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International Coffee Prices, Exchange Rates, and Coffee Export Volume in Indonesia

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ABSTRACT
Purpose: This study examines the development of international coffee prices, the rupiah exchange rate, and coffee export volume in Indonesia. It also investigates the effects of international coffee prices and the rupiah exchange rate on Indonesia's coffee export volume.
Design/Methodology/Approach: This study employs a quantitative approach using secondary time-series data covering the period from 1995 to 2024. The data were obtained from the Central Statistics Agency of Indonesia (BPS), the Ministry of Agriculture of the Republic of Indonesia, and the World Bank. The data were analyzed using multiple linear regression, supported by classical assumption tests and partial and simultaneous significance tests.
Findings: The findings indicate that international coffee prices and the rupiah exchange rate jointly influence Indonesia's coffee export volume. However, their individual effects differ. The rupiah exchange rate has a significant effect on coffee export volume, whereas international coffee prices show a negative but statistically insignificant effect. These findings suggest that exchange rate movements play an important role in shaping Indonesia's coffee export performance, while the effect of international coffee prices may depend on other economic and structural factors.
Research Implications: The findings highlight the importance of exchange rate conditions for Indonesia's coffee export performance. Policy efforts should therefore consider exchange rate stability alongside measures to strengthen the competitiveness of the coffee industry through productivity improvement, quality enhancement, market diversification, and value-added development.

INTRODUCTION

International trade plays an important role in economic development by expanding markets, improving resource allocation, and supporting economic growth. For Indonesia, coffee is a strategic export commodity because the country is one of the world's major coffee producers and exporters, and coffee contributes to national foreign exchange earnings (Nguyen et al., 2024). From the perspectives of absolute and comparative advantage, international trade allows countries to specialize in commodities in which they have production advantages. Therefore, exports can support economic growth, national competitiveness, and improvements in living standards.

In Indonesia, exports are an important source of foreign exchange and contribute to the development of the real sector. Plantation commodities also support employment and household income, particularly in rural areas (Silvia & Aslami, 2022). Among these commodities, coffee has an important position because of its economic value and competitiveness in international markets. Indonesia produces both Arabica and Robusta coffee, supported by diverse geographical and agroclimatic conditions. Coffee exports contributed substantially to Indonesia's foreign exchange earnings, reaching USD 1.15 billion in 2022 (Mas'ud & Sri Wahyuningsih, 2023). However, coffee export performance is influenced not only by domestic production but also by international prices, exchange rates, trade policies, and demand from importing countries (García Juárez et al., 2025).

International coffee prices are an important factor in export performance because changes in global prices can affect demand, producer returns, and export value. Since much of Indonesia's coffee production is sold in international markets, domestic producers and exporters are exposed to fluctuations in global coffee prices (Lubis Ra et al., 2022). Changes in international coffee prices therefore have the potential to influence Indonesia's coffee export performance. Exchange rates are another important factor in international trade. The exchange rate represents the value of one currency relative to another and affects the prices and competitiveness of exported goods (Sukirno, 2019). In general, currency appreciation can make domestic products more expensive in international markets, while depreciation can improve export price competitiveness. For Indonesian coffee, movements in the rupiah against the US dollar may therefore influence export performance (Lubis Ra et al., 2022). Exchange rate fluctuations can also affect the potential gains or losses from international trade transactions.

Recent developments illustrate the changing conditions surrounding Indonesia's coffee exports. International coffee prices fluctuated during 2020–2024, while the rupiah generally weakened against the US dollar. At the same time, Indonesia's coffee export volume also experienced considerable fluctuations. These developments indicate that coffee export performance is affected by changing international market conditions and domestic economic factors. Changes in the rupiah exchange rate can result from various domestic and external factors, including inflation, economic growth, capital flows, interest rate differences, and global economic conditions (Sakir & Rizqi Zainul, 2020). The interaction between international coffee prices and exchange rate movements may consequently influence Indonesia's coffee export performance (Yanuarti & Widjaya, 2023).

Indonesia exports coffee to various international markets, including Japan, the United States, the United Kingdom, Germany, and the Netherlands (Ramadhani & Husein, 2024). However, export performance remains volatile. Previous research suggests that coffee exports are influenced by several factors, including international coffee prices, exchange rates, production capacity, market demand, and trade regulations (Tampubolon et al., 2023). This indicates that understanding the factors associated with coffee export performance is important for strengthening Indonesia's position in the global coffee market. Previous studies have examined several determinants of Indonesian coffee exports, including production, cultivated land area, exchange rates, domestic coffee prices, and domestic consumption. However, many studies consider several independent variables simultaneously, while relatively limited attention has been given to the combined role of international coffee prices and the rupiah exchange rate in explaining coffee export volume (Winingsih & Septiani, 2022). This creates an opportunity to further examine how these two external economic factors relate to Indonesia's coffee export performance over a long observation period.

Therefore, this study examines the relationship between international coffee prices, the rupiah exchange rate, and Indonesia's coffee export volume using time-series data from 1995 to 2024. By focusing on these two key economic variables, the study aims to provide a clearer understanding of the factors associated with Indonesia's coffee export performance. The findings are expected to contribute to the literature on international trade and agricultural commodities while providing relevant insights for policymakers and industry stakeholders in strengthening Indonesia's coffee export competitiveness.

LITERATURE REVIEW

Grand Theory

International trade refers to the exchange of goods and services between countries through export and import activities. It is important because countries have different resources and production capacities. Imports help meet domestic needs, while exports allow countries to utilize available resources and earn foreign exchange (Marbun et al., 2025; Innayatuhibbah et al., 2024). Export performance is influenced by various factors, including international prices, production capacity, exchange rates, global demand, trade policies, destination-country GDP, tariffs, and trade barriers (Negeri & Ji, 2023; Vo et al., 2024). International trade is also supported by the theory of comparative advantage proposed by David Ricardo, which explains that countries can benefit from specializing in products that they can produce at a relatively lower opportunity cost. Such specialization can improve product competitiveness and increase foreign exchange earnings (Silvia Amanda & Aslami, 2022; Achmad Andi Leanado et al., 2025). However, high production costs and low selling prices may reduce the competitiveness of agricultural products in international markets (Gizaw et al., 2022).

Exports are an important part of international trade because they involve the sale of domestic goods and services to foreign markets. Export activities can contribute to national income and economic development, although excessive dependence on foreign markets can also expose a country to international market fluctuations (Purwawangsa et al., 2024). Export performance is closely related to international prices. According to Mankiw, the world price is the price of a commodity in the international market. When the international price is higher than the domestic price, producers have greater incentives to export because foreign markets offer better returns. Conversely, lower international prices may reduce export incentives (Nguyen et al., 2024; Lubis Ra et al., 2022). Price also affects supply, as higher prices generally encourage producers to increase the quantity supplied (Fakhrul Umam, 2016). Therefore, changes in international coffee prices can influence the decisions of producers and exporters to sell coffee in foreign markets. When international coffee prices increase, exporters may increase exports to obtain higher returns (Rani S, 2026).

Another important factor affecting exports is the exchange rate. The exchange rate represents the value of one currency relative to another and is determined by conditions in the foreign exchange market. Changes in the exchange rate can affect the competitiveness of exported products (M S et al., 2024). A depreciation of the rupiah against the US dollar makes Indonesian products relatively cheaper for foreign buyers and may encourage higher export demand. In contrast, an appreciation of the rupiah can make Indonesian products more expensive in international markets and may reduce export demand (Soekartawi, 2005; Rama et al., 2023). Thus, exchange rate movements can influence the volume of Indonesian coffee exports.

Based on these theoretical perspectives, international coffee exports are influenced by both international market conditions and domestic economic factors. International coffee prices affect the potential returns from exporting, while the rupiah exchange rate affects the price competitiveness of Indonesian coffee in foreign markets. Therefore, international coffee prices and the rupiah exchange rate are important factors in explaining changes in Indonesia's coffee export volume. This study examines the effects of international coffee prices and the rupiah exchange rate on Indonesia's coffee export volume during 1995–2024.

International Coffee Prices on Indonesia’s Coffee Export Volume

According to Ricardo’s theory of comparative advantage, countries can benefit from international trade by specializing in products that they can produce relatively efficiently. In the case of coffee, international prices can influence exporters’ decisions because higher prices may provide greater incentives to sell coffee in international markets. When international coffee prices increase, exporters may increase their export activities to obtain higher returns. Previous studies have found different results regarding the effect of international coffee prices on coffee exports. Pratama and Budhi (2023) and Wati and Setyowati (2023) found that international coffee prices have a positive effect on Indonesia’s coffee exports, while Pribadi

and Sudiana (2021) and Ramadhanty et al. (2022) reported different effects. These differences suggest that the response of coffee exports to international prices may depend on production conditions, market demand, and other economic factors. In this study, international coffee prices have a negative but statistically insignificant effect on Indonesia's coffee export volume. This finding indicates that changes in international coffee prices alone may not be sufficient to significantly change export volume.
H1: International coffee prices have a significant effect on Indonesia's coffee export volume

Rupiah Exchange Rate on Indonesia's Coffee Export Volume

The exchange rate is another important factor affecting export performance. International trade theory suggests that changes in the value of a domestic currency can influence the price competitiveness of exported products. A depreciation of the rupiah against the US dollar makes Indonesian products relatively cheaper for foreign buyers and may increase export demand. In contrast, an appreciation of the rupiah can make Indonesian products more expensive in international markets and may reduce export demand. Previous studies have reported a relationship between the exchange rate and Indonesia's coffee exports, although the direction of the effect varies across studies. Pratama and Budhi (2023) found that the exchange rate significantly affects coffee export volume, while Sitepu and Yudha (2022) also found a significant relationship between the exchange rate and coffee exports to several destination countries. Recent research further indicates that exchange rate movements are an important factor in Indonesia's coffee export performance (Zuhdi et al., 2026). In this study, the rupiah exchange rate has a significant effect on Indonesia's coffee export volume. This finding indicates that exchange rate movements play an important role in determining Indonesia's coffee export performance.
H2: The rupiah exchange rate has a significant effect on Indonesia's coffee export volume

International Coffee Prices and Rupiah Exchange Rate on Indonesia's Coffee Export Volume

International coffee prices and the rupiah exchange rate can also influence coffee exports simultaneously. International prices determine the potential returns from selling coffee in global markets, while the exchange rate affects the price competitiveness of Indonesian coffee for foreign buyers. Therefore, changes in both variables may jointly influence Indonesia's coffee export volume. Previous studies have shown that international prices, exchange rates, and other economic factors can jointly affect Indonesia's coffee exports (Pratama & Budhi, 2023; Pribadi & Sudiana, 2021). Recent research also identifies international prices and exchange rates as important factors in explaining Indonesia's coffee export performance (Hardi et al., 2026; Zuhdi et al., 2026). The results of this study show that international coffee prices and the rupiah exchange rate jointly affect Indonesia's coffee export volume. This finding indicates that coffee export performance is influenced by a combination of international market conditions and domestic economic factors.
H3: International coffee prices and the rupiah exchange rate jointly have a significant effect on Indonesia's coffee export volume

METHODS

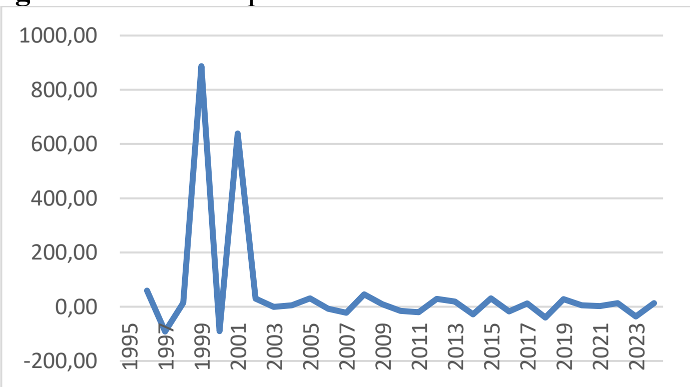
This research adopts a quantitative methodology, employing secondary data in the form of a time series spanning the 1995–2024 period. The data were analyzed using multiple linear regression with EViews 12 software. The data were sourced from the Central Statistics Agency (BPS), the Ministry of Agriculture of the Republic of Indonesia, and the World Bank. The dependent variable examined in this study is Indonesia's coffee export volume, while the independent variables consist of international coffee prices and the rupiah exchange rate against the US dollar. Data analysis was conducted using multiple linear regression to assess the influence of international coffee prices and the rupiah exchange rate on Indonesian coffee export volumes. Prior to hypothesis testing, the regression model underwent a series of classical assumption diagnostics, including tests for normality, multicollinearity, heteroscedasticity, and autocorrelation. These procedures were undertaken to ensure that the model satisfied the requisite assumptions and yielded valid, reliable estimates. Subsequently, hypothesis testing was performed utilizing the F-test to evaluate the simultaneous effect of the independent variables on the dependent variable, the t-test to examine the partial effect of each independent variable, and the coefficient of determination (R^2) to determine the proportion of variance in the dependent variable explained by the regression model. The hypothesis tests were conducted at significance levels of 10%, 5%, and 1%.

RESULT

Development Of Coffee Export Volume In Indonesia

As a foremost commodity within Indonesia's plantation industry, coffee is exported with the dual purpose of generating foreign exchange earnings and enhancing the nation's competitive standing in global markets. Given its strategic importance, coffee not only contributes substantially to the national economy but also provides a vital source of livelihood for millions of farmers across the country. Consequently, fluctuations in coffee export volumes represent a critical factor that warrants careful consideration in the formulation of policies pertaining to both the plantation and trade sectors.

Figure 1. Coffee Export Trends in Indonesia 1995-2024



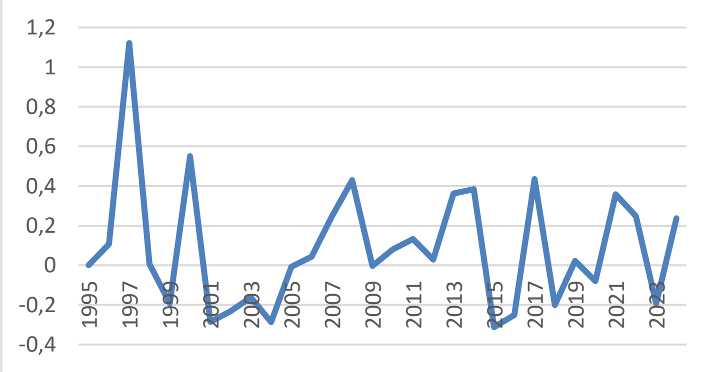
Source: Data processed by author, 2026

Indonesia's coffee exports from 1995 to 2024 exhibited a fluctuating pattern. At the beginning of the period, exports increased from 230,201 tons in 1995 to 366,602 tons in 1996, then dropped drastically in 1997 due to the impact of the Asian economic crisis. After that, exports increased significantly again in 1999, but again experienced a sharp decline in 2000 before recovering in 2001. During the 2002–2013 period, export volume tended to increase although it continued to fluctuate, with exports peaking at 532,156 tons in 2013. In the 2014–2024 period, coffee exports again showed unstable conditions, marked by declines in some years and increases in others, including a significant decline in 2023 before increasing again in 2024. In general, the trajectory of Indonesia's coffee export volume is shaped by a multitude of interrelated factors, including domestic coffee production levels, climatic conditions, international coffee prices, the rupiah exchange rate, and global market demand. Collectively, these elements interact to determine both the performance and the temporal fluctuations of Indonesia's coffee export activities.

Developments In International Coffee Prices

International coffee prices are one of the key indicators in the global commodity market, reflecting the interaction between coffee supply and demand worldwide. Fluctuations in international coffee prices are influenced by various factors, including production levels in major producing countries, weather conditions and global climate changes, disruptions in the supply chain, and changes in coffee consumption patterns in importing countries.

Figure 2. International Coffee Price Trends in Indonesia, 1995- 2024



Source: Data processed by author, 2026

Based on the trend of international coffee prices during the 1995–2024 period, coffee prices exhibited fluctuations from year to year. Between 1995 and 2000, international coffee prices showed an upward trend. However, from 2001 to 2005, prices declined as global coffee supply exceeded market demand. Prices increased again during the 2006–2014 period and reached their highest level in 2014, driven by rising global coffee consumption and production disruptions in several coffee-producing countries caused by unfavorable weather conditions. Subsequently, throughout the 2015–2020 period, international coffee prices persisted in their volatile trajectory, driven by fluctuations in global production volumes, shifting climatic patterns, and evolving demand dynamics within the world market.

Over the 2021–2024 interval, international coffee prices experienced a fairly substantial upward movement, reaching approximately USD 5.6 per kilogram by 2024. This escalation was attributable to a confluence of factors, including reduced coffee output from several leading producer nations, the adverse effects of climate change on agricultural productivity, and the sustained expansion of global coffee demand. Overall, the trend of international coffee prices from 1995 to 2024 shows a fluctuating pattern with a long-term upward tendency. These price movements reflect the dynamics of the world coffee market and could potentially affect Indonesia's coffee export performance.

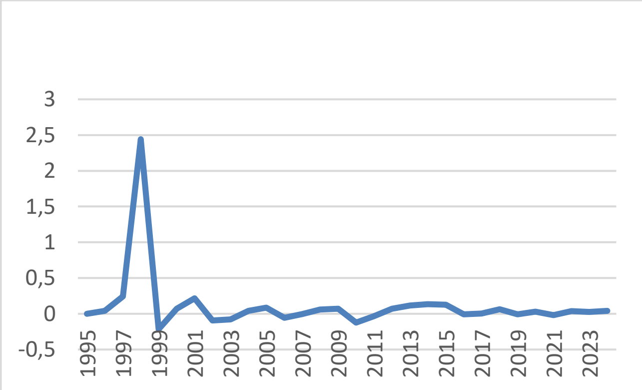
Development Of The Rupiah Exchange Rate

The rupiah exchange rate serves as a crucial economic barometer, as it mirrors a nation's economic health through the valuation of its domestic currency relative to foreign currencies-particularly the US dollar (USD), which is predominantly utilized in international trade transactions. Fluctuations in the rupiah's value reflect underlying shifts in economic conditions and are shaped by an array of determinants, including the trade balance, inflation rate, interest rate levels, foreign direct investment inflows, foreign exchange reserves, as well as global economic developments and the monetary policy stance adopted by the government.

The exchange rate of the rupiah against the US dollar showed a fluctuating movement pattern during the 1995–2024 period. In the period from 1995 to 1997, the rupiah gradually depreciated before experiencing a sharp weakening in 1998 due to the Asian financial crisis, which triggered economic instability and significant exchange rate depreciation. After that crisis, during the 1999–2012 period, the rupiah tended to be more stable, although it still fluctuated in response to Indonesia's economic recovery process and changes in global economic conditions.

Next, during the 2013–2024 period, the rupiah exchange rate once again showed a tendency to depreciate against the US dollar, reaching Rp15,855.45 per USD in 2024. This weakening was attributable to a range of factors, including global economic dynamics, international interest rate policies, inflationary pressures, foreign capital movements, and shifts in the trade balance.

Figure 3. Rupiah Exchange Rate Trends in Indonesia 1995-2024



Source: Data processed by author, 2026

On the whole, the rupiah exchange rate throughout the observation period exhibited a volatile pattern with a long-term depreciating tendency, particularly in the aftermath of the 1997–1998 Asian financial crisis.

Classical Assumption Test

Multicollinearity Test

Table 1. Multicollinearity Test Results

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	5.06E+09	10.22775	NA
HKI	5.10E+08	12.33436	1.706932
KTR	67.15975	16.37960	1.706932

Source: data processed with EViews 12, 2026

The diagnostic results indicate that the Centered Variance Inflation Factor (VIF) for each independent variable is 1.706932. Given that this figure falls substantially below the acceptable threshold of 10, it can be inferred that the regression model is free from multicollinearity among the predictor variables. Accordingly, the dataset employed in this study satisfies the assumption of no multicollinearity, thereby rendering it appropriate for subsequent analysis and interpretation.

Autocorrelation Test

Table 2. Autocorrelation Test Results

Test	Statistic	Probability
F-statistic	1.990323	0.1577
Obs*R-squared	4.120659	0.1274

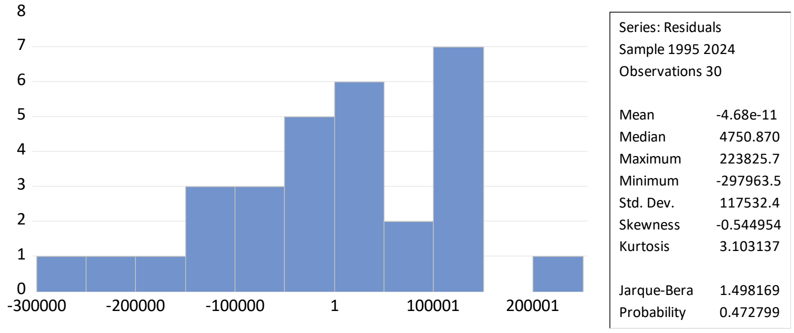
Source: data processed with EViews 12, 2026

The findings from the autocorrelation assessment indicate that the probability value stands at 0.1577 (15.77%), which exceeds the 5% significance threshold (0.05). Moreover, the probability associated with the Obs*R-squared statistic is 0.1274 (12.74%), also surpassing the 5% level of significance. On the basis of these outcomes, it can be inferred that the regression model exhibits no evidence of autocorrelation, thereby confirming that the assumption of residual independence has been satisfied.

Normality Test

The results of the normality assessment reveal that the probability value associated with the Jarque-Bera statistic is 0.472799 (47.27%), which exceeds the 5% significance level (0.05).

Figure 3. Normality Test Diagram



Source: data processed with EViews 12, 2026

On the basis of these findings, it can be concluded that the data utilized in this study follow a normal distribution. Accordingly, the normality assumption—a prerequisite for the regression model—has been duly satisfied.

Heteroscedasticity Test

Table 3. Heteroscedasticity Test Results

Test Statistic	Value	Prob.
F-statistic	2.391740	0.0678
Obs*R-squared	9.977029	0.0759
Scaled explained SS	8.498137	0.1308

Source: data processed with EViews 12, 2026

The heteroscedasticity test results indicate that the probability value for the F-statistic is 0.0678, which exceeds the 5% significance level (0.05). Furthermore, the probability associated with the Obs*R-squared statistic also surpasses the 5% significance threshold. Based on these findings, it can be concluded that the regression model employed in this study does not display symptoms of heteroscedasticity, thereby confirming that the assumption of homoscedasticity, or equal variance of residuals, has been fulfilled.

Multiple Linear Regression Analysis

Table 4. Regression Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	248067.5	71122.01	3.487915	0.0017
HKI	-34734.61	22592.19	-1.537461	0.1358
KTR	20.10434	8.195105	2.452313	0.0209

Statistic	Value	Statistic	Value
R-squared	0.182343	Mean dependent var	345583.7
Adjusted R-squared	0.121775	S.D. dependent var	129978.6
S.E. of regression	121807.6	Akaike info criterion	26.35291
Sum squared resid	4.01E+11	Schwarz criterion	26.49303
Log likelihood	-392.2937	Hannan-Quinn criterion	26.39774
F-statistic	3.010583	Durbin-Watson stat	1.394501
Prob(F-statistic)	0.066026		

Source: data processed with EViews 12, 2026

Based on the multiple linear regression analysis performed in this study, the following regression equation was obtained:

$$VEK = 248067.5 - \ 34734.61\ \text{HKI} + 20.10434\ \text{KTR}$$

Where Y represents Indonesia's coffee export volume, X1 represents international coffee prices, and X2 represents the rupiah exchange rate. The regression equation indicates that, holding other factors constant (ceteris paribus), the coefficient of the international coffee price is negative, whereas the coefficient of the rupiah exchange rate is positive. The constant term of 248,067.5 indicates that when international coffee prices and the rupiah exchange rate are assumed to be zero, the estimated coffee export volume is 248,067.5 tons. The coefficient of international coffee prices X1 is -34,734.61, indicating that a one-unit increase in international coffee prices is associated with a decrease of 34,734.61 tons in Indonesia's coffee export volume, assuming the other variable remains constant. Meanwhile, the exchange rate coefficient X2 of 20.10434 indicates that a one-unit increase in the rupiah exchange rate is associated with an increase of 20.10434 tons in coffee export volume, ceteris paribus.

Hypothesis Testing

The F-test was conducted to examine the joint effect of international coffee prices and the rupiah exchange rate on Indonesia's coffee export volume. The results show an F-statistic of 3.010583 with a probability value of 0.066026. Since the probability value is lower than the 10% significance level ($0.066026 < 0.10$), the regression model is statistically significant at the 10% level. Therefore, international coffee prices and the rupiah exchange rate jointly have a statistically significant effect on Indonesia's coffee export volume during the 1995–2024 observation period. However, because the probability value is higher than 5%, this joint significance does not meet the 5% significance criterion.

The partial effects of each independent variable were subsequently examined using the t-test. With 26 degrees of freedom, the results at the 5% significance level can be interpreted as follows. First, international coffee prices (X_1) have a negative but statistically non-significant relationship with Indonesia's coffee export volume. The variable has a t-statistic of −1.537461 and a probability value of 0.1358, which is greater than the 5% significance level ($0.1358 > 0.05$). This indicates that changes in international coffee prices are not statistically significant in explaining variations in Indonesia's coffee export volume during the 1995–2024 period. Accordingly, the null hypothesis (H_0) is not rejected, while the alternative hypothesis (H_a) is not supported at the 5% significance level.

Second, the rupiah exchange rate (X_2) has a positive and statistically significant relationship with Indonesia's coffee export volume. The t-statistic is 2.452313 with a probability value of 0.0209, which is below the 5% significance level ($0.0209 < 0.05$). This finding indicates that the rupiah exchange rate is statistically significant in explaining variations in Indonesia's coffee export volume over the 1995–2024 period. Thus, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is supported at the 5% significance level.

Overall, the results indicate that the two independent variables are jointly significant at the 10% level, while only the rupiah exchange rate demonstrates a statistically significant partial effect at the 5% level.

Determination Test

The estimation results reveal that the coefficient of determination (R^2) stands at 0.182343, equivalent to 18.23%, and Adjusted R-squared is 0.121775. This figure indicates that international coffee prices and the rupiah exchange rate collectively account for 18.23% of the variability observed in Indonesia's coffee export volume. Meanwhile, the remaining 81.77% is explained by other factors outside the research model that were not included in this study, such as coffee production, domestic coffee prices, outside land area, and others.

DISCUSSION

The estimation results indicate that international coffee prices have a negative but statistically non-significant relationship with Indonesia's coffee export volume during the observation period. This finding suggests that changes in international coffee prices alone do not provide sufficient evidence to explain variations in Indonesia's coffee export volume. Although international coffee prices experienced considerable increases during certain periods, particularly in recent years, these increases were not necessarily accompanied by a corresponding rise in Indonesia's coffee export volume. The absence of a significant relationship indicates that Indonesia's coffee export performance is likely influenced by a combination of other supply-side and demand-side factors. Export volume may depend on domestic coffee production, productivity, availability of exportable supply, weather and climatic conditions, coffee quality, inventory levels, international demand, market conditions in destination countries, and exporters' ability to meet international quality and market requirements. Therefore, an increase in international coffee prices does not automatically result in an increase in export volume, particularly when the availability of coffee for export is constrained by domestic production and other market conditions. From a theoretical perspective, this finding can be related to the international price mechanism described by Mankiw (2009), in which market prices are determined through the interaction of supply and demand. In the context of coffee exports, however, changes in international prices may not immediately translate into changes in export volume because export performance is also determined by the availability and quality of the commodity, production capacity, and market demand. Thus, the findings of this study indicate that international coffee prices, when considered independently, are not a sufficient factor for explaining changes in Indonesia's coffee export volume. This finding is consistent with previous studies conducted by Jamilah, Edy Yulianto, and Mukhammad Kholid Mawardi (2016) and Fitriani et al. (2023), which also found that international coffee prices did not have a statistically significant effect on Indonesia's coffee export volume. The consistency of these findings suggests that the relationship between international coffee prices and Indonesia's coffee exports is relatively complex and cannot be explained solely through changes in international prices. Other factors related to production, supply, demand, exchange rates, and international market conditions should therefore also be considered in understanding Indonesia's coffee export performance.

The findings of this study indicate that the rupiah exchange rate has a positive and statistically significant relationship with Indonesia's coffee export volume during the observation period. This finding suggests that movements in the rupiah exchange rate are associated with changes in Indonesia's coffee export volume, with an increase in the exchange rate corresponding to an increase in export volume when other factors are held constant. One possible explanation for this relationship is that an increase in the rupiah-per-US-dollar exchange rate represents a depreciation of the rupiah against the US dollar. Under other conditions being equal, rupiah depreciation can make Indonesian coffee relatively more competitive in international markets because the price of Indonesian products may become relatively lower when expressed in foreign currencies. In addition, exporters may obtain higher domestic-currency revenues when foreign-currency export earnings are converted into rupiah. These conditions can create incentives for exporters to maintain or increase their export activities. Nevertheless, the relationship between exchange rate movements and coffee exports should be understood within the broader context of international trade. The effect of exchange rate changes may depend on international coffee prices, domestic production capacity, production costs, global demand, market conditions in importing countries, and the ability of exporters to respond to changes in international prices. Consequently, exchange rate movements should not be considered in isolation when explaining changes in Indonesia's coffee export performance. The finding is consistent with the theoretical perspective presented by Soekartawi (2005), which identifies the exchange rate as one of the factors that can influence export activity. Similarly, Sahat et al. (2016) explain that currency depreciation can improve the international price competitiveness of products originating from exporting countries. In the context of Indonesian coffee, a weaker rupiah may therefore create more favorable price conditions for foreign buyers and potentially support export activity. The present finding is also consistent with previous studies by Lubis and Rahmani (2023) and Ridwan Azhari Lubis et al. (2004), which reported a positive relationship between rupiah depreciation and the export performance of Indonesian products, including coffee. Overall, the findings indicate that the exchange rate is an important variable associated with Indonesia's coffee export volume. However, its relationship with export performance should be considered alongside other economic and market factors that may influence the international competitiveness and supply of Indonesian coffee.

CONCLUSION

Based on the findings of this study, international coffee prices have a negative but statistically non-significant relationship with Indonesia's coffee export volume during the 1995–2024 period. This indicates that changes in international coffee prices alone do not significantly determine Indonesia's coffee export volume. In contrast, the rupiah exchange rate has a positive and statistically significant relationship with coffee export volume, indicating that exchange rate movements are an important factor associated with Indonesia's coffee exports. Simultaneously, international coffee prices and the rupiah exchange rate have a significant effect on Indonesia's coffee export volume at the 10% significance level. However, the relatively limited explanatory power of the model indicates that coffee export performance is also influenced by other factors, such as production capacity, productivity, coffee quality, trade policies, and international market demand. Therefore, efforts to strengthen Indonesia's coffee exports should focus not only on international price developments but also on improving productivity and coffee quality, strengthening post-harvest processing, meeting international quality standards, expanding market access, and supporting export-oriented infrastructure and financing. These measures can help strengthen the competitiveness and sustainability of Indonesian coffee exports in international markets.

REFERENCES

Achmad Andi Leanado, et al. (2025). Tanaman kopi merupakan penopang penting dalam nilai ekspor komoditas perkebunan Indonesia. *Journal of Economics, Management, and Accounting, 1*(3).

Ba Toai, D. (2024). Factors influencing coffee export decisions: A case study of Vietnam. *Journal of Information Systems Engineering and Management, 2025*(48S). https://www.jisem-journal.com/

Chikkalaki, A. S. (2024). Export competitiveness of Indian coffee: Analysing trade potential in the global market. *Journal of Scientific Research and Reports, 30*(9), 51–61. https://doi.org/10.9734/jsrr/2024/v30i92329

Firmansyah, A., & Sugiarto, S. (2025). Strategi peningkatan ekspor kopi Indonesia di pasar dunia. *Jurnal Maksipreneur: Manajemen, Koperasi, dan Entrepreneurship, 14*(2), 479–491. https://doi.org/10.30588/jmp.v14i2.2007

García Juárez, H. D., Montes Ninaquispe, J. C., Márquez Yauri, H. Y., Rodríguez Abraham, A. R., Corrales Otazú, C. D., Apaza Miranda, S. J., Suy Chambergo, E. J., León Luyo, S. L., & Flores Castillo, M. M. (2025). Market diversification and international competitiveness of South American coffee: A comparative analysis for export sustainability. *Sustainability, 17*(11). https://doi.org/10.3390/su17115091

Gizaw, N., Abafita, J., & Merra, T. M. (2022). Impact of coffee exports on economic growth in Ethiopia: An empirical investigation. *Cogent Economics & Finance, 10*(1). https://doi.org/10.1080/23322039.2022.2041260

Hardi, B., Arimbi, M., & Safrizal, M. (2026). Determinants of Indonesia's coffee export value: Production, international prices, and exchange rate. *Cendekia Niaga, 10*(1), 75–85. https://doi.org/10.52391/jcn.v10i1.1040

Innayatuhibbah, G. A., Rahayu, E. S., & Ferichani, M. (2024). Export competitiveness of Indonesian coffee in the United States market. *Scientific Horizons, 27*(2), 125–135. https://doi.org/10.48077/scihor2.2024.125

Lubis et al. (2022). Pengaruh nilai tukar rupiah dan harga kopi internasional terhadap nilai ekspor kopi Indonesia tahun 2004–2021. *Coffee Exports in Indonesia, 1*(4).

Marbun, P. M. P., Sihombing, F. N., Lahay, R. R., & Tampubolon, K. (2025). Indonesia coffee export performance to the primary destination countries. *Journal of Tekirdag Agricultural Faculty, 22*(4), 1072–1085. https://doi.org/10.33462/jotaf.1701495

Mas'ud, & Wahyuningsih, S. (2023). *Analisis kinerja perdagangan kopi* (Vol. 12).

Negeri, A., & Ji, Q. (2023). Export knowledge, export commitment, and coffee export performance in Ethiopia. *Heliyon, 9*(6). https://doi.org/10.1016/j.heliyon.2023.e16403

Nguyen, T. L., Do, P. B. N., Nguyen, L. H., & Bui, T. H. (2024). Assessing the current status of Vietnam's coffee exports in the period 2014–2023 in the global coffee value chain. *Journal of Multidisciplinary Science: MIKAILALSYS, 2*(2), 240–252. https://doi.org/10.58578/mikailalsys.v2i2.3261

Pratama, P. R. Y., & Budhi, M. K. S. (2023). Analisis pengaruh harga, nilai tukar rupiah dan produksi terhadap volume ekspor kopi Indonesia. *E-Jurnal Ekonomi Pembangunan Universitas Udayana, 12*(1), 25–37. https://doi.org/10.24843/EEP.2023.v12.i01.p02

Pribadi, T. H. Y., & Sudiana, I. K. (2021). Analisis faktor-faktor yang memengaruhi ekspor kopi Indonesia ke Amerika Serikat. *E-Jurnal Ekonomi Pembangunan Universitas Udayana, 10*(2), 480–506.

Purwawangsa, H., Iqbal, M., & Haq, D. A. (2024). Indonesian coffee exports' competitiveness and determinants. *Jurnal Manajemen dan Agribisnis*. https://doi.org/10.17358/jma.21.1.59

Rama, P., Pratama, Y., Kembar, M., & Budhi, S. (2023). Analisis pengaruh harga, nilai tukar rupiah dan produksi terhadap volume ekspor kopi Indonesia. *E-Jurnal Ekonomi Pembangunan Universitas Udayana*.

Ramadhani, M. R., & Husein, R. (2024). *Analysis of factors affecting exports of Indonesian coffee*. http://ojs.unimal.ac.id/index.php/jompe

Rani, S. (2026). *Pengaruh produksi, kurs dolar dan harga internasional terhadap ekspor kopi Indonesia tahun 2015–2024 dalam perspektif ekonomi Islam*.

Sakir, A., & Rizqi Zainul, Z. (2020). Faktor-faktor penyebab pelemahan kurs rupiah terhadap dolar Amerika. *Jurnal Kinerja, 17*(2), 2020–2165. http://journal.feb.unmul.ac.id/index.php/kinerja

Silvia & Aslami. (2022). Analisis kebijakan perdagangan internasional. *Journal Economy and Currency Study (JECS), 4*(1).

Sintessa Putri, Rosjadi, F., & Setyaningrum, I. (2021). *Analisis pengaruh produksi, harga internasional, dan nilai tukar terhadap volume ekspor minyak sawit Indonesia* (Vol. 9, No. 2).

Sitepu, M. A. M. B., & Yudha, I. M. E. K. (2022). Pengaruh daya saing, kurs, GDP, dan harga terhadap ekspor kopi Indonesia ke lima negara. *E-Jurnal Ekonomi Pembangunan Universitas Udayana, 11*(10), 3811–3830. https://doi.org/10.24843/EEP.2022.v11.i10.p06

Tampubolon, J., Ginting, A., Nainggolan, H. L., & Tarigan, J. R. (2023). Indonesian coffee development path: Production and international trade. *Asian Journal of Agricultural Extension, Economics & Sociology, 41*(12), 316–328. https://doi.org/10.9734/ajaees/2023/v41i122335

Ulfa Hanifah. (2022). Pengaruh ekspor dan impor terhadap pertumbuhan ekonomi di Indonesia. *Transekonomika: Akuntansi, Bisnis dan Keuangan, 2*(6). https://transpublika.co.id/ojs/index.php/transekonomika

Vo, T. D., Yang, L., & Dung Tran, M. (2024). Determinants influencing Vietnam coffee exports. *Cogent Business & Management, 11*(1). https://doi.org/10.1080/23311975.2024.2337961

Wanzala, R. W., Marwa, N., & Nanziri Lwanga, E. (2024). Impact of exchange rate volatility on coffee export in Kenya. *Cogent Economics & Finance, 12*(1). https://doi.org/10.1080/23322039.2024.2330447

Wati, E., & Setyowati, E. (2023). Analysis of the influence of production, international prices, and exchange rates on coffee export volume in Indonesia in 2002–2022. *Determinasi: Jurnal Penelitian Ekonomi Manajemen dan Akuntansi, 1*(4). https://doi.org/10.23917/determinasi.v1i4.65

Winingsih, T. R., & Septiani, Y. (2022). *Indonesian coffee export analysis to Germany from 1990 to 2019*.

Yanuarti, R., & Widjaya, D. (2023). Variability of factors influencing coffee export performance in Indonesia. *Pelita Perkebunan (A Coffee and Cocoa Research Journal), 39*(3), 260–270. https://doi.org/10.22302/iccri.jur.pelitaperkebunan.v39i3.556

Zakirman, Z. (2020). *Pengantar statistik sosial*.

Zuhdi, F., Suryana, A. T., Fauzi, A. A., Destiarni, R. P., Asshagab, S. M., et al. (2026). Beyond trade value: Essential drivers of Indonesia's coffee exports in the global market—a system GMM approach. *Future Business Journal, 12*, Article 203.