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THE INFLUENCE OF DJIA, BRENT CRUDE OIL PRICES, AND HSI ON THE INDONESIA COMPOSITE INDEX

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Abstract

The integration of global financial markets has increased the influence of international indicators on domestic stock markets. This study analyzes the effect of the Dow Jones Industrial Average (DJIA), Brent Crude Oil Price (BCOP), and Hang Seng Index (HSI) on the Indonesia Composite Index (IHSG) during January 2020–December 2024. A quantitative approach is used with monthly secondary data and analyzed using the Error Correction Model (ECM) to capture both short-run and long-run relationships. The results show that in the long run, DJIA and BCOP have a positive and significant effect on IHSG, while HSI has a negative and significant effect. In the short run, DJIA and BCOP remain significant, whereas HSI is not significant. The Error Correction Term (ECT) is significant, indicating long-run equilibrium. These findings highlight the importance of global financial indicators in influencing IHSG movements and provide insights for investors and policymakers.

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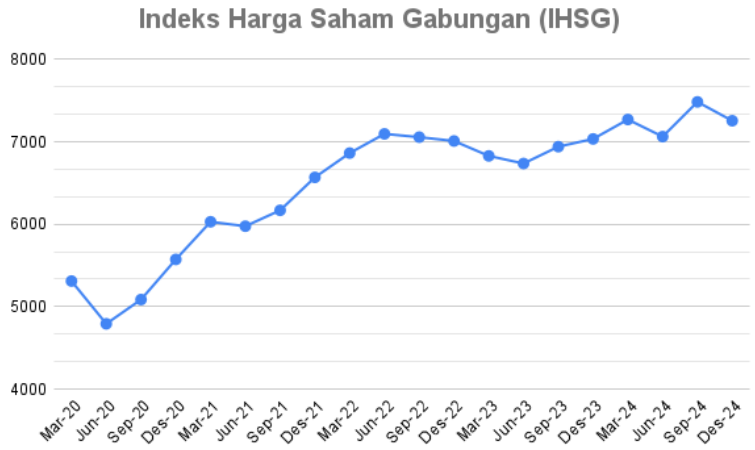
INTRODUCTION

The globalization of financial markets has intensified the degree of interdependence among national stock exchanges, particularly between developed and emerging economies. Capital mobility, technological advancement, and the rapid dissemination of information have accelerated the transmission of shocks across borders, reinforcing the concept of international capital market integration (Putri & Mandayanti, 2021; Rumawi, 2021). Within the framework of the Efficient Market Hypothesis (EMH), stock prices adjust quickly to all available information, whether domestic or global, thereby reflecting macroeconomic signals and international developments in real time (Rivary et al., 2022). However, in practice, financial markets do not always behave perfectly efficiently. The phenomenon of overreaction represents a form of market anomaly in which investors respond excessively to certain information or events, causing security prices to deviate significantly from their fundamental values in the short term before gradually returning to more rational levels (Oktaryani et al., 2026). Consequently, emerging markets such as Indonesia are increasingly influenced by movements in global stock indices and strategic commodity prices.

In the Indonesian context, capital market performance is reflected through the Composite Stock Price Index, which captures the overall movement of share prices of companies listed on the Indonesia Index (IDX). The IHSG functions as a broad economic barometer, representing the level of investor sentiment, macroeconomic conditions, and the financial performance of publicly traded firms (Basit & Haryono, 2021). Financial information disclosure also becomes an important signal regarding the company's condition and future prospects, which may influence investment decisions and provide insight into corporate performance (Putri et al., 2026). To minimize potential losses, investors generally conduct comprehensive analyses that encompass both financial and non-financial aspects when making investment decisions (Firdaus & Utami, 2026). As an emerging market index, IHSG is particularly sensitive to global financial turbulence due to Indonesia's increasing openness to international capital flows (Ash-Shiddiqy, 2025; Najibullah, 2023)

Figure 1 illustrates the historical movement of IHSG during 2020–2024. Figure 1 illustrates that the index underwent a substantial contraction at the beginning of 2020 as a consequence of the COVID-19 outbreak. This downturn was subsequently followed by a progressive recovery phase and a pronounced upward trajectory throughout 2021–2023, before transitioning into a correction period in 2024. The fluctuations shown in Figure 1 indicate the complex interplay between domestic macroeconomic revitalization and developments in the global financial environment. These dynamics reinforce the view that Indonesia's capital market is closely linked to international financial systems and remains vulnerable to external economic disturbances (Sunarso et al., 2025; Warkawani et al., 2020).

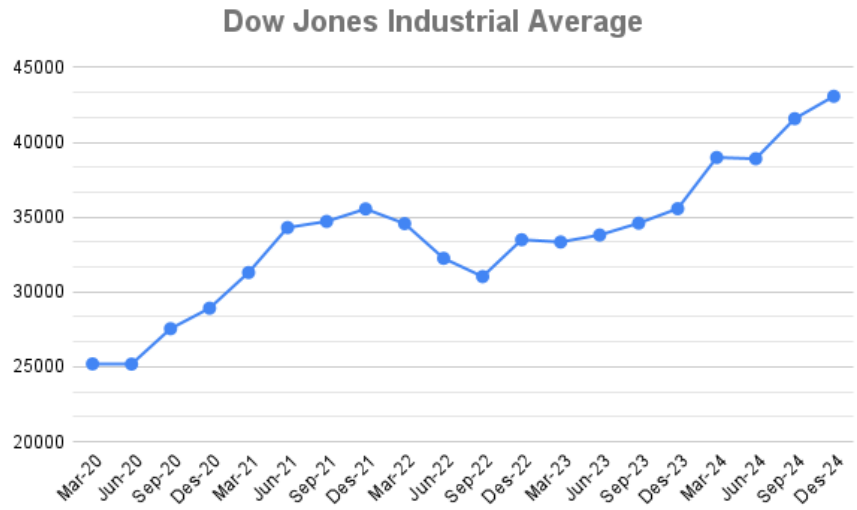


Source: Data processed (2025)

Figure 1. IHSG Movement, 2020–2024

Based on historical data for the 2020-2024 period, the IHSG experienced significant fluctuations. As depicted in Figure 1, the graphical trend demonstrates a pronounced contraction in 2020 triggered by the COVID-19 crisis. This downturn was followed by a steady rebound, during which the index exceeded the 7,000 threeshold, before eventually entering a phase of moderate adjustment. At the beginning of 2020, the index faced substantial pressure triggered by the global health crisis. Subsequently, it demonstrated a strong recovery trend through 2023, before undergoing adjustment again in 2024. This pattern indicates that the IHSG is highly responsive to global dynamics and external macroeconomic shocks (Sunarso et al., 2025; Warkawani et al., 2020).

One of the most influential global benchmarks affecting emerging markets is the Dowjown index DJIA). The Dowjones index comprises 30 major publicly listed companies in the United States and is commonly recognized as a key indicator of overall market conditions and economic performance in the country economy and global investor sentiment (Investopedia, 2024). Due to the dominant role of the United States in the global financial system, changes in DJIA often trigger cross-border capital reallocations and influence investor risk appetite in emerging markets (Hany et al., 2025; Shelly Midesia, 2022). Figure 2 presents the historical movement of DJIA during 2020-2024.

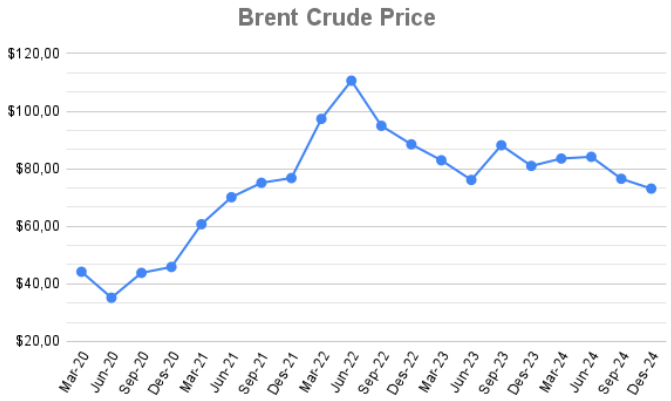


Source: Data processed, 2025

Figure 2. DJIA Movement, 2020–2024

Historical data from 2020–2024 show that the DJIA exhibited fluctuating yet generally increasing trends. As presented in Figure 2, the line graph demonstrates a contraction in early 2020 due to the pandemic, followed by steady recovery, reaching approximately 43,000 points by the end of 2024. This pattern reflects the strengthening of the United States economy, which may influence global investor sentiment and capital flows toward emerging markets such as Indonesia (Beureukat & Andriani, 2021; Sopiyah et al., 2025). Empirical findings by (Shelly Midesia, 2022) further confirm that DJIA exerts a positive and significant influence on IHSG, indicating strong financial integration.

Beyond stock indices, global commodity prices particularly oil play a crucial role in capital market movements. As an energy-importing country, Indonesia is sensitive to international oil price fluctuations. The Brent Crude Oil price serves as a global benchmark, especially in Europe and Asia (Rasyidin et al., 2023). Oil price changes affect inflation, exchange rates, corporate production costs, and profitability, thereby influencing stock valuations (Nurlela et al., 2023; Wardhani & Titah, 2021). Figure 3 presents the historical movement of Brent Crude Oil prices during 2020–2024.

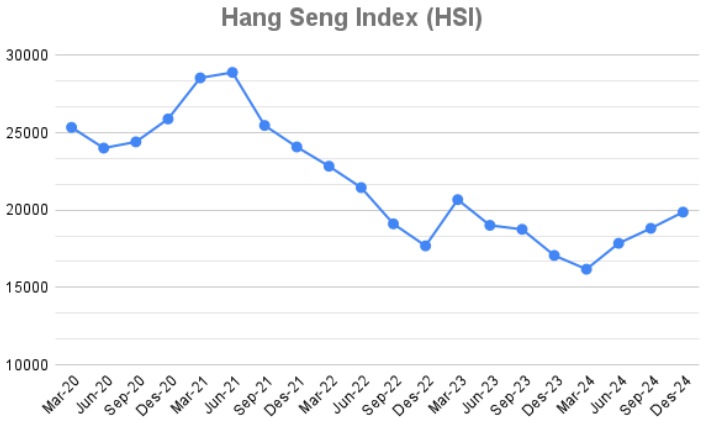


Source: Data processed, 2025

Figure 3. Brent Crude Oil Price Movement, 2020–2024

Based on historical data during 2020-2024, Brent Oil exhibited substantial volatility. As presented in Figure 3, the line graph shows a decline in 2020 due to global economic contraction, followed by a significant surge in 2022, reaching approximately USD 110 per barrel, before stabilizing within the range of USD 70-85 per barrel during 2023-2024. This dynamic reflects global economic and geopolitical uncertainty that can influence financial markets. Empirical studies by (Pramesthi et al., 2024; Agustirani, 2024; Sari & Purnamawati, 2024; Tio et al., 2024) confirm that global oil prices significantly affect IHSG, both in the short and long term.

In addition to the U.S. market, regional Asian markets also play a strategic role in influencing IHSG. The Hang Seng Index (HSI) reflects the market performance of leading firms traded on the Hong Kong Stock Exchange and serves as an important benchmark for assessing economic dynamics across the East Asian region (Beureukat & Andriani, 2021). As Hong Kong is a major international financial hub, fluctuations in HSI may generate spillover effects across Asian capital markets. Figure 4 presents the historical movement of HSI during 2020-2024.



Source: Data processed, 2025

Figure 4. HSI Movement, 2020–2024

Historical data from 2020-2024 indicate that the HSI experienced considerable volatility. As illustrated in Figure 4, the line graph shows an increase in 2021, followed by a significant decline in 2022 to around 17,000 points, and a gradual recovery approaching 20,000 points by the end of 2024. This pattern reflects regional economic dynamics in Asia that also influence regional capital markets. According to (Najibullah, 2023; Sunarso et al., 2025), volatility in major Asian indices may affect IHSG through regional portfolio rebalancing and investor sentiment transmission.

Although previous studies have examined the influence of DJIA, HSI, and oil prices separately, comprehensive analysis of these three global determinants simultaneously particularly during the 2020-2024 period marked by pandemic recovery, global inflationary pressures, and geopolitical instability-remains limited (Rasyidin et al., 2023; Sopiyah et al., 2025). Considering Indonesia's increasing integration with global financial markets, investigating the combined impact of DJIA, brent oil and HSI on IHSG is essential to better understand international capital market integration dynamics.

Drawing upon the observed empirical developments and the existing gap in the literature, this study seeks to examine the impact of the Dowjones Index (DJIA), Brent Oil, and the Hangseng Index (HSI) on the Indonesia Composite Index recorded on the Indonesia Indeks (IDX) over the 2020–2024 timeframe. The findings are anticipated to enrich empirical discourse concerning global capital market integration, while also offering practical insights for investors and policymakers in designing strategies to maintain market resilience amid heightened global economic uncertainty.

H_1: The Dowjones index, Brent oil prices, and the Hangseng Index are jointly demonstrated to exert a statistically significant influence on the Indonesia Index.

H_2: The Dowjones Index is found to exert a statistically significant partial influence on the Indonesia Index.

H_3: Brent oil prices are empirically shown to exert a statistically significant partial effect on the Indonesia Index.

H_4: The Hangseng Index is empirically evidenced to exert a statistically significant partial influence on the Indonesia Index.

RESEARCH METHOD

This investigation is designed as an associative study that applies a quantitative framework to analyze the linkage and impact of international market indicators on the Indonesia Composite Index. The quantitative orientation is selected to ensure that causal relationships among variables can be assessed in an objective, structured, and statistically verifiable manner. The empirical scope concentrates on the Indonesian capital market environment, while integrating external influences derived from the United States and Hong Kong financial markets. The analytical horizon spans from January 2020 until December 2024.

The population encompasses all monthly time-series observations of the Dowjones Index (DJIA), Hangseng Index (HSI), Brent Oil, and the Indonesian Stock Indeks recorded within the five-year timeframe. This interval produced 60 monthly data points for each variable. Referring to Sugiyono (2023), purposive sampling is categorized as a non-probability sampling technique in which predetermined criteria are intentionally established to ensure that the selected analytical units align with the research objectives. In the present study, this method is employed to determine the relevant dataset, namely monthly observations of the Dowjones Index (DJIA), Brent Oil Prices, Hangseng Index (HSI), and the Indonesia Indeks (IHSG) for the period January 2020 to December 2024. The selection criteria stipulate that each variable must be officially published, consistently available, and complete without missing observations during the specified timeframe. By applying these standards, the dataset is expected to accurately capture the influence of global indicators on IHSG fluctuations in a systematic and measurable manner. Furthermore, a saturated sampling approach was adopted, whereby the entire population of available observations was included in the sample, yielding 60 consecutive time-series data points for each variable.

The data utilized were secondary data in the form of monthly closing index values and commodity prices. Data on the DJIA, HSI, and Brent Oil were obtained from the Investing.com financial data platform, while IHSG data were collected from official publications of the Indonesian Stock Index. Data collection was conducted using documentation techniques, including data retrieval, recording,

verification, and compilation from verified sources. The verification process involved cross checking consistency across periods and ensuring the absence of missing values.

The dependent variable was IHSG, measured using its monthly closing index value expressed in index points. The independent variables consisted of DJIA and HSI, measured by their respective monthly closing index values in index points, and Brent Oil, measured in U.S. Dollars per barrel based on monthly closing prices. Variable measurement was conducted comparatively by observing inter-period changes and assessing linear relationships among variables within the regression model.

Data analysis uses a time-series econometric approach with the Error Correction Model (ECM) to examine both short-run and long-run relationships among variables. Prior to ECM estimation, a stationarity test is conducted using the Augmented Dickey-Fuller (ADF) test at the level and first difference. The results indicate that all variables are non-stationary at level but become stationary at first difference, meaning they are integrated of order one (I(1)).

After confirming stationarity, a cointegration test is conducted through the residual-based approach. The results show that the Error Correction Term (ECT) is stationary and significant, indicating the existence of a long-run equilibrium relationship among variables. The general long-run equation model in this study is formulated as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \quad \text{(1)}$$

The Error Correction Model (ECM) equation is formulated as follows:

$$\Delta Y_t = \beta_0 + \beta_1 \Delta X_{1t} + \beta_2 \Delta X_{2t} + \beta_3 \Delta X_{3t} + \lambda ETC_{t-1} - 1 + \varepsilon_t \quad \text{(2)}$$

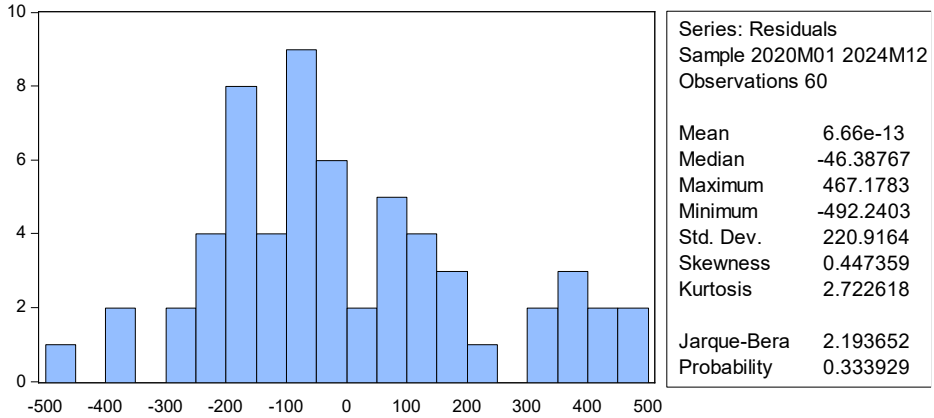
Where Δ denotes the first difference operator, ECT represents the error correction term derived from the long-run equation, and λ indicates the speed of adjustment toward long-run equilibrium. The ECM approach allows the analysis of short-term dynamics through differenced variables and long-term relationships through the ECT. In this study, the ECT coefficient is found to be significant, indicating the existence of a long-run relationship, although the positive coefficient suggests a slower or non-converging adjustment process.

To ensure the validity of the model, classical assumption tests are conducted, including normality, multicollinearity, heteroskedasticity, and autocorrelation tests. The results indicate that the data are normally distributed, free from multicollinearity and heteroskedasticity, but exhibit autocorrelation. Hypothesis testing is carried out using the t-test to examine partial effects and the F-test to evaluate the simultaneous influence of independent variables. The coefficient of determination (R^2) is used to measure the explanatory power of the model. All analyses are performed using standard econometric procedures commonly applied in financial research.

RESULTS AND DISCUSSION

This study examines the effect of the Dowjones Index (DJIA), Brent Crude Oil Price (BCOP), and Hangseng Index (HSI) on the Indonesian Stock Index (IHSG) during the period of January 2020 to December 2024, comprising 60 monthly observations. The data employed are secondary data obtained from official sources and international financial data platforms, while IHSG data were collected from publications of the.

Before the model is used to determine the effect of independent variables on the dependent variable and to ensure the model is valid, classical assumption tests are conducted on the data. The first classical assumption test performed is a normality test using the Jarque-Bera (JB) statistic, as follows:



Source: Data processed , 2025

Figure 5. Normality Test Results

The results of the normality test yielded a Jarque-Bera statistic of 2.193 with a probability value of 0.333. The calculated J-B probability value of 0.333 is greater than the alpha level of 0.05 (5 percent), so it can be concluded that the data residuals are normally distributed.

Table 1.
Heteroskedasticity Test Results

Heteroskedasticity Test: Glejser Null hypothesis : Homoskedasticity			
F-statistic	2.258	Prob. F (3,56)	0.091
Obs*R-squared	6.476	Prob. Chi-Square (3)	0.090
Scaled explained SS	5.916	Prob. Chi-Square (3)	0.115

Source: Data processed, 2026

The heteroscedasticity test using the Glejser method in EViews shows that the Prob. F-statistic is 0.091, the Prob. Chi-Square (Obs*R-squared) is 0.090, and the Prob. Chi-Square (Scaled explained SS) of 0.115, all of which are greater than the significance level of 0.05 (5 percent). Thus, H_0 is not rejected, so it can be concluded that the regression model does not exhibit heteroscedasticity (it is homoscedastic), meaning that the error variance is constant and the model has satisfied one of the classical assumptions.

Table 2.
Autocorrelation Test Results

Breusch-Godfrey Serial Correlation LM Test: Null hypothesis : No serial correlation at up to 2 lags			
F-statistic	0.139	Prob. F (2,53)	0.869
Obs*R-squared	0.309	Prob. Chi-Square (2)	0.856

Source: Data processed, 2026

The autocorrelation test using the Breusch-Godfrey Serial Correlation LM Test shows that the Prob. F-statistic is 0.004 and the Prob. Chi-Square (Obs*R-squared) is 0.005, both of which are smaller than the significance level of 0.05 (5 percent). Thus, H_0 is rejected, so it can be concluded that the regression model exhibits autocorrelation, meaning there is correlation among the residuals at several lags (up to the second lag), so the model does not meet the classical assumption of no autocorrelation.

Table 3.
Multicollinearity Test Results

Variance Inflation Factors Sample: 2020M01 2024M12 Included observations: 60			
Variable	**Coefficient Variance**	**Uncentered VIF**	**Centered VIF**
C	138356.1	161.446	NA
DJIA	5.70E-05	76.932	1.524376
BCOP	3.511271	24.206	1.608372
HIS	8.1163-05	46.713	1.426041

Source: Data processed , 2026

The results of the multicollinearity test using the Variance Inflation Factor (VIF) show that the Centered VIF values for the DJIA (1.524), BCOP (1.608), and HSI (1.426) variables are all well below the general threshold of 10 (and even below 5). This means there is no multicollinearity issue in the model, so the independent variables do not have high correlations with one another. Thus, the regression model can be said to satisfy the classical assumption regarding the absence of multicollinearity, and the coefficient estimates are reliable.

The stationarity test, also known as a unit root test, is conducted to determine whether the data is stationary at the original level, the first difference, or the second difference. This test uses the Augmented Dickey-Fuller (ADF) method, with the criterion that the test statistic must be greater (in absolute value) than the critical value. If the data is not stationary at the level, the test proceeds to the first difference, and if it is still not stationary, it proceeds to the second difference. Based on the test results at a 5 percent significance level, all variables in this study were found to be stationary at the first-difference level.

Table 4.
Stationarity Test Results

Null Hypothesis: D(DJIA) D(BCOP) D(HSI) D(IHSG) Exogenous: Constant Lag Length: 0 (Automatic – based on SIC, maxlag=10)		
Stationarity Test at Level		
Method	**t-Statistic**	**Prob.***
ADF – DJIA	-0.893	0.783
ADF – BCOP	-1.422	0.565
ADF – HIS	-1.564	0.494
ADF – IHSG	-1.127	0.699
1st Difference Levels		
Method	**t-Statistic**	**Prob.***
ADF – DJIA	-9.079	0.000
ADF – BCOP	-6.535	0.000
ADF – HIS	-8.044	0.000
ADF – IHSG	-6.945	0.000

Source: Data processed ,2026

The ADF test results indicate that all variables are non-stationary at the original level but become stationary at the first-difference level. Thus, all variables are integrated of order one (I(1)).

The error correction model (ECM) in quantitative econometric analysis is a testing method that can be used to identify equilibrium models and relationships between variables in the short and long run. For the error correction model (ECM) to be valid, the error correction term (ECT) coefficients must be significant. The following are the results of the error correction term (ECT) coefficients from the regression model residuals:

Table 5.
error correction term (ECT)

Null Hypothesis: ECT has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic – based on SIC, maxlag=10)				
Stationarity Test at Level				
			t-Statistic	**Prob.***
ADF – Fuller test statistic			-3.675	0.007
Test critical values:	1% level		-3.546	
	5% level		-2.911	
	10% level		-2.593	
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(ECT)				
Mwthod: Least Squares				
Sample (adjusted): 2020M02 2024M12				
Included observation: 59 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.***
ECT (-1)	-0.362	0.098	-3.675	0.005
C	0.224	0.892	0.251	0.802

Source: Data processed , 2026

The results of the residual series estimation and unit root tests on the Error Correction Term (ECT) show an Augmented Dickey-Fuller t-statistic of -3.675 with a probability value of 0.007, and the ECT (-1) variable has a coefficient of -0.362 and a probability value of 0.005. Therefore, it can be concluded that the value of the Error Correction Term (ECT) is less than 0.05 (5 percent) and is significant.

Table 6.
Long-Run Equation

Dependent Variable: IHSG				
Method: Least Squares				
Sample : 2020M02 2024M12				
Included observation: 60				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.***
DJIA	0.072	0.007	9.583	0.000
BCOP	20.005	1.873	10.676	0.000
HIS	-0.046	0.009	-5.173	0.000
C	3602.966	371.962	9.686	0.000

Source: Data processed, 2026

From the results above, the long-run regression equation for the effect of DJIA, BCOP, and HSI on the IHSG is obtained as follows:

IHSG=3602,966+0,072342DJIA+20,00588BCOP−0,046750HSI+e

The results show that, in the long run, the DJIA and BCOP variables have a positive effect on the IHSG, meaning that any increase in the DJIA and BCOP will raise the IHSG, while the HSI has a negative effect on the IHSG, meaning that any increase in the HSI will actually lower the IHSG. Furthermore, all independent variables were found to have a significant effect on the IHSG, both individually and collectively.

Table 7.
Short-Run Equation (ECM)

Dependent Variable: D(IHSG)
Method: Least Squares
Sample (adjusted) : 2020M02 2024M12
Included observation: 59 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
D(DJIA)	0.044	0.015	2.909	0.005
D(BCOP)	15.249	3.669	4.155	0.001
D(HSI)	0.0.265	0.017	1.553	0.126
ETC(-1)	10.457	2.535	4.124	0.001
C	6.515	22.779	0.286	0.775

Source: Data processed, 2026

From the results above, the short-term regression equation for the effects of the DJIA, BCOP, and HSI on the IHSG is as follows:

D(IHSGt) = 6.515 + 0.044 (D(DJIA)) + 15.249 (D(BCOP)) + 0.265 (D(HSI)) + 10.457 (ECT-1)

The results show that, in the short term, the variables D(DJIA) and D(BCOP) have a positive and significant effect on changes in the IHSG, with probability values of 0.0052 and 0.0001, respectively (<0.05). Meanwhile, D(HSI) has a positive but insignificant effect (Prob = 0.1262), so changes in the HSI do not have a significant impact on the IHSG in the short term. The variable ECT(-1) has a positive and significant effect (Prob = 0.0001), indicating the presence of an adjustment mechanism toward long-term equilibrium, although the positive direction of the coefficient suggests a non-convergent adjustment process. The constant is not significant (Prob = 0.7759), so it has no significant influence in the model.

Table 8.
(F-Test)

Long-Run Equation			
R-squared	0.924	Mean dependent var	6508.863
Adjusted R-squared	0.920	S.D. dependent var	804.864
S.E. of regression	226.756	Akaike info criterion	13.749
Sum squared resid	2879438.	Schwarz criterion	13.889
Log likelihood	-408.499	Hannan-Quinn criter	13.804
F-statistic	229.107	Durbin-Watson stat	0.969
Prob(F-statistic)	0.000		
Short-Run Equation			
R-squared	0.518	Mean dependent var	19.319
Adjusted R-squared	0.483	S.D. dependent var	238.937
S.E. of regression	171.749	Akaike info criterion	13.210
Sum squared resid	1592893	Schwarz criterion	13.386
Log likelihood	-384.721	Hannan-Quinn criter	13.279
F-statistic	14.563	Durbin-Watson stat	1.825
Prob(F-statistic)	0.000		

Source: Data processed, 2026

Based on the results of the F-test on the presented data, it is known that in the long-run equation, the F-statistic value is 229.107 with a Prob(F-statistic) of 0.000 (< 0.05). This indicates that the independent variables (DJIA, BCOP, and HSI) simultaneously or jointly have a significant effect on the IHSG in the long run, in accordance with the criterion where the probability value is less than 0.05. Meanwhile, in the short-run equation, the F-statistic value is 14.563 with a Prob(F-statistic) of 0.000 (< 0.05), which also shows that the independent variables jointly have a significant effect on changes in the IHSG in the short run. Thus, it can be concluded that both in the long run and the short run, the variables DJIA, BCOP, and HSI simultaneously have a significant influence on the IHSG.

Table 9.
t-Test

Long-Run Equation				
Dependent Variable: IHSG				
Method: Least Squares				
Included observation: 60				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.***
DJIA	0.072	0.007	9.583	0.000
BCOP	20.005	1.873	10.676	0.000
HIS	-0.046	0.009	-5.173	0.000
C	3602.966	371.962	9.686	0.000
Short-Run Equation				
Dependent Variable: D(IHSG)				
Method: Least Squares				
Included observation: 59 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.***
D(DJIA)	0.044	0.015	2.909	0.005
D(BCOP)	15.249	3.669	4.155	0.001
D(HSI)	0.0.265	0.017	1.553	0.126
ETC(-1)	10.457	2.535	4.124	0.001
C	6.515	22.779	0.286	0.775

Source: Data processed, 2026

Based on the results of the t-test, in the long run all independent variables DJIA, BCOP, and HSI have probability values of 0.000 (<0.05), indicating that all three variables have a significant partial effect on the IHSG. DJIA and BCOP have a positive effect, while HSI has a negative effect. Meanwhile, in the short run, the variables D(DJIA) and D(BCOP) have a positive and significant effect on changes in the IHSG, as indicated by their respective probability values of 0.005 and 0.001 (<0.05), whereas D(HSI) does not have a significant effect (Prob = 0.126). In addition, the ECT(-1) variable is significant (Prob = 0.001), indicating the presence of an adjustment mechanism toward long-run equilibrium, while the constant is not significant (Prob = 0.775), meaning it does not have a meaningful effect in the short-run model.

Table 10.
R Square Test

Long-Run Equation			
R-squared	0.924	Mean dependent var	6508.863
Adjusted R-squared	0.920	S.D. dependent var	804.864
S.E. of regression	226.756	Akaike info criterion	13.749
Sum squared resid	2879438.	Schwarz criterion	13.889
Log likelihood	-408.499	Hannan-Quinn criter	13.804
F-statistic	229.107	Durbin-Watson stat	0.969
Prob(F-statistic)	0.000		
Short-Run Equation			
R-squared	0.518	Mean dependent var	19.319
Adjusted R-squared	0.483	S.D. dependent var	238.937
S.E. of regression	171.749	Akaike info criterion	13.210
Sum squared resid	1592893	Schwarz criterion	13.386
Log likelihood	-384.721	Hannan-Quinn criter	13.279
F-statistic	14.563	Durbin-Watson stat	1.825
Prob(F-statistic)	0.000		

Source: Data processed, 2026

The coefficient of determination (R^2) in the long-run equation is 0.924, indicating that approximately 92.46 percent of the variation in the IHSG can be explained by the independent variables,

namely DJIA, BCOP, and HSI, while the remaining 7.54 percent is explained by other factors outside the model. The high Adjusted R-squared value (0.920) also indicates that the model has very strong explanatory power. Meanwhile, in the short run, the R^2 value of 0.518 indicates that approximately 51.89 percent of the variation in changes in the IHSG can be explained by the variables in the model, while the remaining 48.11 percent is influenced by other factors outside the model. The Adjusted R-squared value of 0.483 suggests that the model's ability to explain the dependent variable in the short run is moderate.

CONCLUSIONS AND SUGGESTIONS

Based on the results of this study, it can be concluded that the Dow Jones Index (DJIA), Brent Crude Oil Price (BCOP), and Hang Seng Index (HSI) both simultaneously and partially influence the Indonesian Stock Index (IHSG) during the 2020–2024 period. In the long run, all variables significantly affect IHSG, where DJIA and BCOP have a positive effect, while HSI has a negative effect. In the short run, only DJIA and BCOP have a significant positive effect, whereas HSI does not show a significant impact. These findings indicate that global stock market performance and international commodity price movements play an important role in influencing Indonesia's capital market dynamics. The significant Error Correction Term (ECT) also confirms the existence of a long-term equilibrium relationship, although the adjustment process tends to be slow. Overall, the results support the hypothesis that international financial indicators are crucial in explaining IHSG movements.

Despite these findings, this study has several limitations, including the relatively short observation period and the limited number of independent variables used. Therefore, future research is recommended to extend the observation period and include additional macroeconomic variables such as exchange rates, interest rates, inflation, or other global indices to obtain more comprehensive results. In addition, further studies are suggested to address econometric issues such as autocorrelation by applying more advanced modeling techniques, in order to improve the robustness and accuracy of the analysis and to enrich the literature on global financial integration and its impact on emerging capital markets like Indonesia.

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