

The Influence of the Fed Rate and the Dow Jones Index on the Movement of the Composite Stock Price Index (IHSG) for the 2016-2025 Period

Vinasya Sholafa Ananda¹, Dina Novita²

¹²Pamulang University

Corresponding Author: vinasyasholafaananda@gmail.com

Article History:

Received : 17-08-2026

Revised : 21-08-2026

Accepted : 11-10-2026

Keywords: *Dow Jones Indices; Fed Interest Rates; Jakarta Composite Index*

Abstract: *This study aims to determine the effect of the Fed Rate and the Dow Jones Index on the movement of the Jakarta Composite Index (JCI) for the 2016-2025 period. This study uses a quantitative method with a saturated sampling technique, encompassing 10 years of reporting data on the Fed Rate, the Dow Jones Index, and the JCI. Data analysis techniques included classical assumption tests, regression analysis, correlation coefficients, coefficients of determination, and hypothesis testing. The results show that partially, the Fed Rate has a significant positive effect on the JCI with a coefficient of determination of 65.4% and a t-count of 2,442 > t-table 2,262. The Dow Jones Index also has a significant positive effect on the JCI with a coefficient of determination of 84.3% and a t-count of 4.425 > t-table 2.262. Simultaneously, the Fed Rate and the Dow Jones Index have a significant positive effect on the movement of the JCI with the regression equation $Y = 4051.111 + 127.109X_1 + 0.071X_2$. The simultaneous coefficient of determination is 76%, while the remaining 24% is influenced by other factors not examined in this study. The hypothesis test obtained an F-count > F-table (11,078 > 4,737). In conclusion, there is a significant effect of the Fed Rate and the Dow Jones Index on the movement of the Jakarta Composite Index.*

How to Cite: Vinasya Sholafa Ananda, Dina Novita. (2026). *The Influence of the Fed Rate and the Dow Jones Index on the Movement of the Composite Stock Price Index (IHSG) for the 2016-2025 Period*. 4(4). pp.18-28. <https://doi.org/10.61536/escalate.v4i4.721>



<https://doi.org/10.61536/escalate.v4i4.721>

This is an open-access article under the [CC-BY-SA License](#).



Introduction

Investment in the capital market plays a crucial role in supporting economic activity, but it is not free from various risks influenced by economic, political, and social conditions, as well as developments in global financial markets (Kurniasari et al., 2023). According to (Andhani, 2023), the extent of investment risk is highly dependent on the dynamics of

economic and non-economic conditions. In the era of globalization, the Indonesian capital market is increasingly integrated with international financial markets, so changes in the economic policies of developed countries, particularly the United States, can impact the domestic market. One important external factor is the monetary policy of the Federal Reserve (The Fed), through changes in the Fed Rate, which can influence capital flows and investor behavior in developing countries (Prasetyo et al., 2025)

Changes in the Fed Rate can theoretically affect the attractiveness of investment in emerging markets. When the Fed raises interest rates, investors tend to shift funds to US assets offering more attractive returns, potentially triggering capital outflows and putting downward pressure on the Jakarta Composite Index (JCI). Conversely, interest rate cuts can increase the attractiveness of emerging markets and encourage capital inflows. However, this relationship is not always consistent, as market responses are also influenced by economic fundamentals, domestic policies, exchange rates, and investor sentiment. Previous research has shown that the impact of US monetary policy on emerging markets can vary depending on the conditions and characteristics of each country (Apriyani et al., 2023); (Gunawan & Maharani, 2026).

In addition to the Fed Rate, developments in the US stock market, as represented by the Dow Jones Industrial Average (DJIA), are also external factors that have the potential to influence the JCI. A rise in the Dow Jones Industrial Average generally reflects investor optimism about the US economy and can increase risk appetite for global stock markets, including Indonesia. Conversely, a decline in the Dow Jones Industrial Average can increase investor concerns and trigger a sell-off in the stock market. However, the relationship between the US and Indonesian stock markets does not always follow the same pattern, as each market has different characteristics, policies, and fundamental conditions.

This phenomenon is evident in the data from the Fed Rate, Dow Jones, and the Jakarta Composite Index (JCI) for the 2016–2025 period, which indicates an inconsistency between theory and empirical conditions. In 2022, the Fed Rate rose sharply from 0.07% to 4.33%, but the JCI actually rose from 6,631.15 to 6,839.34. A similar situation occurred in 2023 when the Fed Rate was at a high level, but the JCI still rose to 7,207.94. Meanwhile, in 2024, the Dow Jones rose to 42,544.22, while the JCI actually decreased to 7,109.20. This phenomenon indicates an empirical gap because the theoretical relationship between the Fed Rate, Dow Jones, and the JCI does not always correspond to actual data movements.

The discrepancy between theory and empirical phenomena indicates that the influence of external factors on the JCI still requires further in-depth investigation. This research is important because understanding the influence of the Fed Rate and the Dow Jones Industrial Average can help investors anticipate changing market conditions and manage investment risks. Furthermore, the research findings can provide information for the government and financial market authorities in maintaining the stability of the Indonesian capital market amid increasing global financial integration. Therefore, this research aims to analyze the influence of the Fed Rate and the Dow Jones Industrial Average on the JCI, both partially and simultaneously, thereby providing empirical evidence regarding the Indonesian capital



market's response to changes in monetary policy and global stock market dynamics.

Research Methods

This study uses a quantitative approach with a causal associative research type that aims to analyze the influence of the Fed Rate and the Dow Jones Index on the Composite Stock Price Index (IHSG). The study uses secondary data in the form of annual time series for the period 2016–2025. The study was conducted online through relevant data sources, namely the Fed Rate data from the Federal Reserve/Macrotrends, Dow Jones Index data from Macrotrends, and IHSG data from the Indonesia Stock Exchange and Yahoo Finance. The study population includes all historical data of the Fed Rate, Dow Jones Index, and IHSG, while the sample was determined purposively based on available and complete annual data for the period 2016–2025, so that data is obtained in accordance with the research needs. Data collection was carried out through documentation studies by tracing, recording, and collecting secondary data from official websites and relevant financial publications.

Data analysis was conducted quantitatively using SPSS, beginning with classical assumption tests including normality, multicollinearity, autocorrelation, and heteroscedasticity tests to ensure the feasibility of the regression model. Next, a simple linear regression analysis was conducted to determine the effect of each independent variable on the JCI and multiple linear regression to test the simultaneous influence of the Fed Rate and the Dow Jones Index. The analysis was also supplemented with correlation coefficient and determination coefficient tests to determine the level of relationship and the magnitude of the independent variable's contribution to the JCI. Hypothesis testing was conducted through a t-test to determine partial effects and an F-test to determine simultaneous effects, with the significance level determined in the study.

Results and Discussion

Classical Assumption Test

1. Normality test

Table 1. Normality Test Results

One-Sample Kolmogorov-Smirnov Test			Unstandardiz ed Residual
N			10
Normal Parameters ^{a,b}	Mean		.0000000
	Standard Deviation		447.9411528
Most Extreme Differences	Absolute		.218
	Positive		.218
	Negative		-.174
Test Statistics			.218
Asymp. Sig. (2-tailed) ^c			.196
Monte Carlo Sig. (2-tailed) ^d	Sig.		.201
	99% Confidence Interval	Lower Bound	.190



Upper Bound	.211
-------------	------

a. Test distribution is Normal.

Based on Table 1, the Kolmogorov-Smirnov test significance value was 0.196. Because this value is greater than 0.05, it can be concluded that the residual values in this research's regression model are normally distributed, thus the normality assumption is met and the regression model is suitable for further hypothesis testing.

2. Multicollinearity Test

Table 2. Multicollinearity Test Results
Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta	t		Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	4051.111	659.591		6,142	.000	2491.427	5610.796					
THE FED RATE	127.109	105.314	.269	1,207	.267	-121.918	376,136	.654	.415	.224	.692	1,445
DOW JONES	.071	.023	.693	3.115	.017	.017	.125	.843	.762	.577	.692	1,445

a. Dependent Variable: IHSG

Source: Results of SPSS 27 data processing (2026).

Based on Table 2, both independent variables have a tolerance value of 0.692 (> 0.10) and a VIF value of 1.445 (< 10). Thus, it can be concluded that there is no multicollinearity symptom between the Fed Funds Rate (X1) and Dow Jones (X2) variables, so that both variables are suitable for use together in a multiple linear regression model.

3. Autocorrelation Test

Table 3. Autocorrelation Test Results
Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.872a	.760	.691	507.91753	.760	11,078	2	7	.007	1,801

a. Predictors: (Constant), DOWJONES, THE FED RATE

b. Dependent Variable: IHSG

Source: Results of SPSS 27 data processing (2026).

Based on Table 3, the Durbin-Watson value obtained is 1.801. This value is in the range of 1.550 - 2.460 as per the guidelines in Table 3.3, so it can be concluded that there are no symptoms of autocorrelation in this research regression model.

4. Heteroscedasticity Test

Table 4. Results of Heteroscedasticity Test

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	246,781	323,578		.763	.471
	THE FED RATE	8,635	51,664	.075	.167	.872
	DOWJONES	.003	.011	.124	.278	.789

a. Dependent Variable: ABS_RES

Source: Results of SPSS 27 data processing (2026).

According to (Novita, 2024) One way to detect the presence or absence of heteroscedasticity in a regression model is by looking at the scatterplot graph, namely if the plotting points are spread randomly, do not form a certain pattern and are not piled up in one place, then it can be concluded that there is no heteroscedasticity problem.

Multiple linear regression analysis

Table 5. Results of Multiple Linear Regression Analysis

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	4051.111	659,591		6,142	.000
	THE FED RATE	127,109	105,314	.269	1,207	.267
	DOWJONES	.071	.023	.693	3.115	.017

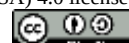
a. Dependent Variable: IHSG

Source: Results of SPSS 27 data processing (2026). Dependent variable: IHSG (Y).

Based on Table 5, the multiple linear regression equation is obtained as follows:

$$Y = 4,051.111 + 127.109 X_1 + 0.071 X_2 + \varepsilon$$

The regression equation can be interpreted as follows: (1) The constant value of 4,051.111 indicates that if the Fed Funds Rate (X_1) and Dow Jones (X_2) are constant or equal to zero, then the JCI is estimated to be at the level of 4,051.111 points; (2) The regression coefficient X_1 of 127.109 indicates that every 1 percent increase in the Fed Funds Rate will be followed by an increase in the JCI of 127.109 points assuming the Dow Jones variable is constant, but as will be explained in the hypothesis testing section, this effect is statistically insignificant; (3) The regression coefficient X_2 of 0.071 indicates that every 1 point increase in the Dow Jones Index will be followed by an increase in the JCI of 0.071 points assuming



the Fed Funds Rate variable is constant, and this effect is proven to be statistically significant.

Correlation Coefficient Analysis

Table 6. Overall Correlation Coefficient Test Results

Model Summary				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.872a	.760	.691	507.91753
a. Predictors: (Constant), DOWJONES, THE FED RATE				

Source: Results of SPSS 27 data processing (2026).

Based onThe results of the Model Summary test in Table 6 obtained a multiple correlation coefficient (R) value of 0.872, which shows that the Fed Rate and the Dow Jones Index together (simultaneously) have a very strong relationship with the movement of the Composite Stock Price Index (IHSG)..

Results of the Determination Coefficient Analysis

Table 7. Results of the Determination Coefficient Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.872a	.760	.691	507.91753
a. Predictors: (Constant), DOWJONES, THE FED RATE				

Source: Results of SPSS 27 data processing (2026).

The R Square value of 0.760 indicates that the Fed Funds Rate and Dow Jones explain 76% of the variation in the IHSG, while the remaining 24% is explained by other variables outside the research model.

Hypothesis Testing Results

1. Partial Hypothesis Test (t-Test)

Table 8. Results of the Partial T-Test of the Fed Rate (X1) Against the Stock Price Index (Y)

Coefficientsa					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	5936.723	378,502		.000
	THE FED RATE	309,163	126,588	.654	.040

a. Dependent Variable: IHSG

Source: Results of SPSS 27 data processing (2026).

The test results show a calculated t value of 2.442, which is greater than the t table of 2.365, with a significance value of 0.040, which is less than 0.05. Thus, H0 is rejected and Ha

is accepted, which means that partially, the Fed Funds Rate has a significant effect on the JCI in the 2016-2025 period.

Table 9. Results of the T-Test (Partial) of the Dow Jones Index (X2) Against the Stock Price Index (Y)

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	3853.402	656,912		5,866	.000
	DOWJONES	.087	.020	.843	4,425	.002

a. Dependent Variable: IHSG

Source: Results of SPSS 27 data processing (2026).

The test results show a calculated t value of 4.425, which is greater than the t table of 2.365, with a significance value of 0.02, which is less than 0.05. Thus, H₀ is rejected and H_a is accepted, which means that the Dow Jones Index has a significant and positive partial effect on the JCI in the 2016-2025 period.

2. Simultaneous Hypothesis Test (F Test)

Table 10. F-Test Results (Simultaneous)

		ANOVA			
Model		Sum of Squares	df	Mean Square	F
1	Regression	5715907.180	2	2857953.590	11,078
	Residual	1805861.488	7	257980.213	
	Total	7521768.668	9		

a. Dependent Variable: IHSG

b. Predictors: (Constant), DOWJONES, THE FED RATE

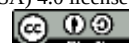
Source: Results of SPSS 27 data processing (2026).

Based on Table 10, the calculated F value is 11.078, which is greater than the F table value of 4.737, with a significance value of 0.007, which is less than 0.05. Thus, H₀ is rejected and H_a is accepted, which means that the Fed Funds Rate and Dow Jones simultaneously have a significant effect on the JCI in the 2016-2025 period.

Discussion

The Influence of the Fed Funds Rate on the JCI

Based on the results of partial hypothesis testing (t-test), the calculated t-value was 2.442, which is greater than the t-table value of 2.365, and the significance value was 0.040, which is smaller than the alpha standard of 0.05. These results indicate that H₀ is rejected and H_a is accepted, which means that the interest rate policy of the United States central bank (The Fed Rate) has been proven to have a significant influence on the movement of the Composite Stock Price Index (IHSG) during the 2016–2025 period. Judging from the direction of the relationship, the regression coefficient and correlation test show a positive value. This means there is a unidirectional relationship between the Fed Rate and the IHSG. In other words, when the Fed interest rate experiences an upward trend, the IHSG also tends to strengthen, and vice versa when the interest rate is lowered.



The results of this study are quite interesting because they reveal an anomaly vis-à-vis classical economic theory. Theoretically, a Fed interest rate hike typically triggers capital outflows from emerging markets (including Indonesia) back to the United States as investors seek risk-free instruments with high returns. Ideally, this situation would put downward pressure on the Jakarta Composite Index (JCI). However, the empirical findings in this study actually point to a positive trend. This positive anomaly can be explained by several fundamental economic conditions during the 2016–2025 period.

The Effects of Economic Recovery and the Commodity Supercycle.In 2022–2023, the Fed aggressively raised interest rates due to a heating global economy and high inflation following the COVID-19 pandemic. Simultaneously, global inflation triggered a surge in global commodity prices, including coal, nickel, and palm oil (CPO). As a major commodity exporter, Indonesia benefited significantly from this situation. Profits from major energy and mining companies on the Indonesia Stock Exchange surged, pushing the Jakarta Composite Index (JCI) to the 7,000-plus level, defying negative sentiment from the Fed's rate hike.

Fundamental Resilience of the Domestic Economy.The Fed rate hike did not immediately collapse the Indonesian capital market due to the very solid domestic macroeconomic resilience. Bank Indonesia has been able to keep domestic inflation under control, economic growth (GDP) has consistently grown at around 5%, and the trade balance has recorded consecutive surpluses. These solid fundamentals provide a high level of confidence for both foreign and domestic investors to maintain and expand their investment portfolios in the Indonesian stock market.

Effects of the COVID-19 Pandemic Crisis.This positive anomaly was also heavily influenced by data from 2020. At that time, the Fed drastically cut interest rates to near 0% to stimulate an economy that had been in a state of suspended animation due to the pandemic. At the same time (when the Fed's interest rates were very low), the Jakarta Composite Index (JCI) also plummeted to around 5,800 due to market panic and lockdown policies. This situation (low interest rates followed by a falling index) statistically strengthened the positive correlation calculation in the test.

Thus, it can be concluded that while the Fed Rate is a crucial global indicator, its impact on the Indonesian capital market (IHSG) is not always destructive. When interest rate adjustments are accompanied by strong domestic economic fundamentals and positive global commodity trends, the JCI can mitigate these pressures and instead continue its growth trend.

The Influence of the Dow Jones Index on the IHSG

Based on the results of partial hypothesis testing (t-test), the calculated t-value for the Dow Jones Index variable was 4.425, which is much greater than the t-table value of 2.365. In addition, the significance level obtained was 0.002 (smaller than alpha 0.05). These results indicate that H_0 is rejected and H_a is accepted, which means that the movement of the Dow Jones Index has been proven to have a positive and significant influence on the Composite Stock Price Index (IHSG) during the 2016–2025 period.

The positive direction of the relationship is evidenced by a regression coefficient of 0.071 and a very strong Pearson correlation coefficient of 0.843. This means that any strengthening (increase) in the US stock market (Wall Street) tends to be followed by strengthening in the Indonesian Composite Index (JCI), and the same applies to weakening. This strong, unidirectional influence is very logical and can be explained by several global capital market mechanisms:

1. Global Sentiment Contagion Effect.

The United States capital market is the largest and most influential financial market in the world. The Dow Jones Industrial Average (DJIA) is often considered a key barometer or "mecca" for economic health and the global investment climate. When the Dow Jones Industrial Average is in the green (rising), it reflects investor optimism about economic prospects and corporate profitability. This psychological optimism quickly spreads across borders to Asian stock exchanges, including the Indonesia Stock Exchange (IDX). Often, a positive close on Wall Street in the evening serves as a key driving sentiment for the JCI, which opens in the green the following morning (Hidayat & Wibowo, 2023).

2. Increasing Investor Risk Appetite.

An upward trend (rally) in the Dow Jones Index typically indicates that the global economy is in a positive expansion or recovery phase (as occurred post-pandemic in 2023–2025). In a stable and growing economy, global institutional investors have a higher risk appetite. They not only invest in developed markets but also begin diversifying and channeling capital into emerging markets like Indonesia in search of higher returns. This influx of foreign capital is the primary driver driving the JCI's upward movement.

3. Supply Chain Linkages and Global Trade.

The companies included in the Dow Jones Index are giant multinational corporations that drive the global economy. The positive performance of these companies indicates high production and consumption activity globally. Given that Indonesia is part of the global supply chain (primarily as a supplier of raw materials and commodities), improving economic activity in the US and other developed countries will directly boost demand for Indonesian exports. This ultimately increases the revenues of domestic issuers, reflected in the rising valuations of their shares on the Jakarta Composite Index (JCI).

Overall, this study confirms that the Indonesian capital market does not operate in a vacuum. The JCI's dependence and sensitivity to the Dow Jones Industrial Average demonstrates that global macroeconomic sentiment—particularly from the United States—remains a dominant external factor in driving the direction of the domestic stock market.

The Simultaneous Effect of the Dow Jones Index and the Fed Funds Rate on the JCI

The results of simultaneous hypothesis testing (F test) in Table 4.11 show that the calculated F value of 11.078 is greater than the F table of 4.737, with a significance value of 0.007 which is smaller than the significance level of 0.05. Thus, H_0 is rejected and H_a is accepted, which means that the Fed Funds Rate and the Dow Jones Index together (simultaneously) have a significant effect on the JCI in the 2016–2025 period.

This result is supported by the multiple correlation coefficient (R) value in Table 4.9 of 0.872 which shows a very strong relationship between the two independent variables and the



JCI, as well as the determination coefficient value (R Square) of 0.760 which means that 76.0% of the JCI variation during the research period can be explained jointly by the Fed Funds Rate and the Dow Jones Index, while the remaining 24.0% is explained by other factors outside this research model.

The significant contribution of these two variables indicates that the JCI movement cannot be separated from the dynamics of the global financial market, both as reflected in the direction of the United States Central Bank's monetary policy and through global stock market sentiment as represented by the Dow Jones Index. Meanwhile, the remaining 24.0% of variation that cannot be explained by the model is most likely influenced by domestic factors, such as the Bank Indonesia benchmark interest rate (BI Rate), inflation rate, rupiah exchange rate, domestic political conditions and fiscal policy, fundamental performance of issuers, and domestic investor sentiment that are not included in this research model.

Thus, it can be concluded that in addition to paying attention to global market movements as reflected by the Fed Funds Rate and Dow Jones, investors and policy makers in the Indonesian capital market still need to consider domestic macroeconomic factors in analyzing and formulating strategies related to the movement of the JCI.

Conclusion and Recommendation

This study found that the Dow Jones Index was positively and significantly associated with the Jakarta Composite Index (JCI) ($\beta = 0.071$; $p = 0.017$), whereas the Fed Rate did not show a statistically significant partial association with the JCI ($\beta = 127.109$; $p = 0.267$) in the multiple regression model. Simultaneously, the Fed Rate and Dow Jones Index were significantly associated with the JCI ($F = 11.078$; $p = 0.007$), with an R^2 of 0.760, indicating that the model explained 76.0% of the variation in the JCI during the observation period. These findings suggest that the Dow Jones Index provides relevant information for understanding JCI movements, while the role of the Fed Rate should be interpreted cautiously when the Dow Jones Index is considered in the same model. The results indicate statistical associations and do not establish causal relationships.

Investors are advised to consider global market developments alongside domestic economic conditions when making investment decisions. Future research should extend the observation period, use higher-frequency data such as monthly or daily observations, and include additional macroeconomic variables, such as exchange rates, inflation, and commodity prices, to provide a more comprehensive understanding of JCI movements.

References

- Andhani, D. (2023). *Pengaruh Tingkat Inflasi , Bi-7 Days Repo Rate , dan Nilai Tukar Usd / Kurs terhadap Indeks Harga Saham Gabungan*. 11(1), 85–96.
- Apriyani, R., Suharti, T., & Yudhawati, D. (2023). Pengaruh Inflasi, Kurs dan Suku Bunga terhadap IHSG di Bursa Efek Indonesia. *Jurnal Ilmiah Swara MaNajemen (Swara Mahasiswa Manajemen)*, 3(4), 768–778. <https://doi.org/10.32493/jism.v3i4.34399>
- Gunawan, I., & Maharani, S. (2026). Analisis Hubungan Prediktif Indeks Dow Jones



- Terhadap Volatilitas IHSG di Bursa Efek Indonesia. *Jurnal Riset Keuangan Multinasional*, 6(2), 50–65.
- Hidayat, T., & Wibowo, A. (2023). Dampak Inflasi, Nilai Tukar, dan Suku Bunga Domestik Terhadap Volatilitas IHSG. *E-Jurnal Ekonomi Dan Bisnis*, 11(3), 112–126.
- Kurniasari, C. C., Pratiwi, Y. E., & Lasianti, S. D. (2023). *Pengaruh Kenaikan Suku Bunga the Fed , Harga Minyak Dunia terhadap IHSG dalam Pergerakan Pasar Modal*. 7, 333–347.
- Novita, D. (2024). *Dampak Perputaran : Aktiva Tetap dan Piutang terhadap Return on Asset pada PT Unilever Indonesia , Tbk Periode 2007-2017*. 2(3), 120–128.
- Prasetyo, A. D., Soemitra, A., & Anggrain, T. (2025). *Analisis Pengaruh Nilai Tukar Rupiah , BI-Rate , dan Suku Bunga The Fed terhadap Indeks Harga Saham Gabungan (IHSG) di Bursa Efek Indonesia Periode 2020 – 2024*. 8(3), 360–370.
<https://doi.org/10.57178/paradoks.v8i3.1371>

