



The Influence of Human Development Index (HDI), Unemployment, and Economic Growth on Crime Rates in Banjarmasin City

Rendy Wahyu Ridhani, Ahmad Yunani, Mahyuni

Universitas Lambung Mangkurat, Indonesia

Email: Rerendy61@gmail.com, ahmadyunani.iesp@ulm.ac.id, mahyuni.fisip@ulm.ac.id

ARTICLE INFO

ABSTRACT

Keywords: Human Development Index; Unemployment; Economic Growth; Crime Rate; Banjarmasin City

Sustainable regional development can be seen from the low crime in a place. The development of the times and the very fast dynamics of knowledge and technology in the era of society 5.0 make fierce competition in the field of human life including social, economic, ethical, morality and ideological changes. This research aims to partially and simultaneously examine the influence of the Human Development Index (HDI), unemployment and economic growth on the crime rate in Banjarmasin City. The approach of this study is a quantitative approach with the Multiple Linear Regression Analysis Method with a data period from 2004-2024. The results of this study show that partially the Human Development Index (HDI) has a positive and significant effect on the crime rate in Banjarmasin City. The unemployment variable has a positive and insignificant influence on the crime rate in Banjarmasin City, while economic growth has a negative and insignificant influence on crime in Banjarmasin City. simultaneous testing, the Human Development Index (HDI), unemployment and economic growth have a significant effect on the crime rate in Banjarmasin City. These findings have important implications for policymakers, suggesting that crime reduction strategies should focus on balanced human development, targeted employment programs, and inclusive economic growth. Future research could benefit from incorporating qualitative methods to explore the unexpected positive relationship between HDI and crime rates.

This work is licensed under CC BY-SA 4.0

INTRODUCTION

The complexity of modern life has become a serious concern for regions in Indonesia in their efforts to reduce the increasing levels of criminality (Anwary, 2022). Sustainable regional development can be reflected in the low crime rates within an area. The rapid advancement of knowledge and technology in the era of Society 5.0 has created intense competition in various aspects of human life, including social, economic, ethical, moral, and ideological changes (Ardelia, 2023). The impact and implications of these changes have led to shifts in social norms and behavior, with the most dominant being tendencies toward hedonism and materialism.

Nevertheless, crime cannot be completely eradicated from society, both in Indonesia and worldwide, given the diversity of social, economic, and cultural conditions. Recently, the Indonesian National Police (Mabes Polri) reported a comparison of crime rates between January 1 and December 21, showing an increase of 16.36% in criminal cases from 2020 to 2021. The high

crime rate is largely driven by the growing needs of individuals and their inability to compete (Purwanti & Widyaningsih, 2019). South Kalimantan Province, which consists of 13 regencies and cities, has shown significant variations in crime rates from year to year. Between 2019 and 2022, the total number of criminal cases fluctuated: 6,275 cases in 2019, declining to 5,870 in 2020, decreasing further to 5,031 in 2021, and slightly rising again to 5,220 in 2022.

Banjarmasin, as the largest city in South Kalimantan, faces a serious issue due to its high crime rate. The data shows a significant increase from 377 cases in 2020 to 990 cases in 2021, and further rising to 1,239 cases in 2022. This drastic increase raises questions about the factors contributing to such a spike and the measures that the local government has taken to address this problem. These dynamics indicate the need for a comprehensive analysis of the factors driving criminality in this city.

The Human Development Index (HDI), unemployment rate, and economic growth are three major indicators believed to influence crime levels in Banjarmasin. Criminology theories suggest that high crime rates are often triggered by the socio-economic conditions of offenders (Miller, 2009). Therefore, this research is highly relevant in examining the impact of these three variables on crime rates in urban areas, particularly in Banjarmasin.

HDI measures human development in terms of three main aspects: health, education, and living standards. A high HDI is expected to reduce crime rates by improving people's quality of life. According to Amartya Sen's human development theory (1999), human development must focus on enhancing individuals' capabilities to achieve the lives they value. However, disparities in human development within a region can lead to social inequalities that potentially increase crime. In Banjarmasin, HDI has shown positive growth, from 77.16 in 2019 to 77.97 in 2022, with a projected increase to 79.05 by 2024, indicating continuous improvement in public welfare.

Unemployment is another critical factor strongly related to crime rates. Robert K. Merton's Strain Theory suggests that the mismatch between socially accepted goals and the means available to achieve them can create pressure that leads to deviant or criminal behavior (Merton, 2017). This is consistent with findings by Fachrurrozi et al. (2021), which show that unemployment positively influences crime across 34 Indonesian provinces between 2019 and 2022. High unemployment in Banjarmasin is therefore considered a key driver of its rising crime rate, as it affects both economic stability and social order.

Economic growth is also a crucial indicator for assessing overall economic dynamics. According to neoclassical theory, economic growth is driven by technology, capital, and labor (Öztürk, 2010), while Schumpeterian theory emphasizes the role of innovation and technological advancement as catalysts for sustainable development (Aghion & Festré, 2017). Several studies, such as those by Fajnzylber et al. (2002) and Brenner (1976), have revealed that economic growth significantly affects crime levels, both directly and through social factors.

Previous studies have explored the influence of HDI, unemployment, and economic growth on crime rates. For example, Jamaliah & Elyta (2022) found a negative correlation between HDI and crime, while Rahmalia et al. (2019) reported that unemployment and poverty have significant effects on crime levels. However, this study aims to fill the research gap by focusing on a specific

geographic scope—city-level analysis—and by examining the combined influence of the three macro variables to provide a more comprehensive understanding of the determinants of crime in Banjarmasin.

This research is expected to contribute to the formulation of crime prevention policies based on local data. By utilizing the latest and most comprehensive data, this study aims to develop an analytical model relevant to the socio-economic challenges in urban areas. Focusing on Banjarmasin allows this research to offer practical recommendations that can be implemented by local governments to reduce crime rates effectively.

METHOD

The type of data used in this study is secondary data in the form of time series data, which includes the Human Development Index (HDI), unemployment, economic growth, poverty, and crime rate for the period 2004–2024 in Banjarmasin City. The research applies a quantitative approach with multiple linear regression analysis to determine the influence of HDI, unemployment, and economic growth on crime rates in Banjarmasin. The multiple linear regression equation is as follows: $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$ Where Y represents the Crime Rate (%), β_0 is the constant value, β_1 , β_2 , and β_3 are regression coefficients, X_1 is the Human Development Index (HDI) (%), X_2 is Unemployment, X_3 is Economic Growth, and ε is the error term.

Classical Assumption Tests

Normality Test

The normality test is conducted to determine whether the data distribution is normal or not. The normality test is essential because, in parametric statistical analysis, one of the assumptions is that the data must be normally distributed (Ghozali, 2009). a. If the significance value > 0.05 , the data is normally distributed (H_0 is accepted). b. If the significance value < 0.05 , the data is not normally distributed (H_0 is rejected).

Multicollinearity Test

Multicollinearity can be detected through the tolerance value and variance inflation factor (VIF). These measures indicate whether any independent variable is explained by other independent variables. The common cutoff value is a tolerance of 0.10, equivalent to a VIF of 10 (Ghozali, 2009). If the tolerance is above 0.10 and the VIF is less than or equal to 10, it can be concluded that there is no multicollinearity.

Heteroscedasticity Test

The heteroscedasticity test aims to examine whether the variance of the error terms is constant across all values of the independent variables. A good regression model should have homoscedasticity (no heteroscedasticity). To detect heteroscedasticity, the Glejser test is used with the following decision rules: a. If the significance value ≥ 0.05 , there is no heteroscedasticity. b. If the significance value ≤ 0.05 , heteroscedasticity exists.

Autocorrelation Test

The autocorrelation test is conducted to determine whether there is a correlation between residual errors in period t and errors in period $t-1$ (previous period). If a correlation exists, it indicates an autocorrelation problem (Ghozali, 2009). The Durbin-Watson (DW) test is used with the following criteria:

1. If $DW < -2$, there is positive autocorrelation.
2. If DW is between -2 and $+2$, there is no autocorrelation.
3. If $DW > +2$, there is negative autocorrelation.

Hypothesis Testing

Hypothesis testing is carried out to determine whether the independent variables collectively explain the behavior of the dependent variable using the F-test. In addition to the overall effect, the t-test is used to examine the individual effect of each independent variable on the dependent variable (Purwanto, 2011). The hypothesis is constructed to evaluate the ability of the independent variables to influence the dependent variable. If the independent variables cannot affect the dependent variable, the regression coefficients (β_1 , β_2 , and β_3) would be equal to zero. Conversely, if β_1 , β_2 , and β_3 are not equal to zero, the independent variables are deemed to have a significant influence on the dependent variable.

RESULT AND DISCUSSION

Classic Assumption Test

Data Normality Test

Normality test is a data test that is carried out to see whether the data is distributed normally or vice versa. The data is said to be normally distributed if the difference between each observation that is above the observation average and one that is below the observer average, is relatively the same.

Table 1. Data Normality Testing Using Kolmogorov-Smirnov

		Unstandardized Residual
N		21
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	5.85811773
Most Extreme Differences	Absolute	.100
	Positive	.067
	Negative	-.100
Kolmogorov-Smirnov Z		.460
Asymp. Sig. (2-tailed)		.984

Source: SPSS Version 26 Results, Data Processed by Researchers in 2025

The results of the data distribution normality test showed a significance of $0.984 \geq$ from the alpha level of 0.05. Thus, H_0 is rejected and H_1 is accepted. This means that with the Kolmogorov-Smirnov Technique, the data distribution of all variables is normally distributed. These results make the data usable for testing multiple linear regression assumptions.

Multicollinearity Test

The problem of the classical assumption test lies not only in the relationship between data in one variable, but also in the relationship between independent variables. If two or more independent variables in the regression model have a close linear relationship, then the regression model can be said to experience symptoms of multicollinearity. A good regression model must be free from the symptoms of Multicollinearity. If multicollinearity is symptomatic, then the regression model becomes bad and several variables will produce similar parameters so that they can interfere with each other.

Table 2. Multicollinearity Testing

Model	Tolerance	VIF	Keterangan
X1	0,952	1,051	Tidak Terjadi Multikolinieritas
X2	0,965	1,036	Tidak Terjadi Multikolinieritas
X3	0,968	1,033	Tidak Terjadi Multikolinieritas

Source: SPSS Version 26 Results, Data Processed by Researchers in 2025

Multicollinearity testing was performed by comparing the VIF values of the model generated by multiple linear regression outputs. The measure is that if the VIF value is < 10 , then the model does not multicollinearity. The multicollinearity testing table of the variables of the Human Development Index (1.051), Open Unemployment (1.036), and Economic Growth (1.033) is below 10 ($VIF < 10$), thus this model does not symptomatic of multicollinearity.

Heteroscedasity Test

Heteroscedasity is a variance test of the residual value that is not the same from one observer to another. If the variant and value are the same between one observer and another, then this condition can be said to be Homokedasticity. A good multiple linear regression is in the position of Homokedasticity instead of Hetercococedasity. In this study, the Glejser Test test method was used.

Table 3. Heteroscedasity Testing

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	13,539	29,464		0,460	0,652
	X1	-0,134	0,372	-0,089	-0,361	0,723
	X2	0,086	0,515	0,041	0,167	0,869
	X3	0,080	0,467	0,042	0,171	0,866

Source: SPSS Version 26 Results, Data Processed by Researchers in 2025

The results of the heteroscedasity test using the Glejser teset method showed that all independent variables (HDI, Open Unemployment and Economic Growth) had no significant effect ($>$ of the value of α : 0.05) on the residual absolute variable. Thus, that the model is not symptomatic of heteroscedasity.

Autocorrelation Test

Autocorrelation testing was performed with a DW (Durbin Watson) value. The test indicators are based on the following criteria: (Santoso, 2019)

If D-W is below -2, it means that a positive autocorrelation occurs;

If D-W is between -2 to +2, then there is no autocorrelation;

If D-W is above +2, there is a negative autocorrelation.

Table 4. Autocorrelation Testing

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,865 ^a	0,747	0,703	6,35402	1,125

Source: SPSS Version 26 Results, Data Processed by Researchers in 2025

The results show that the Durbin Watson value (1.125) is between -2 to +2, thus the model does not autocorrelate so it can be decided that it does not violate the classical assumption test. Based on the decision to fulfill the classical assumptions of the regression model, namely the Normality, Multicollinearity, Heteroscedasticity, and Autocorrelation Tests have been met, thus, the results of the multiple linear regression model are results that are not constrained by statistical problems

Multiple Linear Regression

The function of the model formed to see the influence of independent variables (Human Development Index, Open Unemployment and Economic Growth on the Crime Rate in Banjarmasin City is as follows:

$$Y = -255.99 + 4.267 X_1 + 0.409 X_2 - 0.114 X_3$$

The interpretation of the results of multiple linear regression produced through SPSS work is as follows:

- The constant (β_0) of -255.99 indicates that the Crime Rate in Banjarmasin City is very low if a) the Human Development Index (HDI) is high; b) Low Open Unemployment, and c) High Economic Growth. That is, if the Human Development Index (HDI, open unemployment, and economic growth is 0 (which is practically unrealistic, but statistically this is the starting point of the model), then the crime rate is estimated to be -255.99.
- The Human Development Index (X_1) coefficient is 4.267 which has a positive relationship. This means that every 1% increase in the Human Development Index (HDI) is expected to increase crime cases in Banjarmasin City by 4.267% assuming other variables are considered fixed (*ceteris paribus*).
- The Open Unemployment Coefficient (X_2) of 0.469 has a positive relationship. This means that every 1% increase in Open Unemployment is expected to increase crime cases in Banjarmasin City by 0.469% assuming other variables are considered fixed (*ceteris paribus*).
- The Economic Growth Coefficient (X_3) is -0.114 which has a negative relationship. This means that every 1% increase in economic growth is expected to reduce crime cases in

Banjarmasin City by 0.114% assuming other variables are considered fixed (*ceteris paribus*).

The value of the determination coefficient (R^2) shows 0.747 which means a change in the variation in the Human Development Index (HDI), Open Unemployment and Economic Growth resulting in a change in Crime variation of 74.7%. In other words, only 25.3% of the change in the variation in the crime rate was caused by changes in variable variations outside the Human Development Index (HDI), open unemployment, and economic growth.

From the value of the correlation coefficient (R) shows an R value of 0.865 ($R > 0.5$), which means that the relationship between the Human Development Index (HDI), open unemployment, and economic growth to the crime rate in Banjarmasin City is very strong.

Table 5. Coefficient of Determination

R	R Square	Adjusted R	
		Square	Std. Error of the Estimate
0,865	0,747	0,703	6,35

Source: SPSS Version 26 Results, Data Processed by Researchers in 2025

Hypothesis Testing

T test (Partial)

The purpose of this significance test is to partially look at the influence of two or more independent variables on the non-independent variable in separately measuring the contribution arising from each independent variable to the dependent variable.

Table 6. Testing t-test (Partial test)

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	T	
1	(Constant)	-255.519	48.547		-5,263	0,000
	X1	4.267	.614	.869	6,952	0,000
	X2	.409	.849	.060	.481	0,636
	X3	-.114	.770	-.018	-.149	0,884

Source: SPSS Version 26 Results, Data Processed by Researchers in 2025

Based on the partial hypothesis test (t-test), it was shown that the Human Development Index had a positive and partially significant effect on the crime rate in Banjarmasin City with a significance value of 0.000 ($\text{Sig } t < \alpha 0.05$), while the variable of open unemployment had a positive and insignificant effect partially on the crime rate in Banjarmasin City, because it had a significance value of 0.636 ($\text{Sig } t > \alpha 0.05$). The economic growth variable also showed a significance value of 0.884 ($\text{Sig } t > \alpha 0.05$), meaning that it had a negative, but not partially significant effect on the crime rate in Banjarmasin City.

Overall, from partial testing (t-test) and the value of multiple linear regression coefficients, it shows that the Human Development Index (HDI) has a significance value of < 0.05 and a coefficient value (4.267) so that this variable is the most dominant in influencing the crime rate in Banjarmasin City when compared to the variables of open unemployment and economic growth.

F Test (Simultaneous)

The F test or Goodnes of Fit Test is a test of the feasibility hypothesis of the model or to test simultaneously the influence of independent variables on dependents. Simultaneous testing is said to be significant if the significance value is $< \alpha 0.05$.

Table 7. Simultaneous Testing (F Test)

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.030,879	3	676,960	16,767	0,000 ^a
	Residual	686,351	17	40,374		
	Total	2.717,230	20			

Source: SPSS Version 26 Results, Data Processed by Researchers in 2025

Annova's table shows that the F-calculated number (16.767) $>$ F-table (3.20) with a significance of 0.000 (Sig F $< \alpha 0.05$). This means that simultaneously independent variables (Human Development Index, open unemployment, and economic growth have a significant effect on dependent variables (crime rate) in Banjarmasin City. Thus, the resulting hypothesis, namely, H0 is rejected and H1 is accepted.

The Effect of the Human Development Index on Crime Rates

Based on the results of multiple linear regression, the significance value of HDI has a positive and partially significant effect on the crime rate in Banjarmasin City, but in terms of the findings of the model equation has a positive value so that it is contradictory to the theory, considering that the Human Development Index reflects an improvement in the quality of human life. A high Human Development Index (HDI) is expected to reduce the crime rate by improving the quality of life of the community.

The results of this study are also supported by several empirical studies that show that the value of the Human Development Index (HDI) coefficient has a positive and significant effect on the crime rate, namely research conducted by (Mubarok & Saepudin, 2023) shows that the Human Development Index (HDI) variable has a positive and significant effect on the crime rate. In addition, research conducted (Ristika et al., 2021) shows that the Human Development Index (HDI) has a positive and significant effect on the crime rate.

According to Amartya Sen's theory of human development, human development should be focused on improving the capabilities of individuals to achieve the life they deserve. (Sen, 1999). However, if inequality in a region occurs in human development, this will have an impact on social disparities that have the potential to increase crime. This is evidenced by data in the city of Banjarmasin which is more varied in the HDI Human Development Index from the 2004-2024 period, the difference in gap between regions can be one of the driving factors for the occurrence

of crime (high crime). This means that a good Human Development Index figure cannot necessarily reduce the number of crime cases.

The Effect of Open Unemployment on Crime Rates

Based on the results of the study through partial testing, it is shown that open unemployment has a positive value coefficient but does not have a significant effect on the crime rate in Banjarmasin City. This is contrary to the Theory of Crime Economics (Becker, 2009), which states that unemployment increases a person's likelihood of committing a crime due to the loss of official income potential.

This is also contrary to the debate of classical and Keynesian theories about unemployment which cannot actually be eliminated in dealing with the economy, because according to these two theories some of the bad consequences caused by unemployment in a country, including on individuals and society so that it will affect the stability of the surrounding community and the regional development of a country which will have a negative effect. For example, the increasing crime rate. (Kurihara, 1959).

Although, social and economic theories often associate unemployment and crime, in this context unemployment does not significantly affect the crime rate in the city of Banjarmasin. This can be due to the possibility of informal or semi-unemployed activities that can absorb labor and are not formally recorded as well as the social assistance provided by the government in soaking economic turmoil so that it will have an impact on reducing crime. This theory is strengthened by the Ecological Theory which reveals the causes of crime or crime in society caused by the human environment and the social environment, for example the soaring population, high population mobility, urbanization, and areas with high crime rates caused by slum settlements

The Effect of Economic Growth on Crime Rates

Based on the results of the regression model and partial testing, it is shown that economic growth has a negative value coefficient, which means that any increase in economic growth will have an impact on reducing the crime rate, but the results of the partial testing show that it does not significantly affect the crime rate in Banjarmasin City. The results show that economic growth supports the theory, but several things that cause economic growth do not affect the crime rate in Banjarmasin City. This is contradictory from several studies including (Fajnzylber et al., 2002) which states that economic growth has a strong influence on the high crime rate, then a literature review by (Brenner, 1976) provides that economic growth has an impact on the crime rate (social factors).

Schumpeter's theory provides the opinion that the increase in state income over time, its development is very unstable and the situation is determined by the magnitude of the possibility of carrying out the formation of profitable capital that will be carried out by entrepreneurs. This instability means that in the process of economic development, prosperity and depression will arise one after another. This theory is in accordance with the results of this study, which provides an

empirical study that economic growth does not significantly affect the variable crime rate in Banjarmasin City.

Renewal activities by entrepreneurs will increase people's income and increase consumption. The increase will encourage other companies to increase production levels and raise new capital. This theory is supported by the opinions of Harrod and Domar who emphasize the role of capital formation in creating economic growth. (Sukirno, 2000).

CONCLUSION

Based on the results of the study, the researcher can conclude that partially, the Human Development Index (HDI) has a positive and significant coefficient for the crime rate in Banjarmasin City. Every increase in HDI tends to experience an increase in crime. The results also show that the HDI variable is the most dominant independent variable affecting the crime rate in Banjarmasin City when viewed from the results of its significance and the value of the coefficient produced. Open unemployment has a positive coefficient, but it does not have a significant effect on the occurrence of crime rates in the city of Banjarmasin. Economic growth has a negative coefficient, but it does not have a significant effect on the occurrence of crime rates in the city of Banjarmasin. Simultaneous testing, the variables of the Human Development Index (HDI), open unemployment and economic growth together have a significant effect on the crime rate in Banjarmasin City.

For future research, it is recommended to expand the analysis by incorporating micro-level factors such as individual socio-economic backgrounds, psychological influences, or local cultural dynamics to provide a more holistic understanding of crime determinants. Additionally, comparative studies across multiple cities or regions could further validate the findings and enhance their generalizability for policy applications.

REFERENCE

- Aghion, P., & Festré, A. (2017). Schumpeterian growth theory, Schumpeter, and growth policy design. *Journal of Evolutionary Economics*, 27, 25–42.
- Anwary, I. (2022). Evaluation of the effectiveness of public administration policies in the development of stringent legal framework: An analysis of the criminal justice system in Indonesia. *International Journal of Criminal Justice Sciences*, 17(2), 312–323.
- Ardelia, A. S. (2023). Pengaruh indeks pembangunan manusia terhadap tingkat kriminalitas di kalimantan barat dalam kerangka ekonomi islam. *Jurnal muamalat indonesia-jmi*, 3(1).
- Becker, G. S. (2009). Human capital: A theoretical and empirical analysis, with special reference to education. University of Chicago press. [https://books.google.com/books?hl=id&lr=&id=9t69iICmrZ0C&oi=fnd&pg=PR9&dq=Becker,+G.+S.+\(1993\).+Human+Capital:+A+Theoretical+and+Empirical+Analysis,+with+Special+Reference+to+Education.+University+of+Chicago+Press.&ots=WzxvpVSyeT&sig=myXGdyySARLxB7-HNOB9x47WPjg](https://books.google.com/books?hl=id&lr=&id=9t69iICmrZ0C&oi=fnd&pg=PR9&dq=Becker,+G.+S.+(1993).+Human+Capital:+A+Theoretical+and+Empirical+Analysis,+with+Special+Reference+to+Education.+University+of+Chicago+Press.&ots=WzxvpVSyeT&sig=myXGdyySARLxB7-HNOB9x47WPjg)

- Brenner, M. H. (1976). Estimating the social costs of national economic policy: Implications for mental and physical health, and criminal aggression: A study prepared for the use of the joint economic committee, Congress of the United States (Issue 5). US Government Printing Office.
- Purwanto, S. (2011). Statistika untuk Ekonomi dan Keuangan Modern Edisi 2. Jakarta: Salemba Empat.
- Fachrurrozi, K., Fahmiwati, F., Hakim, L., Aswadi, A., & Lidiana, L. (2021). Pengaruh Kemiskinan dan Pengangguran Terhadap Kriminalitas di Indonesia Di Tahun 2019. *Jurnal Real Riset*, 3(2), 173–178.
- Fajnzylber, P., Lederman, D., & Loayza, N. (2002). What causes violent crime? *European Economic Review*, 46(7), 1323–1357.
- Ghozali, I. (2009). *Ekonometrika teori, konsep dan aplikasi dengan SPSS 17*. Semarang: Badan Penerbit Universitas Diponegoro, 50.
- Jamaliah, J., & Elyta, E. (2022). The Effect of Human Development Index (HDI) on Poverty and Crime in West Kalimantan, Indonesia. *Khazanah Sosial*, 4(1), 119–130.
- Kurihara, K. K. (1959). *The Keynesian theory of economic development*. Columbia University Press.
- Merton, R. K. (2017). Social structure and anomie. In *Gangs* (pp. 3–13). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781351157803-1/social-structure-anomie-robert-merton>
- Miller, J. M. (2009). *21st century criminology: A reference handbook* (Vol. 1). Sage.
- Mubarak, M. I. G. M., & Saepudin, T. (2023). Analisis Dampak Indikator Sosial Ekonomi Terhadap Tingkat Kriminalitas Pada 13 Kota Besar Di Indonesia Tahun 2015-2021: Studi Pada 13 Kota Besar di Indonesia Tahun 2015-2021. *Jurnal Riset Ilmu Ekonomi*, 3(2), 101–117.
- Öztürk, N. (2010). Klasik ve neoklasik iktisatta gelir bölüşümü. *Çalışma ve Toplum*, 1(24), 1–24.
- Purwanti, E. Y., & Widyaningsih, E. (2019). Analisis faktor ekonomi yang mempengaruhi kriminalitas di Jawa Timur. *Jurnal Ekonomi-QU*, 9(2).
- Rahmalia, S., Ariusni, A., & Triani, M. (2019). Pengaruh tingkat pendidikan, pengangguran, dan kemiskinan terhadap kriminalitas di Indonesia. *Jurnal Kajian Ekonomi Dan Pembangunan*, 1(1), 21–36.
- Ristika, E. D., Primandhana, W. P., & Wahed, M. (2021). Analisis Pengaruh Jumlah Penduduk, Tingkat Pengangguran Terbuka Dan Indeks Pembangunan Manusia Terhadap Tingkat Kemiskinan Di Provinsi Jawa Timur. *Eksis: Jurnal Ilmiah Ekonomi Dan Bisnis*, 12(2), 129–136.
- Santoso, S. (2019). *Mahir statistik parametrik*. Elex Media Komputindo. <https://books.google.com/books?hl=id&lr=&id=CTOyDwAAQBAJ&oi=fnd&pg=PP1&dq=santoso+2019+autokorelasi&ots=rHNC3tBztD&sig=fg9YKoGjKTV7yzPh5gVY91VsLLs>
- Sen, A. (1999). *Development as Freedom*: Oxford university Press. Oxford.

Sukirno, S. (2000). Ekonomi Pembangunan proses, masalah dan dasar kebijakan Pembangunan. UI-Press. Jakarta.