

The Influence of International Coffee Prices and the Rupiah Exchange Rate on the Volume of Indonesian Coffee Exports

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Abstract

Indonesia is the fourth largest coffee producer in the world. Coffee exports are one of the plantation commodities that Indonesia relies on to increase the country's foreign exchange. The purpose of this study was to determine the extent of the influence of international coffee prices and the rupiah exchange rate on the volume of Indonesian coffee exports. The data used in this study is secondary data in the form of monthly time series from 2016 to 2020 obtained from relevant agencies such as the Indonesian Central Statistics Agency, the World Bank, Bank Indonesia, and the International Coffee Organization (ICO). The analysis used is descriptive quantitative using multiple linear regression analysis tools.

Keywords

international coffee prices;
exchange rates; export volume



I. Introduction

In international relations, export is one of the activities trading in important role in advancing the Indonesian economy, where through these export activities a country can expand its market in the industrial sector and other economic sectors.

The large number of natural resources produced by Indonesia has made Indonesia known as an agrarian country, because the majority of the people who are the source of income for the Indonesian people are working in the agricultural sector. With so many areas to grow crops, it will be able to create a lot of jobs, which later will also be one of the contributors to a country's foreign exchange income. The importance of Indonesia's agricultural deposit function is supported by the existence of commodities produced by farmers which are then marketed in the global market which will generate a surplus for Indonesia's trade balance and balance of payments. (Haryadi & Nopriyandi, 2017)

Various ways or strategies are always pursued, by continuing to carry out export development strategies, especially exports in the non-oil and gas sector, it is hoped that this will be able to increase exports, both in terms of quantity and type of goods and services. With this export development, it is intended to be able to increase the function or role of exports in spurring economic growth, and increase Indonesian products in the world arena. Especially now that many countries, including Indonesia, are facing free trade that has been developing continuously, which has made world competition increasingly fierce which also forces Indonesia to be ready to be competitive in order to maintain the economy. (Laili, 2021)

One of the commodities produced by Indonesian farmers is coffee, which of several coffee commodities has the advantage of being able to be marketed in the global market. Every year the number of coffee commodity exports is increasing, supported by Indonesia as

one of the few countries with a large number of coffee produced. This is an advantage that Indonesia has as well as local Indonesian farmers. The following is data on countries with the largest coffee producers in the world.

Table 1. Largest Coffee Producing Countries in 2020 (Tons)

Negara	Jumlah (Dalam Ton)
Brazil	2.590.000
Vietnam	1.650.000
Kolombia	810.000
Indonesia	660.000
Etiopia	384.000

Source: USDA (United States Department of Agriculture)

The data table above shows that Brazil is the country with the largest coffee producer in 2020, producing 2.59 million tons of coffee. Vietnam is in second position with coffee production of 1.65 million tons, followed by Colombia with 810,000 tons, and Indonesia in fourth position, namely coffee production of 660,000 tons, followed by Ethiopia and other countries.

Table 2. Largest Coffee Producing Countries in 2020 (Tons)

Tahun	Harga Internasion al Kopi (US\$/Kg)	Nilai Tukar Rupiah (Terhadap US\$)	Volume Ekspor Kopi (Ton)
2016	2,78	13.436,00	414.650
2017	2,77	13.548,00	467.799
2018	2,40	14.481,00	279.961
2019	2,25	13.901,00	359.052
2020	2,42	14.105,00	379.354

Source: WorldBank, BI, Central Bureau of Statistics, 2020

Based on table I.2 above, it shows that the volume of Indonesian coffee exports tends to fluctuate every year in the last 5 years, where in the 2018 period Indonesia experienced a drastic decline in exports, from 467,799 tons to 279,961 tons, and increased again in 2019 amounting to 359,052. tons of exported coffee exports.

Meanwhile, fluctuating movements also occurred in the condition of the rupiah exchange rate against the US Dollar, which made its value unstable. A country's exports can be influenced by the high and low exchange rates of a country, fluctuations that occur can be the cause of the emergence of separate problems for Indonesia's export activities. Where the table above shows the rupiah exchange rate tends to weaken every year, namely in 2016 from Rp. 13,436.00 to Rp. 14,481.00 in 2018, and there was an increase again in 2019, then weakened again in 2020. According to Sukirno, the weakening currency of a country or commonly called depreciation, this will have an impact on increasing export activities due to the higher prices of foreign goods in Indonesia and the lower prices of domestic goods for foreign countries. Likewise, the opposite will happen, when the rupiah exchange rate

appreciates or strengthens against the US dollar, Indonesia's export activities will actually decline or decline. (Irayani & Abbas, 2018).

In addition to the exchange rate, another factor that causes the high and low volume of a commodity export in a country is the world price. ICO or international coffee organization is an organization that sets international coffee prices as a benchmark for coffee export prices. The table above shows that the average world coffee price tends to decline, where in 2016 the world coffee price of US\$ 2.78 per kilogram fell to US\$ 2.25 per kilogram in 2019, which then rose to US\$ 2.24 in 2020. The fluctuation of prices This world coffee will have an impact on the high and low demand and supply, when the world coffee price increases it will affect the decrease in demand and increase supply for sellers, as well as if the world coffee price decreases, the opposite will happen.

From some of the descriptions above, the aim of the researcher is to be able to find out and also examine whether there is an influence of the international price of coffee, and the exchange rate of the rupiah against the US dollar on coffee export activities in Indonesia.

II. Review of Literature

2.1 International Trade

According to (Purba et al., 2021) Trading activities or activities by residents or governments from one country to another (between countries), in which there is a transaction process both sending and receiving goods or services that are mutually beneficial, this activity is called international trade.

Transactions between countries in international trade involve various countries around the world, because it can also be called world trade. These export and import activities are part of international trade.

According to Edwin Basmar, Sri Hardianti Sartika et al (2021) in conducting international trade there will be parties who will benefit, including countries that carry out international trade will benefit in the form of improved national income. The existence of a country's advantages with international trade can be used as a driving force for a country's economy which will have a large enough impact.

2.2 Export

Exports are one of the most important parts of trading activities in the global market. Export is an activity of releasing a product to outside the customs area, involving the payment system used, quality, quantity and other requirements that have been accepted to be agreed upon by both parties, both from the exporting party and the importing party. (Tawakkal Setiawan & Rahmadi, 2021).

According to Mankiw in (Ekasari & Baskara, 2018) Export activities are selling the results of goods or services abroad from the results of domestic production. where the volume or value of exports in a country can be used as an indicator to determine how well the performance of export activities carried out by that country, to analyze how the process goes forward.

2.3 Exchange Rate

According to Sukirno, the exchange rate is the amount of the price of one unit of a country's currency shown in the form of another currency (Jamilah, 2013).

(Purba et al., 2021) stated, when the rupiah exchange rate depreciates or weakens against the US\$ currency, it will have an impact on increasing the number of exports to a country, because the US dollar currency is able to buy the export results in large enough

quantities produced by Indonesia in currency units. Rupiah. Conversely, when the Rupiah exchange rate is in a position of appreciation or there is a strengthening against the US dollar, this will have an impact on decreasing export activities due to the declining ability of the US dollar to obtain goods at the rupiah exchange rate.

2.4 International Price

According to Kotler and Armstrong in (Kurniawan & Puspita, 2016), argues that the price is the money spent to buy a product, either goods/services, or the value issued in a certain amount by the consumer as payment as to be able to get benefits or benefits for the product or service that will be his.

(Haryadi & Nopriyandi, 2017) states that, price is a unit of currency value of a commodity that has been determined to be used as information from the owner of the commodity. Despite modest progress in some countries, the post-colonial state has been unable to establish rights-based political and economic systems of governance that would facilitate consolidation of state-building and promote economic development (Monga, 2019). Particularly, whether inflation is necessary or harmful form economic growth constitutes the basis of the matter in question (Eden in Wollie, 2018).

The economic concept explains that in a competitive market, the high and low prices formed in the market are determined by the amount of supply and demand. Supply will always relate to the seller, while demand is always related to the buyer. The interaction that exists between the seller and the buyer, there are buying and selling activities.

Soekarno in (Mejaya et al., 2016) explained that international prices and export volumes have a relationship where when setting a higher price for a commodity on the world market compared to the price on the domestic market, it will affect the increasing number of offers or the number of commodities offered or exported.

III. Discussion

3.1 Research Design

The approach used in this study is a quantitative or statistical approach, which according to Sugiyono (2015). This quantitative approach is an approach that emphasizes the nature of positivism as well as objectivity, where research is carried out using numbers or statistical processing in conducting a study that serves to test hypotheses that have been previously determined.

3.2 Object of Research

The objects to be observed consist of independent variables, namely international prices as X1 and the rupiah exchange rate as X2 and the dependent variable, namely the volume of coffee exports as variable Y, where Indonesia is the location of choice in this study.

3.3 Research Data

a. Sources and Data Collection Techniques

This study uses data sources in the form of secondary data, namely data obtained by researchers from related institutions, such as BPS, Bank Indonesia, World Bank, and literature research as literature related to the object of research. Where data collection uses the documentation method, namely citing secondary data, taking notes, and studying it.

The data uses time series data in a monthly period, starting from January 2016 to December 2020, so that the data obtained is 60 data. The data used is related to the international price of coffee, the rupiah exchange rate or the exchange rate, and the total volume of coffee exports in Indonesia.

b. Sampling Technique

This technique uses non-probability sampling techniques and purposive sampling methods, which are based on considerations to focus on certain goals, namely knowing the effect of the independent variables of this study on the dependent variable.

c. Variable Operational Definition

The definition of variables is the factors used by researchers in their research so that they can be understood with the intention of gaining knowledge related to the variables being studied, which then draws conclusions from research using these variables. (Sugiyono, 2015)

The measurement of variables in this study are:

1. International coffee prices, namely the international average prices of robusta and arabica beans on the global market which are valued in US Dollars per kg (US\$/Kg) from 2016-2020 per month, where the data will be transformed because it has different units from other variables.
2. Exchange rate, which uses the middle rate of exchange rate of the Rupiah against the US Dollar (Rp/US\$) in the 2016-2020 period per month, where the data will be transformed because it has different units from other variables.
3. Export volume, namely the volume of coffee beans exported by Indonesia to the global market in one tonne in the 2016-2020 period per month, where the data will be transformed because it has different units from other variables.

3.4 Data Analysis Method

a. Descriptive Analysis

This descriptive analysis is needed to describe the variables used in a study, so as to facilitate observations by using the results of calculations such as sum, average and standard deviation, which show or describe in general terms in this study.

b. Classic Assumption Test

According to (Digdowiseiso, 2017), the research model using multiple regression analysis can be said to be quite good when it is in accordance with the BLUE criteria (Best Linear Unbiased Estimator). The provisions of BLUE can be fulfilled after successfully fulfilling the requirements of the following tests, namely:

c. Normality Test

This normality test serves to analyze whether the data in the model is normally distributed or well distributed, so that it can be determined whether the data to be used can or cannot use parametric analysis.

d. Multicollinearity Test

This multicollinearity test is carried out so that it can be known whether or not there is a linear relationship that occurs between each independent variable in the regression equation, where it can be said that the existing relationship is perfect in a model, then the model must be free from multicollinearity symptoms. (Hakiki, 2019)

A good regression model is free from multicollinearity symptoms, where the results of the analysis show that the VIF between the independent variables has a value less than 10 ($VIF < 10$).

e. Heteroscedasticity Test

Heteroscedasticity testing can be done with the white test, which is a test to find out whether an observation has the same variance or residuals with other observations by squaring the residuals (U_t^2) from the regression of the independent variables.

Symptoms of heteroscedasticity can also be seen by using the glejser test, provided that there are no symptoms of heteroscedasticity if the value of sig. greater than 5% alpha (sig. > 0.05), otherwise the sig. less than 5% alpha (sig. < 0.05) is a symptom of heteroscedasticity in this study.

f. Autocorrelation Test

If the study uses time series data or time series, it is necessary to do this autocorrelation test. The purpose of this test is to find out whether there is a correlation between the nuisance error in period t and errors that occur in period $t-1$ or the previous period. (Zelvia Nolla et al., 2020).

The autocorrelation test can be run with the Durbin-Watson test. In the model, it is said that there is no autocorrelation when the DW value is in the range of 1.69 to 2.31. On the other hand, it can be said that autocorrelation occurs when the DW value does not exist in the range between 1.69 to 2.31.

g. Multiple Linear Regression Analysis

According to Ghozali (Pandoyo & Moh. Sofyan, 2018), performed multiple regression analysis, namely to determine and measure how the direction of the relationship between the independent variable and the dependent variable. This multiple regression model has the following formula:

$$Y = a + b_1X_1 + b_2X_2 + et$$

Keterangan:

Y = Volume Ekspor

a = Nilai konstanta

X_1 = Harga Internasional

X_2 = Nilai Tukar Rupiah

b_1, b_n = Nilai koefisien regresi

et = Error Term

h. Hypothesis Test

Testing this hypothesis is needed in order to know the magnitude of the influence of each coefficient of the independent variable.

1. Partial Test (t Test)

This partial test is used to determine the level of significance of the independent variable itself in influencing the variation of the dependent variable.

1. $H_0: p=0$, showing that there is a partial effect of the independent variable on the dependent variable
2. $H_0: p \neq 0$, shows that there is a partial effect of the independent variable on the dependent variable

The t-test calculation is based on a comparison if the t-count value is greater than the t-table using a certain alpha value, which can be concluded that there is an influence of the independent variable on the dependent variable. (Pandoyo & Moh. Sofyan, 2018).

1. There is a partial influence of the independent variable with the dependent variable (H1 is accepted and H0 is rejected), if it has a value of $t_{\text{count}} > t_{\text{table}}$ or $t_{\text{count}} < t_{\text{table}}$.
2. There is no partial effect of the independent variable with the dependent variable (H0 is accepted and H1 is rejected), if it has a value of $t_{\text{count}} < t_{\text{table}}$ or $t_{\text{count}} > t_{\text{table}}$.

2. Simultaneous Test (F Test)

The F test is used to determine whether all the independent variables of a study in the regression model can simultaneously affect the dependent variable. This F test is carried out based on the comparison of the significance value with the statistical prob value of F. The following is the determination of whether the hypothesis is accepted or rejected by seeing how big the significance is. (Pandoyo & Moh. Sofyan, 2018)

1. The model can be said to be significant with a significant level of 1% if it produces a probability value of 0.01.
2. The model can be said to be significant with a significant level of 5% if it produces a probability value of 0.05
3. The model can be said to be significant with a significant level of 10% if it produces a probability value of 0.10.

3. Coefficient of Determination (R²)

The coefficient of determination (R²) is designed to determine the extent to which the independent variable can describe the variation of the dependent variable. If the number is getting closer to 1 in an equation, it shows the greater the influence or which can be explained on the dependent variable. (Pandoyo & Moh. Sofyan, 2018)

3.5 Descriptive Analysis Results

a. International Price

Based on the analysis results, the international average price of Robusta and Arabica coffee experienced the highest period occurred in November 2016 with a value of 1.15, which is US\$3.17 per collogram. Meanwhile, the lowest average price for Robusta and Arabica coffee was 0.75, namely in May 2019, which was US\$2.11 per kilogram. With the world average price of Robusta and Arabica coffee of US\$2.52 per kilogram.

b. Exchange Rate

Based on the results of the analysis above, the highest point of the exchange rate was in March 2020 at 9.70, which was Rp. 16,367/US\$. Meanwhile, in September 2016 the exchange rate was at its lowest point of 9.47, which was Rp. 12,998/US\$, by owning Rp 13,950/US\$.

c. Export Volume

Based on the results of the analysis, the highest period of Indonesian coffee export volume occurred in July 2017, which was 11.01 with an export volume of 60,724 tons of coffee. While the lowest period occurred in February 2018, namely 9.72 with a volume of 16,669 tons of coffee, where the volume of coffee exports had an average of 31,697 tons.

d. Normality Test

Table 3. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		60
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	,26587908
Most Extreme Differences	Absolute	,062
	Positive	,062
	Negative	-,050
Test Statistic		,062
Asymp. Sig. (2-tailed)		,200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Source: SPSS V.26 Output (Data processed)

This normality test needs to be done before analyzing with multiple linear regression test. From the results above, the Kolmogorov-Smirnov Z value is 0.062 and the significance is 0.200. because the significance value of Kolmogorov-Smirnov Z is $0.200 > 0.05$, it can be concluded that in this study the data is normally distributed.

e. Multicollinearity Test

Table 4. Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Harga Kopi Internasional (US\$/Kg)	,591	1,691
	Nilai Tukar (Rupiah)	,591	1,691

Source: SPSS V.26 Output (Data processed)

The table illustrates that all independent variables (international coffee prices and the Rupiah exchange rate against the US Dollar) have a tolerance value > 0.10 , and a VIF (variance inflation factor) value above 10.00 so we can conclude that the symptoms of multicollinearity in the regression model this research occurs (there is no correlation between variables).

f. Heteroscedasticity Test

Table 5. Heteroscedasticity Test

Model		t	Sig.
1	(Constant)	1,590	,117
	Harga Kopi Internasional (US\$/Kg)	-,874	,386
	Nilai Tukar (Rupiah)	-1,559	,125

Source: SPSS V.26 Output (Data processed)

The results above show that the significant value of international coffee prices is 0.386 and the exchange rate is 0.125, the results obtained are significant values > 0.05 . So from these results it can be seen that the regression model does not experience heteroscedasticity problems, in other words all independent variables included in this model have homogeneous or the same variations.

g. Autocorrelation Test

Table 6. Autocorrelation Test

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
1	,171 ^a	,029	-,005	,18648	1,796
a. Predictors: (Constant), LAG_LnX2, LAG_LnX1					
b. Dependent Variable: LAG_LnY					

Source: SPSS V.26 Output (Data processed)

The table above shows that in this study, the Durbin Two Steps Method value was 1.796. Where in this equation the number of k (independent variables) 2 and the amount of data used (n) is 60, so that the DW table is obtained by $dL = 1.5144$ and $dU = 1.6518$. As for the values of $4-dU = 2.3503$ and $4-dL = 2.4856$ by testing the two-end Durbin-Watson statistical test, the benchmarks used are as follows:

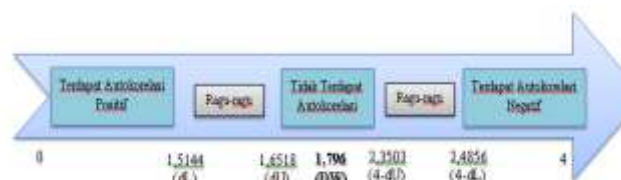


Figure 1. Durbin Watson Skema Schematic

Source: Secondary Data (Processed)

Thus, from Figure IV.1 it can be concluded that the Durbin-Watson $> dU$ ($1.796 > 1.6518$) and the Durbin-Watson value $< 4-dL$ ($1.796 < 2.4856$) where the results of this test are at the point where there is no autocorrelation symptoms. Thus, the model in this test

meets the criteria for the classic assumption test, which is avoiding autocorrelation symptoms.

g. Multiple Linear Regression Test Results

Table 7. Multiple Linear Regression Test

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3,524	9,878		,357	,723
Harga Kopi Internasional (US\$/Kg)	1,622	,441	,548	3,674	,001
Nilai Tukar (Rupiah)	,555	1,007	,082	,551	,584

a. Dependent Variable: Volume Ekspor Kopi Indonesia (Ton)

Source: SPSS V.26 Output (processed data)

Based on the results above, we can write the multiple linear regression equation as follows:

$$Y = 3.524 + 1.622X_1 + 0.555X_2$$

Information:

Y = Export Volume in Tons

X₁ = International Coffee Price (US\$/Kg)

X₂ = Rupiah Exchange Rate

From the above equation, we can interpret it as follows:

1. The value of the export volume is at a value of 3,524, if it is not influenced by the independent variables of international prices and exchange rates.
2. The price of coffee has increased by 1 unit, then the volume of coffee exports will increase by 1,622 units assuming the other variables are held constant.
3. The exchange rate increases by 1 unit, the export volume will increase by 0.555 units assuming the other variables are held constant.

3.6 Hypothesis Testing Results

a. Partial Test (t Test)

The t test is designed to find out how the independent variable partially affects the dependent variable. The value of t table is obtained from the degrees of freedom (df) = (nk), where k is the number of variables and n is the number of data, so that (df) = 57, and the value is 2.002 by looking at the percentage point distribution table t.

From table 7 above, it can be concluded that the t-test is:

1. The value of t-count regression for international coffee prices is 3.674 > t-table 2.002, sig. 0.001 < 0.05. Thus, it can be concluded that H₀ is rejected and H₁ is accepted, which means that the international coffee price variable has a significant effect on the volume of Indonesian coffee exports.
2. The value of t-count regression of the exchange rate variable is 0.551 < t-table 2.002 and sig. 0.584 > 0.05. Thus, it can be concluded that H₀₂ is accepted and H_{a2} is rejected, which means that the exchange rate variable has no significant effect on the volume of Indonesian coffee exports.

b. Simultaneous Test (F Test)

Table 8. F test (simultaneous test)

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1,387	2	,694	9,481	,000 ^b
	Residual	4,171	57	,073		
	Total	5,558	59			
a. Dependent Variable: Volume Ekspor Kopi Indonesia (Ton)						
b. Predictors: (Constant), Nilai Tukar (Rupiah), Harga Kopi Internasional (US\$/Kg)						

Source: SPSS V.26 Output (Data processed)

Based on the results of the f test in the table above, the calculated f value is $9.481 > f$ table 3.16, the significance value is 0.000, which means it is smaller than 0.05, namely at the 95% confidence level, H_a is accepted. Which means the International Coffee Price (X1) and the IDR-USD Exchange Rate (X2) simultaneously on the Indonesian Coffee Export Volume (Y).

c. Coefficient of Determination Test (R²)

Table 9. F Test (Simultaneous Test)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,500 ^a	,250	,223	,27050
a. Predictors: (Constant), Nilai Tukar (Rupiah), Harga Kopi Internasional (US\$/Kg)				

Source: SPSS V.26 Output (Data processed)

From the results of the table, the R Square value of the coefficient of determination is 0.250, which means that the independent variables, namely International Coffee Prices (X1) and Exchange Rates (X2) have a 25% effect on the dependent variable (Y), and the other 75% can be explained by other variables. which were not investigated in this study.

3.7 The Effect of International Coffee Prices on Indonesian Coffee Export Volume

Multiple regression analysis test obtained results of 0.001, smaller than alpha (α) = 0.05. This explains that the factor of international prices significantly influences the volume of Indonesian coffee exports. The international price regression coefficient is 1.622 with a positive sign indicating that an increase of 1 US\$ in world market prices can increase export volume by 1.622.

International prices are prices that are able to compete in the international market. There is a positive and significant effect, indicating that Indonesian coffee exports are influenced by changes in international coffee prices. This is in accordance with Krisna's

theory in his economic hypothesis, which explains that price is positively related to supply, the higher the price of an item, the more quantity the seller will provide.

More Soekartawi (Mejaya et al., 2016) explained that the relationship between export volume and international prices is that if a commodity is priced higher in the global market than in the domestic market, the quantity of the exported commodity increases, so the value/number will increase, as well as the export of a commodity.

This is also supported by research Maulani & Wahyuningsih (2021), which states that international coffee prices have a positive and significant impact on the volume of Indonesian coffee exports, with higher prices resulting in more commodities being offered.

3.8 The Effect of the Rupiah Exchange Rate on the Volume of Indonesian Coffee Exports

The results of the analysis obtained a significance value of 0.584, greater than alpha (α) = 0.05, which illustrates that the exchange rate has no significant effect on the volume of Indonesian coffee exports. This is not in accordance with the assumption that the value of the destination country's currency is higher than the Rupiah itself. The exchange rate that has no effect can be caused by an increase in market demand for coffee commodities, therefore when the rupiah appreciates or depreciates, the export volume is not very significant. There is a large demand for coffee because this coffee has become a commodity that is in great demand throughout the world even though the price is relatively more expensive.

Furthermore, this research is supported by research Krismawan et al. (2021), which in his research found that the exchange rate did not affect rubber exports, due to high demand which also resulted in greater foreign exchange due to the increase in the amount of money circulating in the community. This is what can lead to domestic inflation, high inflation when compared to an appreciating dollar. There was an appreciation of the dollar which should have been able to increase exports but did not happen, due to high inflation in Indonesia which had an impact on Indonesia's export demand.

3.9 The Effect of International Coffee Prices and Rupiah Exchange Rates Together (simultaneously) on the Volume of Indonesian Coffee Exports

Based on the analysis and research results obtained a significance result of 0.0000 < 0.05, which means that the International Coffee Price and the Rupiah Exchange Rate have a significant simultaneous effect on Indonesian Coffee Exports.

The influence that occurs from the international coffee price variable and the exchange rate significantly on coffee exports, in accordance with the hypothesis. From the results of the coefficient of determination (R^2) explaining the Volume of Indonesian Coffee Exports can be explained by International Coffee Prices and Exchange Rates of 0.25, meaning that 25% of changes in Indonesian Coffee Export Volumes can be explained by these variables and 75% can be explained by other variables. which is not present in this study.

The results of this hypothesis are supported by research Jamilah (2013) that together or simultaneously international price and exchange rate variables have an effect on the volume of Indonesian coffee exports. Other research Mejaya et al., (2016) also concludes that production factors, domestic prices, world market prices and the rupiah exchange rate together affect the volume of Indonesian coffee exports.

IV. Conclusion

1. The international coffee price variable partially has a positive and significant effect on Indonesian coffee exports in 2016-2020.
2. The exchange rate variable partially has no significant effect on Indonesia's coffee exports in 2016-2020.
3. The results of the analysis show that the international coffee price variable and the exchange rate have a positive and significant effect of 25% on Indonesian coffee exports in 2016-2020.

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