



## The Effect of Socio-Economic Factors on Property Crimes in the Gerbangkertosusila Area

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### ABSTRACT

Property crime is one of the serious problems commonly caused by poverty, unemployment, and education in both a region and a country. The aim of this research is to find out the impact of poverty rates, unemployment rates, and average school age on property crime. The research method uses panel data regression with the Fixed Effect Model (FEM). Source data from the Central Statistical Agency of East Java is data from the Port of Gerbangkertosusila Region (Gresik, Bangkalan, Mojokerto, Surabaya, Sidoarjo, Lamongan) in 2018–2022. The results of the study show that the poverty rate variable has a significant positive impact on property crime, while the unemployment rate and average length of education have a negative impact on property crime. The advice to the government in responding to this problem is to educate communities of all ages not to commit non-crime. Besides, improving the quality of education and providing more jobs should also be done by the government. In this study, of course, there is a limitation in terms of research time of only 5 years because of the limitation of obtaining related data from related data sources.

**Keywords:** Crime, Property Crime, Poverty, Unemployment, Education

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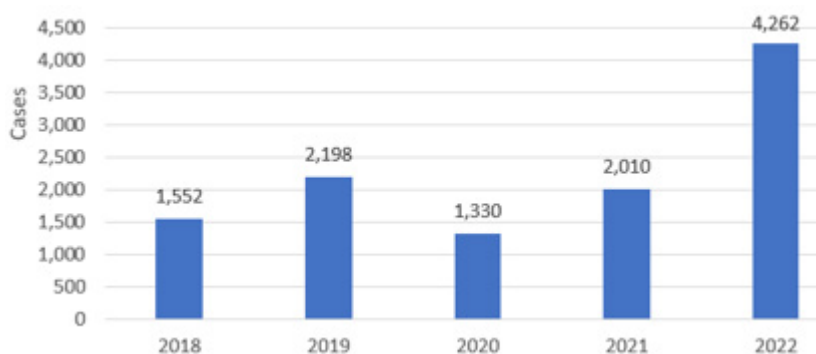
## INTRODUCTION

Economic development is carried out to achieve the state's goals as stated in the 1945 Constitution, one of which is advancing community welfare, improving the nation's intelligent life and social justice. The development of a country is, of course, significant to making the country better in terms of economic, social, and welfare. However, it is not easy for a country to achieve its goal of improving the welfare of society because of obstacles both from a social and economic perspective. One of the obstacles that is a big problem for a country is developing an environment or creating a sense of security and peace. Article 28G (1) of the 1945 Constitution explains that feeling safe is a human right that every person or citizen must obtain by the objectives of the SDGs (Sustainable Development Goals/SDGs), namely maintaining community security and creating a peaceful, just and inclusive society (Ervina, 2020). The community's social conditions often cause obstacles in creating a sense of security and peace in society. One of the social conditions of society is the social problem of crime, the impact of which can spread to various sectors and disrupt the economic growth of a country (Fachrurrozi et al., 2021).

Crime is a severe problem for every region because it harms many people. Perpetrators of criminal acts commit immoral

acts, violating existing norms and rules, both social and legal rules (Sari & Azhar, 2019). The crime phenomenon because some perpetrators violate norms and laws cannot be adequately addressed even in small, sparsely populated areas such as small towns, districts, or villages (Fachrurrozi et al., 2021). Criminal acts committed by someone can be punished under the Criminal Code (Criminal Code) or other laws. Criminal acts are committed due to several factors, such as social conditions, fulfillment of needs, and hidden intentions of the perpetrator (Rahmalia et al., 2019). One of the reasons criminals commit criminal acts is social factors and economic needs. Economic conditions require a person to have a job and earn an income to meet life's demands. Various criminal acts criminals commit include theft, robbery, fraud, and so on, which can cause material harm to victims due to loss of property (Indonesian Criminal Statistics, 2021).

In Indonesia, crime is difficult to control, given that the causes of crime vary widely, ranging from economic, social, and so on. (Dulkiah, t.t.). The desire to satisfy everyday needs and the satisfaction of obtaining more than the result of legal acts are also major factors in the occurrence of criminal acts. The crime rate in Indonesia is moderate when compared to countries like America, Colombia, and Iraq. Nevertheless, it is important to address or control



Source: East Java Criminal Statistics

**Figure 1.**

**Number of Property Crimes Cases in East Java Province, 2018 – 2022**

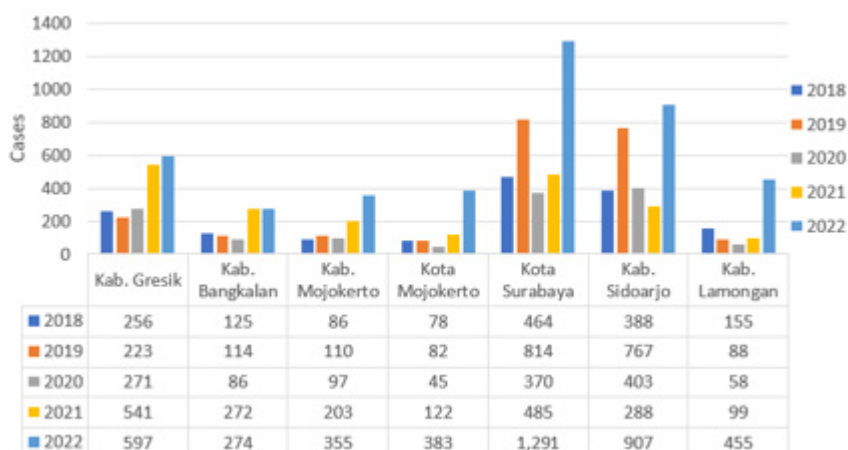
this crime problem so as not to hinder the country's development process. (Rahmalia dkk., 2019; Sari & Azhar, 2019).

Indonesian crime statistics data from 2018–2021 show a decline in the number of crime cases. In 2022, the crime rate will have almost tripled compared to 2021. By 2020, more than 32,000 cases of crime were recorded in North Sumatra Province, 26,000 cases in Jakarta DKI, and more than 17,000 in East Java. The three provinces have the highest number of crime cases in 2020, and two of them are dominated by Java Island. Java Island has a great chance of having high crime rates because Java Island is one of the most densely populated provinces in Indonesia. Figure 1 shows the number of cases of crime in East Java province in the period 2018–2022.

In East Java Province, criminal cases are often discussed, especially cases of motor vehicle theft, because they frequently occur. All efforts made by both the government and society also make it challenging to reduce crime cases, especially motor vehicle theft. Figure 2 shows data on property crime cases or what is commonly referred to as theft and robbery, both using violence and not using violence.

Crime is very often associated with several other social factors or problems that are considered to trigger it. These factors include poverty, unemployment (Yulia Purwanti et al., 2019), and education. Social and economic factors are often associated with crime because it is believed that crime occurs directly due to financial problems in meeting needs, few job opportunities, and low human resource capabilities due to low education (Fachrurrozi et al., 2021). In reducing or controlling crime, it is necessary first to resolve the existing problems of poverty, unemployment, and education.

Travis Hirchi (1969) finds Social control theory and its relationship to crime. Social control theory suggests that criminals commit criminal acts because of a social failure. Travis Hirchi divides four social elements that can inhibit crime, including: 1) Attachment, namely a person's connection with the home environment or parents and an institution such as a school to prevent and hinder someone from committing a crime or crime; 2) Involvement, namely the frequency of activities carried out by a person, is very influential in minimizing and preventing someone from committing a crime or crime; 3) Commitment: investing



Source: East Java Criminal Statistics  
**Figure 2.**

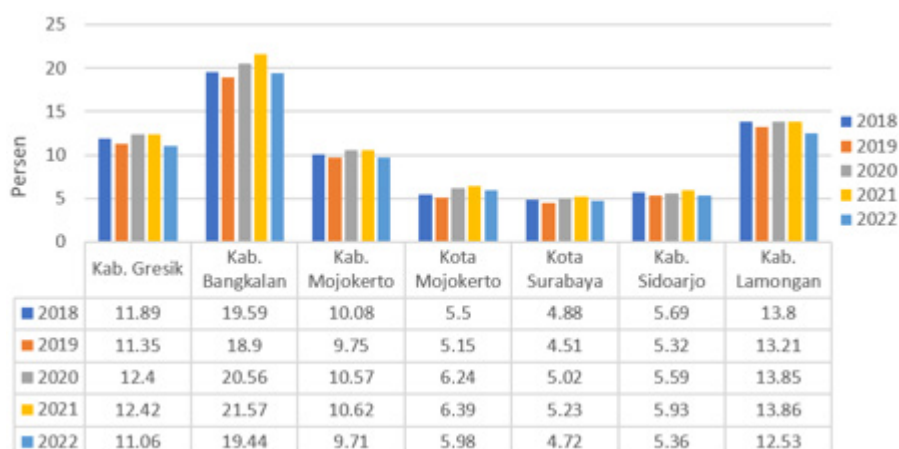
**Number of Property Crimes Cases in Gerbangkertosusila Region, 2018 – 2022**

in good things in society, such as education, entrepreneurship, etc; 4) Belief, namely, realizing things that society recognizes based on applicable norms and rules.

Factors such as poverty, unemployment, and education are some of the factors that are assumed to influence crime in a country or region. It cannot be denied that all of these factors are a chronic problem experienced by all developed and developing countries.

Gerbangkertosusila Region (Gresik, Bangkalan, Mojokerto, Surabaya, Sidoarjo, and Lamongan) also has a poverty rate, an unemployment rate, and an average old school gap between one city or district and another. Here are the data on poverty rates, unemployment rates, and the average school age of the Port of Kertosusila region in 2018–2022.

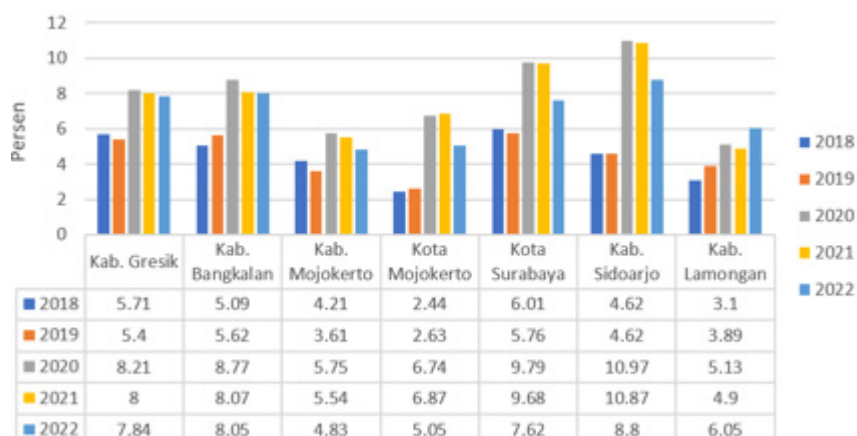
In the data, it can be seen that inequalities occur between large and small cities and districts. The poverty rate in the



Source: Indonesian Central Statistical Agency

**Figure 3.**

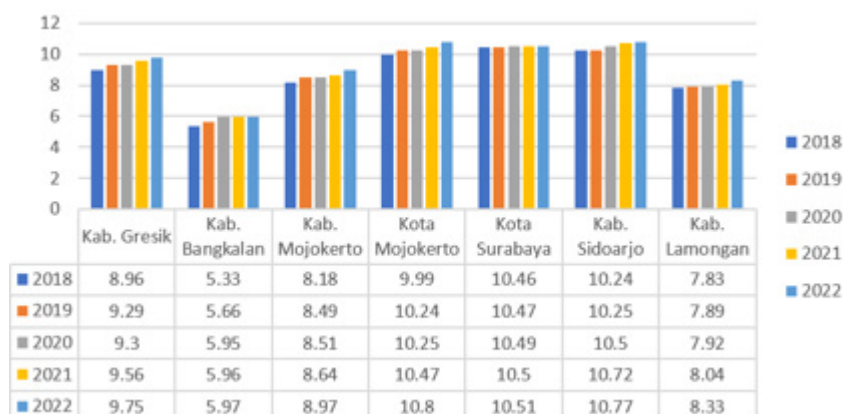
**Data on Poverty Rate in the Gorkertosila Region, 2018–2022**



Source: Indonesian Central Statistical Agency

**Figure 4.**

**Data on Unemployment Rate in the Gorkertosila Region, 2018–2022**



Source: Indonesian Central Statistical Agency

Figure 5.

**Data on Average Age of Education in the Gorkertosila Region, 2018–2022**

small districts is very high. However, the unemployment rate in big cities and districts is far higher than in smaller ones. Whereas the average age of community school in small towns or districts is no more than 9 years, or only school to the level of primary high school.

The relationship between poverty and crime in general is positively linked. If poverty increases, then crime also increases. This is because if the presence and number of poor people increase, the chances of these poor people committing criminal acts such as theft, robbery, and so on are greater to meet their basic needs. Poor societies with conditions below the standard of living will find ways to produce more utility than by working, i.e., by committing crimes. (Dari & Asnidar, 2022). In Ralf Dahrendorf's "conflict" theory, a German sociologist explains that the failure to satisfy one's life needs leads to criminal acts in various forms and will lead to interpersonal conflict. This is in line with Aristotle's statement that persistent and chronic poverty leads to criminal acts.

The relationship between unemployment and crime in general is also linked, both positively and negatively. The relationship between crime and unemployment is said to be positive, as the more people who are unemployed, the higher

the chance of committing criminal acts to satisfy their living needs. A person who is unemployed and then has less opinion or even no income at all will have a greater chance of committing criminal acts. Whereas the link between crime and unemployment is said to be negative if the rise in unemployment can reduce crime as well as vice versa. A person who doesn't have a job will face financial constraints and end up engaging in criminal activities to meet that need. (Rahmi & Adry, 2018). According to the research (Fachrurrozi dkk., 2021), it is stated that unemployment has a positive and significant impact on crime. It means that if unemployment is increased, it will increase crime in a region, and vice versa.

The relationship between education and crime, according to Neckerman & Torche (2007) in (Mardiyansyah & Ni, 2020), states that a person's limitations or lack of education will lead to a lack of skills due to existing educational differences. It will also affect the chance of committing a crime to satisfy the needs of life. According to the results of the study (Liamanu Dkk., 2023), it is mentioned that crime and education have a negative relationship, which means that the higher the education, the lower the crime, and vice versa. Generally speaking, the theory that discusses the connection between education

and crime also suggests that the higher the education, the higher the quality of life and the lower the chance of committing crime. However, contrary to the findings (Ervina, 2020), it states that the relationship between crime and education shows a positive relationship, which means that if education increases, then crime increases. The increase in the number of such crimes is based on the assumption that crimes committed by highly educated communities are online-based crimes such as hacking and the like. Crime in the digital world is mostly done by people who have more knowledge about digital and also have the tools to commit such crimes.

This study contains elements of novelty from previous studies in the year of study, namely in 2018–2022, when the new crime variable developed into property crime as the most common type of crime in society.

## METHODOLOGY

The study uses a quantitative research method using the Fixed Effect Model (FEM) method as a statistical measurement to obtain the results of the study. (Kasim & Hendra, 2023). In addition to the Fixed Effect Model (FEM), statistical calculations with classical assumptions are also performed to ensure that the data from the variables studied are normal distributed data and that neither multicollinearity nor heterogeneity occurs. (Dulkiah, n.d.). The use of the Fixed Effect Model (FEM) method is used because in this study we do not only look at data by year (time series) or only by region (cross section). (cross section).

The study was conducted to analyze the impact of poverty rates, unemployment rates, and average school length on crime in the Gerbangkertosusila Territory (Gresik, Bangkalan, Mojokerto, Surabaya, Sidoarjo, and Lamongan) in 2018–2022. The selection of territories or research objects in the Portengertosusisla Territory is

based on the analysis data that the regions in Indonesia that have the highest number of crime cases of property among them are the City of Surabaya, District of Sidoarjo, and District of Gresik. The three cities and the districts are part of the Portosusila Territory. The selection of research time for the years 2018–2022 is based on the period of doubt that the last five years are still comparable in terms of causes, conditions of the territory, and so on.

The panel data regression model used is adapted from Gujarati sources (2009) in his book Basic-Econometrics, referring to the similarity of the method of data regressible analysis of the panel. The following examples:

$$Y_{it} = a_{it} + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + \varepsilon_{it}$$

where Y is dependent variable, a is constant,  $\beta$  is coefficient, X1, X2, X3 is independent variable, E is error

Referring to the observed equation, Makai obtained the equation of the regressive method of the data panels in the initial research, which is as follows:

$$CR_{it} = a_{it} + \beta_1 TK_{it} + \beta_2 TP_{it} + \beta_3 RLS_{it} + \varepsilon_{it}$$

where CR is property crime, TK is poverty rate, TP is unemployment rate, RLS is average school age, e is error

As for the regression estimate phase, the data panel has three estimate models (Widarjono, 2007; Tripena, 2022), namely:

Common Effect Model Y(CEM). One of the easiest methods in panel data analysis is by combining time series x and cross dates, regardless of a certain time point or individual unit, for regression in the ordinary Least Square (OLS) model.

Fixed Effect Model Y(FEM). The Fixed Effect Model assumes that variations between individuals can be explained by variations in intercepts and slopes, both

between individuals and between time. This model is commonly known as the Technical Least Squares Dummy Variable (LSDV).

Random Effect Model Y (REM). In the Random Effects Model, the data panel estimate between variables has a potential correlation disturbance between time periods and individuals. Therefore, in the Random Effects Model (REM), it assumes that there is an interceptive difference between each individual and that the interceptor is caused by an error, which is a random or stochastic variable.

There are 3 test models in the panel data model to continue the previous test.

First, the chow test is used for the purpose of ensuring the selection of the most appropriate model to use between CommonOEffectOModel and FixedOEffectoModel. In the Chowi test, a hypothesis is needed, namely:

$H_0$ : The Common Effect Model is appropriate to use.

$H_1$ : The fixed-effect model is appropriate to use.

Assuming that if the probability value  $> \alpha$  (5%) then  $H_0$  is accepted, whereas if the probability value  $< \alpha$  (5%) then  $H_1$  is accepted.

Second, the hausman test is used for the purpose of ensuring the selection of the most appropriate model to use between a fixed-effect model and a random-effect model. In the Hausmanl test, a hypothesis is needed, namely:

$H_0$ : The random effect model is appropriate to use.

$H_1$ : The fixed-effect model is appropriate to use.

Assuming that if the probability value  $> \alpha$  (5%) then  $H_0$  is accepted, whereas if the probability value  $< \alpha$  (5%) then  $H_1$  is accepted.

Third, lagrange multiplier test: used for the purpose of ensuring the selection of the most appropriate model to use between Random Effect Model and Common

Effect Model. In the Lagrange Multiplier test, a hypothesis is needed, namely:

$H_0$ : The CommonOEffectOModel model is appropriate to use.

$H_1$ : The Random Effect Model is appropriate to use.

The assumption uses the Breusch-Pagan method, where if the probability value in the Breusch-Pagan column is  $> \alpha$  (5%) then  $H_0$  is accepted, whereas if the Tprobability value in the Breusch-Pagan column is  $< \alpha$  (5%) then  $H_1$  is accepted.

Next is testing the classical assumptions to assess the feasibility of the regression model used. The classical assumption tests used include the Normality Test, the Multicollinearity Test, and the Eteroscedasticity Test.

Normality Test. The purpose of the normality test is to determine whether the variables in the regression model show a normal distribution or not. How to find out if the data is normally distributed or not is seen from the significance value obtained by using the Jarque-Bera test (Ghozali, 2018). In this normality test, the Jarque-Bera (JB) test is used to check the level of significance. If the significance level is  $> \alpha$  (5%), it can be concluded that the data conforms to a normal distribution. Conversely, if the significance level is  $< \alpha$  (5%), this indicates that the data does not obey a normal distribution.

Multicollinearity test. Ghozali (2018) states that the multicollinearity test is used to determine the existence of correlation in the independent variables used in the regression model. An effective regression model is characterized by the absence of correlation between the independent variables. This can be seen from the variable inflation factor (VIF) value. If the VIF value is  $< 1$  (less than), then the regression model used is free from multicollinearity. Vice versa, if the VIF value is  $> 1$  (more than), then the regression model used is not free from multicollinearity.

Heteroscedasticity test. Ghozali (2018) states that the heteroscedasticity test is used to find out whether the regression model used has unequal variances from the residuals from one observation to another. The regression model is said to be good if heteroscedasticity does not occur by looking at the probability value of the independent variable. Heteroscedasticity does not occur if the probability value is  $> \alpha$  (5%).

Next, the hypothesis tests used include the Coefficient of Determination (R<sup>2</sup>), the F Statistical Test, and the t Statistical Test.

The determination coefficient (R<sup>2</sup>) is used to determine the ability of the independent variables together to explain the dependent variable. The greater the R<sup>2</sup> value, the better it can explain the independent variable.

The F test is used in research to ascertain whether the independent variables collectively have an effect or influence on the dependent variable. It can be seen through the results of the f-statistics probability significance value. If the significance is  $\alpha < 5\%$ , then the independent variables together have an effect on the dependent variable.

Statistical Test. Ghozali (2011) states that the t test is used to determine the extent to which the independent variable influences the dependent variable. In the t test, there is a null hypothesis (H<sub>0</sub>), which means that the independent variable has no effect on the dependent variable. And the alternative hypothesis (H<sub>a</sub>), which means that the independent variable has an effect on the dependent variable, The hypothesis criteria in the t test are:

H<sub>0</sub> is rejected, and H<sub>a</sub> is accepted if the significant value is  $< 0.05$  (less than). So the research hypothesis is accepted.

H<sub>1</sub> is accepted, and H<sub>a</sub> is rejected if the significant value is  $> 0.05$  (more than). So the research hypothesis is rejected.

## RESULTS AND DISCUSSION

### *Determination Of Estimation Model Tests* **Chow Test**

The Chow test selects the most suitable model choice between the Common Effect Model and the Fixed Effect Model. This test necessitates the formulation of a hypothesis, expressly:

H<sub>0</sub>: The Common Effect Model is the suitable model to use

H<sub>1</sub>: The Fixed Effect Model is the suitable model to use

If the probability value exceeds the threshold  $\alpha$  (5%), the null hypothesis H<sub>0</sub> is deemed acceptable; conversely, if the probability value is less than  $\alpha$  (5%), the alternative hypothesis H<sub>1</sub> is deemed acceptable.

Based on the Chow Test results in Table 1, the Chi-square cross-section probability results are  $0.0001 < 0.05$ . This means the probability value is smaller than the significance level, or a 0.05 or 5%. Based on the Chow Test results, it can be concluded that H<sub>0</sub> is rejected and H<sub>1</sub> is accepted, so the accepted model is the Fixed Effect Model (FEM). So it is necessary to carry out the Hausman Test as a further test to determine between the Fixed Effect Model (FEM) and Random Effect Model (REM).

### **Hausman test**

In order to establish the most suitable model, such as the Fixed Effect Model or Random Effect Model, a decision must be made. The Hausman test necessitates the formulation of a specific hypothesis.

H<sub>0</sub>: The Random Effect Model is the suitable model to use

H<sub>1</sub>: Fixed Effect Model is the suitable model to use

If the probability value exceeds the threshold  $\alpha$  (5%), the null hypothesis H<sub>0</sub> is deemed acceptable; conversely, if the probability value is less than  $\alpha$  (5%), the alternative hypothesis H<sub>1</sub> is deemed acceptable.



**Table 1.**  
**Chow Test Results**

Effects Test	Statistics	d.f.	Prob.
Cross-section F	5.449930	(6,25)	0.0010
Cross-section Chi-square	29.213093	6	0.0001

Source: Output EViews, 2024

**Table 2.**  
**Hausman Test Results**

Test Summary	Chi-Sq. Statistics	Chi-Sq. d.f.	Prob.
Cross-section random	28.931798	3	0.0000

Source: Output EViews, 2024

Based on the findings of the Hausman Test as presented in Table 2, the random cross-section probability outcomes indicate a value of 0.0000 which is less than 0.05. This signifies that the computed probability is below the predetermined significance threshold of 0.05 or 5%. The conclusion drawn from the Hausman Test results is the rejection of the null hypothesis (H0) in favor of the alternative hypothesis (H1), thereby establishing the Fixed Effect Model (FEM) as the preferred model. Following both the Chow Test and Hausman Test, it was determined that the Fixed Effect Model (FEM) is the most suitable model for the study. Consequently, the Lagrange Multiplier Test can be executed without any need for repetition.

**Fixed Effect Model (Fem) Estimation**

In this research, the Fixed Effect Model (FEM) model was chosen, where

this model assumes that differences between variables can be accommodated by differences in intercepts and the same regression coefficient (slope), both between variables and over time. To find out panel data estimates using the Fixed Effect Model (FEM), you can use the dummy variable technique to understand the difference in intercept between cross sections.

By the results of the panel data regression test in Table 3, the following equation is obtained:

$$PR_{it} = 205.5465 PL_{it} - 52.00610 UR_{it} - 421.6261 AYS_{it} + \epsilon_{it}$$

where PR is property crime, PL is poverty level, UR is unemployment rate, AYS is average years of schooling and e is error

**Table 3.**  
**Panel Data Regression Test Results**

z	Coefficient	Std. Error	t-Statistics	Prob.
C	2330.423	1770.350	1.316363	0.2022
X1	205.5465	72.10102	2.850813	0.0096
X2	-52.00610	28.91510	-1.798579	0.0865
X3	-421.6261	200.2090	-2.105930	0.0474

Source: Output EViews, 2024

**Classic Assumption Test  
Normality Test**

The objective of the Normality Test is to ascertain whether the variables utilized in the regression model exhibit a normal distribution. The identification of a normal distribution in the data is typically conducted through graph analysis, where the distribution points align with the diagonal of the graph (Ghozali, 2018). Within this Normality Test, the Jarque-Bera (JB) test is employed to assess the probability value. A dataset is considered to be normally distributed if the probability value exceeds a threshold of 5%. Conversely, if the probability value falls below this threshold, which is 5%, the data is deemed to be non-normally distributed.

The results of the Normality Test in Table 4 show that the probability value is  $0.687 > 0.05$ . This means that the probability value is greater than the significance level  $\alpha$  of 0.05 or 5%. So, it can be concluded that the model in this research is usually distributed.

**Multicollinearity Test**

Ghozali (2018) posited that the utilization of the multicollinearity test aims at ascertaining the extent to which the employed

regression model aligns with the independent variables. An effective regression model necessitates alignment with the independent variables, a criterion that is evidenced by the value of the Variant Inflation Factor (VIF). Should the VIF value be  $< 10$  (lesser than), the regression model is deemed devoid of multicollinearity. Conversely, a VIF value exceeding 10 indicates the presence of multicollinearity within the regression model under consideration.

Based on the results of the Multicollinearity Test in Table 5 shows that all independent variables, namely Poverty Level (X1), Unemployment Rate (X2), and Average Years of Schooling (X3), have a VIF value  $< 1.00$ . So, the model in this study is free from symptoms of multicollinearity.

**Heteroscedasticity Test**

Ghozali (2018) stated that the heteroscedasticity test is used to determine whether the regression model has unequal variances from the residuals of one observation to another. The regression model is likely good if no heteroscedasticity exists when the independent variables' probability values are examined. Heteroscedasticity does not occur if the probability value is  $> \alpha$  (5%).

**Table 4.  
Normality Test Results**

<b>Jarque-Bera</b>	0.750734
<b>Probability</b>	0.687037

Source: Output EViews, 2024

**Table 5.  
Multicollinearity Test Results**

	<b>POV</b>	<b>UE</b>	<b>AS</b>
<b>POV</b>	1.000000	-0.030832	-0.955127
<b>UE</b>	-0.030832	1.000000	0.166321
<b>AS</b>	-0.955127	0.166321	1.000000

Source: Output EViews, 2024

**Table 6.**  
**Heteroscedasticity Test Results**

F-statistic	0.580544	Prob. F (9,25)	0.8003
Obs *R-squared	6.050354	Prob. Chi-Square (9)	0.7349
Scaled explained SS	5.005616	Prob. Chi-Square (9)	0.8338

Source: Output EViews, 2024

Based on the results of the Heteroscedasticity Test in Table 6 show that the value of Prob. Chi-Square (9) is 0.7349. This means that the probability value is greater than the significance level of 0.05 or 5%. So, the model in this research is free from symptoms of heteroscedasticity.

**Statistic Test**

**Coefficient of Determination Test (R<sup>2</sup>)**

The Determination Coefficient (R<sup>2</sup>) is used to determine the independent variables' ability to explain the dependent variable. The greater the R<sup>2</sup> value (0 – 1), the better it can explain the dependent variable.

The coefficient of determination test results in Table 7 show that the adjusted R-squared value in this study is 0.824135 or 82.41%. This means that the independent variables, namely Poverty Level (X1), Unemployment Rate (X2), and Average Years of Schooling (X3), can explain the dependent variable, namely Property Crime (Y) of 82.41%% and the rest is explained by other variables that were not studied.

**Simultaneous Test (F)**

The F test is utilized in academic studies to assess if the independent variables collectively have an effect on the dependent variable.

Based on the results of the simultaneous test (F) in Table 8 show that the F-Statistics probability value in this study is 0.000000 < 0.05. This means the probability value is smaller than the significance level, or a 0.05 or 5%. This means that the independent variables, namely Poverty Level (X1), Unemployment Rate (X2), and Average Years of Schooling (X3), simultaneously or jointly influence the dependent variable, namely Property Crime (Y).

**Partial Test (t)**

The t-test assesses the extent to which the independent variable impacts the dependent variable. Within the framework of the t-test, a null hypothesis (H0) postulates that the independent variable exerts no influence on the dependent variable, while the alternative hypothesis (Ha) posits that the independent variable does

**Table 7.**  
**Coefficient of Determination Test Results (R<sup>2</sup>)**

R-squared	0.891378
Adjusted R-Squared	0.824135

Source: Output EViews, 2024

**Table 8.**  
**Simultaneous Test Results (F)**

F-statistics	13.25620
Prob(F-statistics)	0.000000

Source: Output EViews, 2024

impact the dependent variable. In the context of the t-test, the criteria for hypotheses are as follows:

$H_0$  is refuted, and  $H_a$  is upheld when the p-value is  $< 0.05$ . Consequently, the research hypothesis is supported.

$H_0$  is accepted, and  $H_a$  is refuted when the p-value is  $> 0.05$ . Consequently, the research hypothesis is not substantiated.

The results of the partial test (t) in Table 9 can be interpreted as follows:

The coefficient result for the Poverty Level variable (X1) is 205.5465 with a probability of  $0.0096 < 0.05$ , so  $H_0$  is accepted, and  $H_1$  is rejected. Based on these results, the poverty level variable has a significant favorable influence on property crime.

The coefficient result of the Unemployment Rate variable (X2) is -52.00610 with a probability of  $0.0865 > 0.05$ , so  $H_0$  is rejected, and  $H_1$  is accepted. Based on these results, the unemployment rate variable has a negative and insignificant effect on property crime.

The coefficient result for the variable Average Years of Schooling (X3) is -421.6261 with a probability of  $0.0474 < 0.05$ , so  $H_0$  is accepted, and  $H_1$  is rejected. Based on these results, the variable average length of schooling negatively and significantly influences property crime.

Based on the results of the panel data regression that has been carried out, the poverty level variable has a coefficient value of 205.5465 and a probability value of  $0.0096 < 0.05$ , so  $H_0$  is accepted, and

$H_1$  is rejected. This means that the poverty level variable has a positive and significant influence on the property crime variable in the Gatekertokusila area (Gresik, Bangkalan, Mojokerto, Surabaya, Sidoarjo, Lamongan) in 2018 - 2022. This means that if poverty increases by 1%, property crime cases will increase by as much as 205 cases in the Gerbangkertokusila area and vice versa.

Poverty in an area dramatically influences society's deviant behavior and actions, including property crime. This is in line with the theory by Emile Durkheim, which states that crime is complicated to eliminate because it is carried out consciously by people to earn income and survive. Poor people have low incomes below the poverty line but have a lot of expenses for daily life and other needs. This causes high levels of poverty, which indirectly increases property crime. Because poor people who feel their income is low will do anything, even illegal means, to make ends meet in their daily lives. According to Sullivan (2009), the utility cost of property crime is higher than that of legal work. Therefore, many poor people commit property crimes to meet their daily needs, such as stealing, robbing, etc.

The regression results in this research show that the poverty level has a significant positive effect on research (Rizkiana Fauziah, 2019), explaining that the poverty level positively impacts existing crimes. This is because the definition of poverty in society is not only a lack of material

**Table 9.**  
**Partial Test Results (t)**

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	2330.423	1770.350	1.316363	0.2022
X1	205.5465	72.10102	2.850813	0.0096
X2	-52.00610	28.91510	-1.798579	0.0865
X3	-421.6261	200.2090	-2.105930	0.0474

Source: Output EViews, 2024

goods in the form of income to meet daily living needs but also a lack of capital resources, which causes community welfare to decline. Decreased welfare causes people to commit illegal acts to fulfill their daily needs. In addition, the quality of human resources tends to be low, making it difficult to find decent work with a decent income to meet daily living needs.

This is also in line with research (Kuciswara et al., 2021), which also shows that poverty positively influences property crime. Poverty is often found among the lower middle class in environments with low social control and low productivity and causes difficulty in earning a decent income to meet daily living needs. The existence of property crime is an instant effort for poor people to earn income. The positive influence between poverty and economic-based property crime is the social control theory by Travis Hirschi, which states that poverty is one of the causes of existing crime. Supported by conflict theory, Ralf Dahrendorf also said that not fulfilling a person's living needs and chronic poverty will give rise to crime.

Based on the results of the panel data regression that has been carried out, the unemployment rate variable has a coefficient value of  $-52.00610$  and a probability value of  $0.0865 > 0.05$ , so  $H_0$  is rejected, and  $H_1$  is accepted. This means that the unemployment rate variable has a negative and insignificant influence on the property crime variable in the Gatekertosusila area (Gresik, Bangkalan, Mojokerto, Surabaya, Sidoarjo, Lamongan) in 2018 - 2022. If unemployment rises by 1%, it will reduce property crime cases by 52 in the Gerbangkertosusila area and vice versa.

A high unemployment rate indicates that a region has an unstable economy because a lack of jobs available in that region can cause excessive unemployment. However, this research shows the opposite result, namely that there is a negative and insignificant relationship between the

unemployment rate and property crime. This means that contrary to the theory, increasing unemployment will reduce property crime in the Gerbangkertosusila area in 2018 - 2022. However, not significant can refer to the uncertain influence of unemployment on property crime. This is not in line with the theory presented because increasing unemployment will increase existing crimes. The frequency of activities carried out by a person influences existing criminal acts. Suppose someone with a frequency of activity tends to be busy or, in other words, is working. In that case, there is little or no possibility of thinking about committing a crime, especially a property crime.

Several factors underlying the negative and insignificant influence on the unemployment rate in the Gatekertosusila Region in 2018 - 2022 in this research are the uneven distribution of job vacancies in cities and districts in the Gatekertosusila Region. One factor is economic and trade centers located in large cities and districts such as Surabaya City, Gresik Regency, and Sidoarjo Regency. People in districts or small cities will look for work in large towns or districts as city and economic centers. However, intense competition in large cities and districts makes it increasingly difficult to get a job. As a result, people from small towns and districts tend to commit crimes, especially property crimes in big cities. Therefore, the tendency for the unemployment rate to increase reduces property crime, assuming that this condition occurs in small towns or districts in the Gerbangkertosusila Region.

Apart from differences in regional conditions, the increase in unemployment can be caused by the large number of workers or fresh graduates still looking for work. The large workforce is separate from the availability of job opportunities and adequate access to information, which makes it difficult to get a job. Apart from that, the workforce or fresh graduates usu-

ally choose jobs that they feel are appropriate to their education and reject jobs that do not suit their field. The large number of educated workers like this is also one of the factors that there is no definite relationship or influence between the unemployment rate and property crime because the educated workforce usually dedicates their unemployed time to looking for work that suits their interests and talents, improving their self-quality, and trying new things like doing business.

In line with research by (Kasim & Hendra, 2023), it is explained that the unemployment rate negatively and insignificantly influences property crime. Many unemployed people from the educated workforce with good educational backgrounds are less likely to commit property crimes because they use their free time to look for suitable work, open businesses, and have more reasonable thoughts not to commit property crimes. This is also in line with research by (Rahmi and Adry, 2018), which also states that there is an insignificant negative relationship between the unemployment rate and property crime. Unemployed people wait to think about committing crimes immediately because the time can be used to carry out new activities, such as opening a new business.

Based on the results of the panel data regression that has been carried out, the average length of the school variable has a coefficient value of -421.6261 and a probability value of  $0.0474 < 0.05$ , so  $H_0$  is accepted, and  $H_1$  is rejected. This means that the average length of schooling variable has a negative and significant influence on the property crime variable in the Gatekertosusila area (Gresik, Bangkalan, Mojokerto, Surabaya, Sidoarjo, Lamongan) in 2018 - 2022. This means that if the average length of schooling increases by one year, it will reduce property crime cases by 421 in the Gerbangkertosusila area and vice versa.

Education dramatically influences the quality of existing human resources. Education teaches many things academically, morally, morally, and as human behavior should be. Formal education, such as school, will help a person gain knowledge, hone skills, and gain other positive things, such as understanding morals, morals, and good behavior. Going to school as a means of education will teach a person how to do good and not commit crimes. The research results show that increasing the average length of schooling will reduce existing crimes. This is in line with the Human Capital theory by Kaufman and Hotchkiss (1999), which states that education is essential for all levels of society because, with education, the quality of human resources will be more promising and have an impact on the ease of finding work with a decent income. A person with a job and a decent income will not commit crimes, especially property crimes.

The regression results in this study show that the level of poverty significantly negatively affects research (Winda & Sentosa, 2021), explaining that the average length of education has a negative effect on existing crimes. Educated people will have a better quality of work than those with low education and have a decent income or sufficient income to meet daily living needs without committing a crime. Apart from that, people with higher education are assumed to interact more with people with higher education so that the frequency of activities carried out is more valuable, and they do not have thoughts of committing crimes, especially property crimes.

This is also in line with research (Mardinsyah & Sukartini, 2020), which shows that the average length of schooling negatively influences property crime. Someone with a higher educational background is usually also surrounded by a social environment with the same background. In other words, a safe social en-

vironment with a sound security system. In addition, people with higher education usually know the right way to protect themselves or minimize getting into dangerous situations. Therefore, education is critical to getting an education, honing skills and qualities, understanding morals and morals, and knowing how to act and protect self from the dangers of crime.

## CONCLUSIONS

Simultaneously, the poverty rate variable (X1), the educational rate (X2), and the school average age (X3) jointly influence the property crime (Y) variable with an adjusted R square value of 82.41%. Partially, the one that has an influence on the property crime variable (Y) is the poverty level variable (X1) with a positive correlation and the average school-age variable (X3, with a negative correlation. Whereas the unemployment rate variables (X2) have no influence over the property criminality variable. (Y).

Based on the conclusions presented, the author's suggestions are based on research so that they can be taken into consideration, namely as follows:

First, the researcher hopes that this research can be used as a reference for the government in making more effective policies to reduce various social problems such as crime, poverty, and education, especially in cities and districts in the Pinitukertosusila region.

Second, based on the variables, time and place, the research that the researcher has carried out can be developed by other researchers with a wider time span and objects.

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