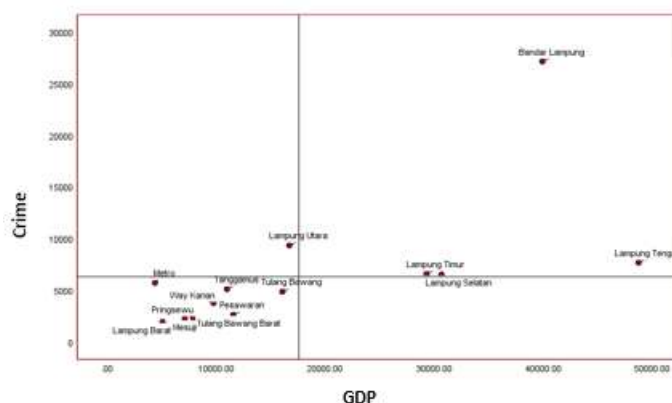


Figure 5. Class Typology Based on GDP and Crime Rates

This Klassen typology plotting GDP and crime rates helps identify the relationship between economic well-being and crime rates, and provides appropriate policy guidance for each category. A similar approach can be applied by plotting GDP against other variables such as the Gini ratio or unemployment rate. Based on the results of the Klassen typology, it can be explained as follows:

- 1) Quadrant I shows prosperous areas but prone to crime. Areas in this quadrant show good economic prosperity but have social problems, such as GDP which triggers high crime rates. The area included in this quadrant is North Lampung Regency. North Lampung Regency, which is in Quadrant I, shows good economic welfare with high GDP, but also faces social problems that trigger high crime rates. This can happen due to social inequality or problems with uneven distribution of wealth even though the overall economy of this region is growing. Strategic steps that can be taken are to focus attention on equalizing the results of economic development, by strengthening policies that reduce social inequality. In addition, it is important to improve the quality of the security system and law enforcement in this region to reduce crime rates. Community empowerment programs that focus on poverty reduction and improving social welfare must also be strengthened to create better stability. Inclusive social development will help create a safer and more equitable environment.
- 2) Quadrant II shows prosperous and safe areas, these areas not only have high economic welfare but also stable and safe social conditions, indicating success in social and economic management. The areas included in this category are Central Lampung Regency, East Lampung, South Lampung and Bandar Lampung City. Central Lampung Regency, East Lampung, South Lampung, and Bandar Lampung City which are in Quadrant II show areas with high economic welfare and low crime rates. This reflects good social and economic management, as well as maintained social stability. The strategic steps that can be taken are to maintain and improve the sustainability of this success by continuing to strengthen inclusive economic policies and equitable social development. Education programs, skills training, and economic empowerment need to be continued to ensure

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continued prosperity. In addition, maintaining and strengthening the security system and cooperation between the government and the community in maintaining order will ensure that social stability is maintained. Cities and regencies in this quadrant can also be models for other regions in managing economic and social welfare in a balanced manner.

- 3) Quadrant III shows underdeveloped and crime-prone areas, meaning these areas face major problems, both economically and socially. They usually require more intensive intervention to overcome poverty and reduce crime. The areas included in this category are West Lampung Regency, Tanggamus, Way Kanan, Metro City, Tulang Bawang, Pesawaran, Pringsewu, West Tulang Bawang, Mesuji, and West Lampung. The areas included in Quadrant III, such as West Lampung Regency, Tanggamus, Way Kanan, Metro City, Tulang Bawang, Pesawaran, Pringsewu, West Tulang Bawang, Mesuji, and West Lampung, face major challenges both economically and socially, with high crime rates. These areas need more attention in overcoming poverty and existing social inequality. Strategic steps that can be taken are implementing more focused poverty alleviation programs, such as community-based economic empowerment, increasing access to education, skills training, and health programs that reach the underprivileged. In addition, the government must improve infrastructure and access to employment to reduce unemployment rates. On the other hand, improving the security system and better law enforcement are essential to reduce crime rates. Collaboration between the government, private sector, and society is essential to create more equitable economic prosperity and reduce existing social inequality.
- 4) Quadrant IV shows underdeveloped but relatively safe areas because of low GDP per capita and low crime rates. This could reflect strong social capital or stable communities. No regencies/cities fall into this category. Although no regencies/cities fall into Quadrant IV, which indicates underdeveloped but relatively safe areas, this situation still provides an important picture of the potential of areas with low GDP per capita and low crime rates. This condition often indicates strong social capital and supportive communities. Strategic steps that can be taken in areas like this are to strengthen and utilize existing social capital to improve economic welfare. This can be done through community empowerment, improving the quality of education and skills, and improving infrastructure to support better economic growth. In addition, local-based development programs that involve community participation can accelerate the development process without ignoring existing social stability. By maintaining good social conditions and focusing on sustainable economic development, this area can develop even better.

CONCLUSION

The results of the regression analysis show that income inequality, Open Unemployment Rate (OUR), education represented by the Gross Participation Rate (GPR), and Gross Regional Domestic Product (GDP) have a significant influence on the crime rate in Lampung Province. Income inequality, unemployment, education, and GDP levels are the main factors driving the increase in crime rates in the region. From the F test, a value of 35.603 was obtained with a significance level of 0.000, indicating that the four variables simultaneously affect the crime rate. This model is able to explain 73.6% of the variation in crime rates, while the rest is influenced by other factors not included in the analysis.

Based on the Klassen Typology that plots economic inequality (Gini index) against crime rates, it can be seen that Bandar Lampung City, East Lampung, and Central Lampung face complex socio-economic problems and require strategic policies to reduce inequality while increasing security. Metro City, despite its inequality, is able to maintain stability through effective social mechanisms or policies. In contrast, North Lampung Regency shows that other factors besides income inequality also influence crime rates. Areas such as West Lampung and Tanggamus reflect better socio-economic stability, with relatively high levels of welfare and a safe situation.

Klassen's typology that maps OUR and crime rates identifies that areas such as South Lampung, North Lampung, and Bandar Lampung City, with equally high unemployment and crime rates, face serious socio-economic challenges. Interventions to reduce unemployment and crime are urgently needed in these areas. In contrast, areas such as Pesawaran, Pringsewu, and Metro City, despite having high OUR, have managed to maintain social stability with low crime rates.

Mapping of GDP against crime rates shows that areas such as South Lampung, East Lampung, Central Lampung, and Bandar Lampung City, with high GDP but also high crime rates, face complex social problems despite having good economic potential. Meanwhile, areas with low GDP and low crime rates, such as West Lampung, Tanggamus, Way Kanan, and Metro City, show more solid socio-economic stability.

Analysis of education on crime rates shows that areas with high levels of education such as East Lampung, Central Lampung, and Bandar Lampung City, still experience high crime rates. This indicates that good access to education has not been able to fully reduce crime rates, because other social factors also play a role. On the other hand, areas with low education but low crime, such as West Lampung, Tanggamus, and Way Kanan, reflect strong social stability even though access to education is still limited.

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