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Analysis Of The Influence Of International Prices, Exchange Rates, Export - Import Quotas, Tariff And Non-Tariff Policies On The Volume Of Indonesian Palm Oil (CPO) Exports To India

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Abstract

This research aims to analyze the influence of international prices, exchange rates, export-import quotas, as well as tariff and non-tariff policies on the volume of Indonesian palm oil (CPO) exports to India. Using secondary data covering the period 1993 – 2023. Analysis was carried out using the ECM, OLS and Classical Assumption Test methods. The research results show that international prices have a positive and significant influence and the exchange rate has a weaker and insignificant positive relationship on the volume of Indonesian CPO exports to India. Export - import quotas have a weak and insignificant relationship and tariff and non-tariff policies have a positive and significant influence on the volume of Indonesian CPO exports to India. This research is expected to provide insight for policy makers and industry players in formulating appropriate strategies to increase the competitiveness of Indonesian CPO exports to the Indian market.

Keywords : International Prices, Exchange Rates, Export – Import Quotas, Tariff and Non-Tariff Policies, Export Volume, CPO, Indonesian Exports.

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INTRODUCTION

In the long term, Indonesia's CPO export volume to India shows an upward trend, with exports reaching X tons in 2023, up from Y tons in 2022. This increase was driven by increasing demand for CPO in India, increased CPO production in Indonesia, and the competitiveness of Indonesia's CPO prices in the global market. Indonesia's exports are divided into oil and gas (oil and gas) and non-oil and gas (agriculture, mining, mineral materials, and processing industries), where the non-oil and gas sub-sector, especially the plantation sub-sector which is part of the agricultural sector, contributes significantly to Indonesia's total exports and has experienced a consistent increase from year to year.

An increase in CPO production in Indonesia will generally increase the volume of exports to India due to the availability of greater supply. Indonesia exporters tend to increase CPO sales to India, especially when international prices are high, because they provide greater profits. However, export and import policies can affect these trade volumes.

export quotas set by Indonesia or import quotas by India can limit the number of CPO exported. In addition, the implementation of import tariffs by India can reduce the competitiveness of Indonesia's CPO by increasing prices in the India market, thereby reducing demand and export volume. Non-tariff policies such as sanitation requirements, quality standards, and other technical barriers can also affect Indonesia's CPO market access in India. Other factors affecting CPO exports include domestic prices, international prices, and the rupiah exchange rate against the US dollar, with prices that tend to fluctuate and are difficult to predict like other primary products.

Indonesia's palm oil is one of the main export commodities in international trade, with a market share of 42.99%, making it the largest in the world and exported to countries such as India, Malaysia, the Netherlands, and Papua New Guinea. International trade, which involves both export and import activities, plays an important role in a country's economy, especially when a country has insufficient resources but is abundantly available in other countries. Export is the process of selling goods and services abroad, while import is the process of buying goods and services from abroad. A country's trade balance is considered positive when exports exceed imports, and negative when imports are greater than exports (Tambunan, 2001:1 in Turnip et al., 2016).

In international trade, each country seeks to take advantage of the advantages of resources owned by other countries, such as technology, economic structure, labor specifications, social, political, and environmental and climatic conditions. This difference causes variations in the products produced by each country, so that no single country is

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able to meet all its own needs without trading with other countries (Nufus, 2022). International trade allows domestic products to be traded both domestically and abroad, which in turn can improve the country's welfare through economic growth.

The country exports goods and services to meet domestic and international needs, which drives economic growth in an open economic system like Indonesia (Temitope & Magaji, 2023; Nurjanah, 2022). International trade, through the real and financial sectors, connects countries around the world, where a country's competitiveness depends on its superiority over certain goods and services. According to David Ricardo's theory, a country can take advantage of the scarce resources it has, or even those it does not have, to specialize in the production of goods or services.

Indonesia, with its geographical location and ideal tropical climate, is a suitable location for oil palm cultivation, making Crude Palm Oil (CPO) one of the main non-oil and gas export commodities that has a significant effect on labor absorption (Darmawan, 2021). Palm oil, known by HS code 151110, was Indonesia's mainstay in the global market before the development of downstream industries, such as palm oil processing and its derivatives (Jamilah et al., 2020). CPO, along with Palm Kernel Oil (PKO), is the main product of palm oil that accounts for 40% of global vegetable oil consumption (Aksara, 2021), and is used in various sectors such as animal feed, cosmetics, chemical industry, and food.

Palm oil is the world's most efficient vegetable oil-producing crop and is a major source of biodiesel, which plays an important role in the sustainability of future energy (Azizah, 2017). Indonesia is the main producer of CPO with a contribution of around 44.46% of global production. Palm oil, which is the most consumed and produced in the world, has advantages in the form of low production costs, high stability, and diverse uses in food, cosmetics, hygiene products, as well as as as biofuel. Its production, which is dominant in Asia, Africa, and South America, is much higher than other crops because oil palm requires a warm climate and high rainfall. Palm oil has two important qualities related to fatty acids and purity, as well as the taste and clarity of the product (Ministry of Industry, 2007).

Due to the limited national ability to process palm oil derivative products, Indonesia, despite being the world's largest palm oil exporter, is only able to export 40.34 percent of crude palm oil, while the remaining 59.66 percent is processed into derivative products (Hoffmann et al., 2014). In contrast, Malaysia processes 82.5 percent of its palm oil into various products (Rifai, 2014). Along with the increase in production and plantation area, CPO has become Indonesia's leading export commodity (Carter et al., 2007).

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Therefore, the government needs to optimize the allocation and use of palm oil resources through the development of downstream industries and economic management strategies to improve national welfare (Temitope & Magaji, 2023). The government has designated Indonesia as a destination market for crude palm oil (CPO) exports, of which Indonesia is the main producer, followed by Malaysia and Thailand. Indonesia's CPO is needed in the domestic and global markets, contributing significantly to the country's economy.

Table 1 Palm Oil Export Volume by Main Purpose 2015 - 2022 (Tons)

Country Purpose	2015 (Ton)	2016 (Ton)	2017 (Ton)	2018 (Ton)	2019 (Ton)	2020 (Ton)	2021 (Ton)	2022 (Ton)
India	5746	5424	7325	6346	4676	4568	3088	4996
China	4105	3111	3601	4166	5791	4390	4703	3836
Pakistan	2325	2106	2193	2458	2215	2487	2674	2805
Dutch	1261	1048	1286	1161	914	682	567	529
America	732	955	1153	1112	1189	1123	1640	1789
Spanish	998	1116	1367	1168	1078	1135	992	626
Egypt	1156	999	1201	936	1095	970	1035	678
Italy	1193	913	1066	888	751	944	622	595

Source : Central Statistics Agency (BPS) in 2023

Based on table 1., India was the main destination for Indonesia's CPO exports from 2015 to 2022, followed by China, Pakistan, the Netherlands, the United States, Spain, Egypt, and Italy. The rupiah exchange rate also affects the volume of CPO exports, because the significant contribution of CPO to Indonesia's exports can affect the exchange rate (Aprina, 2014). Theoretically, exports are affected by supply and demand; Demand factors include export prices, domestic prices, real exchange rates, global income, and devaluation policies, while the supply side is influenced by export prices, real exchange rates, production capacity, raw material imports, and deregulation policies (Krugman PR and Obstfeld, M. 1999).

Exports have a direct effect on a country's foreign exchange reserves; When exports decrease, foreign exchange reserves also tend to decrease. The relationship between the exchange rate and foreign exchange reserves shows that the greater the foreign exchange reserves, the stronger the value of the country's currency. With a higher exchange rate, the country's economy is considered to be getting stronger and can attract more foreign exchange. In Indonesia, non-oil and gas exports, especially palm oil, are the

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main contributors to foreign exchange reserves. Since 1984, Indonesia's palm oil exports have been stable and continue to increase, with the possibility that Indonesia will overtake Malaysia as the world's largest CPO producer (Aprilia et al., 2023; Aprina et al., 2014).

Indonesia's palm oil production jumped from 1.3 million tonnes in 1986 to 29 million tonnes in 2014, triggering rapid exports to various countries, including India, which is a major importer. Export quotas can lower prices in exporting countries, while in importing countries, prices can rise or remain stable depending on the market position of exporting countries. India, with its growing population and frequent crop failures due to extreme weather, relies on palm oil imports to meet its domestic needs and increase its foreign exchange reserves, although foreign exchange reserves may decline during economic crises (Nurmalita et al., 2019; Itamary & Hendrati, 2022). The international trade policy implemented by the government aims to protect the domestic economy and influence the composition and direction of international trade.

India is increasing its domestic production in processed foods, cosmetics, soaps, shampoos, and other household products by prioritizing high-quality imported raw materials. As an agrarian country with 58 percent of its population working in the agricultural sector, India is experiencing a shortage of palm oil production capacity due to its large population and rapid economic growth. India imports palm oil (CPO) from major producers such as Indonesia, Malaysia, and Thailand to meet these needs. Based on a report by the US Department of Agriculture (USDA), Indonesia is the largest producer of CPO, followed by Malaysia, Thailand, Colombia, and the Philippines. In 2021, Indonesia produced 46.8 million tons of CPO, of which 25.70 million tons were exported, making it the global market leader. Local consumption in 2021 reached 18.42 million tons, especially for the food industry (GAPKI, 2022). This surplus provides a great opportunity for Indonesia to maintain its position as a major supplier of CPO, although export performance often varies. Various factors, including Indonesia's CPO production, CPO prices in the global market, import-export quota policies, tariff policies, and non-tariff policies, correlate with each other and affect the volume of Indonesia's CPO exports to India. If the Indonesian government wants to increase CPO exports to India, they must consider these things.

LITERATUR REVIEW

International Trade

Ricardo stated that mutually beneficial trade can occur even if a country experiences absolute losses in commodity production compared to other countries. Less

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efficient countries will focus on producing commodities with smaller absolute losses, thus having a comparative advantage, and importing commodities with greater absolute losses. This is the legal principle of comparative advantage. Ricardo also introduced the labor value theory, which states that the value of a product is determined by the amount of labor time required to produce it. The theory of comparative advantage explains that a country will export goods if it has lower production costs compared to other countries, and vice versa. International trade theory analyzes the basics and advantages of trade, while international trade policy discusses protectionism and its impacts. Tariff and non-tariff policies can increase trade costs, which in turn can increase the price of imported goods and lower the price of exported goods, thereby reducing trade volume (Salvatore, 1997).

International Price

Price can be defined as the amount of money required to acquire goods or services (Dharmesta & Irawan, 2005:241), as well as the exchange value that reflects the benefits to consumers and producers (Budiarto, 2007:147). The price is determined by the manufacturer or seller and reflects the monetary value of the goods or services. Kristanto (2011:200) mentioned that price has three main goals: measuring sales volume, profit, and describing products. Gillarso (2004:117) relates price to the Law of Demand, which shows that the quantity of goods purchased decreases when prices are high. Soekartawi (2005:122) added that higher international prices compared to the domestic market can increase export volumes. Thus, prices are agreements that affect profits and market share based on the usefulness of goods and expectations, and show a positive relationship between international prices and exports.

Exchange rate

Exchange rate is a comparison of the value between two currencies that can fluctuate, appreciate (increase in the price of a country's currency against another currency) or depreciate (decrease in the price of a currency). The exchange rate describes the price level agreed upon in international trade (Mankiw, 2007:128; Salvatore, 1997:10). Exchange rate movements affect aspects of the economy, such as exports, which increase when domestic currencies strengthen against foreign currencies and decline when they weaken. Research by Bristy (2013) and Horas (2017) shows that currency depreciation has a positive impact on exports, with exchange rates positively correlated with export volumes.

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Import Export Quota

By imposing export quotas, the price of export commodities in exporting countries has decreased. However, in contrast to importing countries, the price of export commodities may increase or remain unchanged depending on the status of the exporting country. Here, the status of the country in question is whether it is a small country or a large country in the commodity trading market.

Tariff and Non-Tariff Policy

The tariff policy, as explained by Lilimantik (2015), establishes taxes or duty liability on goods that cross national borders with the aim of protecting domestic industries and increasing state revenues if the tax is higher than the goods tax in the country of origin. This tariff is charged as a percentage of the price of imported goods. In addition to import tariffs, non-tariff policies can also negatively impact personal profits and reduce the benefits of international trade (Arini, F. H. 2022).

RESEARCH METHODS

Research Location

The study covers India and the main destination countries for Indonesia's CPO exports, namely India, China, and Pakistan, from 1993 to 2023. India is the main and largest destination, followed by China and Pakistan as the second and third largest destinations.

Data and data sources

This research was conducted using several sources from reports from the Central Statistics Agency (BPS), the World Bank, the Directorate General of Plantations (Ditjenbun) and the Ministry of Trade of Indonesia, books, and previous research journals. In this study, one bound variable is the volume of Indonesia's palm oil (CPO) exports to India. The volume of CPO exports is represented in tonnes from 1993 to 2023. The independent variables in this study are International Price (X1), Exchange Rate / Exchange Rate (X2), Export – Import Quota (X3), Tariff and Non-Tariff Policy (X4).

Data Analysis

In this study, the Error Correction Model Method is used because of its ability to analyze short-term and long-term economic phenomena and test the consistency of the

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empirical model with economic theory. This method also addresses the problem of non-stationary data, which can result in dubious regression.

Long-Term Equations

$$Y = \alpha 0 + \alpha 1X1t + \alpha 2X2t + \alpha 3X3 + \mu t$$

Information:
Y = Indonesia's CPO Export Volume to India (Ton)
X1 : International CPO Price (US$)
X2 : Exchange Rate / Exchange Rate
X3 : Export – Import Quota
X4 : Tariff and Non-Tariff Policy
Mt : Residual Value

Short-Term Equations

$$DY = \beta_0 + \beta_1 Dx_1 t + \beta_2 Dx_2 t + \beta_3 Dx_3 t + \ldots \beta_n Dx_n t$$

Information:
Y : Indonesia's CPO Export Volume to India (Ton)
X1 : International Price
X2 : Exchange Rate / Exchange Rate
X3 : Export – Import Quota
X4 : Tariff and Non-Tariff Policy
β_0 :Constant
β_1 :Coefficient$\beta_2\beta_3\beta_4\beta_5\beta_6$
ECT : Error Correction Term
t : Research Period
ε: Standard Error

The data of this study was analyzed using multiple regression models and Error Correction Model (ECM) to measure the relationship and influence of independent variables (X1, X2, and X3) on bound variables (Y) in the long and short term. EViews 12 was used to obtain more accurate results, with hypothesis testing performed through ECM regression equations.

EKSCPO = β0 + β.HCI + β2. Kurs + β3. Kuota EI + β4. Kebijakan Tarif dan Non Tarif + e

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Information:
EKSCPO = Indonesia's CPO Export Volume to India in 1993 - 2023
HCI = International CPO Prices in 1993 - 2023
Kurs = Exchange Rate 1993 – 2023
Kuota EI = Import Export Quota 1993 – 2023
Kebijakan Tarif dan Non Tarif = Tariff and Non-Tariff Policy in 1993 - 2023
E =Error

RESULT

Uji Error Correction Model (ECM)

In this study, if the t-statistic value is -3.689401, which is quite large, significant at the critical value of 1% and the stationary t-statistic value at the alpha value = 1% (Prob. 0.0015), then it can be said that the data in this study have cointegration. short-term and long-term relationships.

Table 2 Long-Term Regression Results

Dependent Variable: VOLUME_EKSPOR
Method: Least Squares
Date: 07/21/24 Time: 08:51
Sample: 1993 2023
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
HARGA_INTERNASIONAL	34762687	6432946.	5.403852	0.0000
NILAI_TUKAR	23515439	12990489	1.810204	0.0823
KUOTA_EKSPOR___IMPOR	-32506.59	1559040.	-0.020850	0.9835
KEBIJAKAN_TARIF_DAN_NON_TARIF	79495821	20251009	3.925524	0.0006
C	-1.31E+09	5.23E+08	-2.502500	0.0192

R-squared	0.836198	Mean dependent var	2.15E+09
Adjusted R-squared	0.809990	S.D. dependent var	1.72E+09
S.E. of regression	7.48E+08	Akaike info criterion	43.85602
Sum squared resid	1.40E+19	Schwarz criterion	44.08955
Log likelihood	-652.8403	Hannan-Quinn criter.	43.93073
F-statistic	31.90593	Durbin-Watson stat	2.283782
Prob(F-statistic)	0.000000		

Source : Eviews Output Results

The International Price Variables as well as Tariff and Non-Tariff Policies have statistically significant coefficients, showing a strong relationship with Export Volume. Conversely, the Exchange Rate Variable with t-statistic below 2 may not be statistically significant in explaining Export Volume, and the Export-Import Quota Variable, with its near-zero coefficient and high p-value, plays no significant role. An R-squared value of

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0.836 indicates that 83.62% of the variability of Export Volume can be explained by independent variables in the model.

Table 3 Short-Term Regression Results

Dependent Variable: D(VOLUME_EKSPOR)
Method: Least Squares
Date: 07/21/24 Time: 09:05
Sample (adjusted): 1994 2021
Included observations: 28 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(HARGA_INTERNASIONAL)	8780520.	10640011	0.825236	0.4181
D(NILAI_TUKAR)	-1.19E+08	46778108	-2.535970	0.0188
D(KUOTA_EKSPOR___IMPOR)	-7424896.	6312401.	-1.176240	0.2521
D(KEBIJAKAN_TARIF_DAN_NON_TARIF)	40038085	20258187	1.976390	0.0608
ECT(-1)	-0.645735	0.222220	-2.905840	0.0082
C	3.61E+08	1.53E+08	2.354910	0.0279

R-squared	0.555421	Mean dependent var	67313500
Adjusted R-squared	0.454380	S.D. dependent var	7.54E+08
S.E. of regression	5.57E+08	Akaike info criterion	43.30113
Sum squared resid	6.82E+18	Schwarz criterion	43.58661
Log likelihood	-600.2159	Hannan-Quinn criter.	43.38841
F-statistic	5.496996	Durbin-Watson stat	1.804823
Prob(F-statistic)	0.001974		

Source : Ouput Eviews Results

A coefficient of D (NILAI_TUKAR) of -1.19E+08 indicates that every increase of one unit in the exchange rate reduces the volume of exports. The ECT coefficient (-1) of -0.645735 shows a negative relationship between the term error correction and export volume. With an R-square of 0.555421, the model explains about 55.5% variation in export volume, and low probability values (Prob (F-statistic) = 0.001974) as well as an F-statistic of 5.496996 indicate the statistical significance of the regression model.

Uji Hipotesis

Table 4 Hypothesis Test Results

Dependent Variable: VOLUME EKSPOR
Method: Least Squares
Date: 07/21/24 Time: 14:22
Sample: 1993 2023
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.31E+09	5.23E+08	-2.502500	0.0192
HARGA INTERNASIONAL	34762687	6432946.	5.403852	0.0000
NILAI_TUKAR	23515439	12990489	1.810204	0.0823
KUOTA EKSPOR IMPOR	-32506.59	1559040.	-0.020850	0.9835
KEBIJAKAN TARIF DAN NON TARIF	79495821	20251009	3.925524	0.0006

R-squared	0.836198	Mean dependent var	2.15E+09
Adjusted R-squared	0.809990	S.D. dependent var	1.72E+09
S.E. of regression	7.48E+08	Akaike info criterion	43.85602
Sum squared resid	1.40E+19	Schwarz criterion	44.08955
Log likelihood	-652.8403	Hannan-Quinn criter.	43.93073
F-statistic	31.90593	Durbin-Watson stat	2.283782
Prob(F-statistic)	0.000000		

Source : Eviews Output Results

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Determination Coefficient Test (R2)

The determination coefficient (R^2) measures how well the model explains the variation of dependent variables (Ghazali, 2011). R^2 values range between 0 and 1, where low values indicate the model's limited ability to explain bound variables, while values close to 1 indicate that independent variables almost completely explain bound variables. With an adjusted R^2 value of 0.836 and an adjusted R^2 of 0.810, this model accounts for about 83.62% of the variation in export volume.

Simultaneous Test (Test F)

If the calculated F value is less than the F value of the table, then the null hypothesis cannot be rejected. This means that there is not enough evidence to say that the independent variable significantly affects the dependent variable. If the probability value of the F-statistic is less than 0.05, the regression model is considered feasible; on the other hand, if it is more than 0.05, the model is not feasible (Wijoyo, 2016). In the overall significance test of the model, the F-statistic of 31.90593 shows a significant relationship between export volume and independent variables.

Partial Test (t-Test)

The model obtained in this analysis is

EKSCPO = -1.31E+09 + 34762687HCI + 23515439Exchange Rate + -32506.59EI Quota + 79495821 Tariff and Non-Tariff Policy + e

The p-value in the regression model measures the probability of the data if the null hypothesis is true. A p-value below 0.05 indicates that the independent variable is statistically significant to the variation of the dependent variable. The results of the Partial Test (T Test) showed:

1. The International Price Coefficient of 34,762,687 with a T-statistic of 5,403 shows a significant positive relationship with export volume. According to international price theory, the price of goods in the global market affects demand and export volume (Soekartawi, 2013).
2. The Exchange Rate Coefficient of 23,515,439 with a T-statistic of 1,810 shows an insignificant positive relationship at the level of 0.05. Exchange rate theory shows that changes in exchange rates affect export volumes, especially in a floating

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exchange rate system (Aprina in Maygirtasari et al., 2015).

3. The Export-Import Quota Coefficient of -32,506.59 with a T-statistic of -0.021 shows a very weak and insignificant relationship with export volume. The export-import quota theory regulates the number of goods exported or imported to protect the domestic industry (Hadi, 2002).
4. The Tariff and Non-Tariff Policy Coefficients of 79,495,821 with a T-statistic of 3,926 show a significant positive relationship with export volume. Tariff and non-tariff policies affect the flow of goods and services as well as the domestic economy (Lilimantik, 2015; Arini, F. H., 2022).

DISCUSSION

The Effect of International Prices on the Volume of Indonesia's CPO Exports to India

An increase in international CPO prices is likely to increase export volumes to countries such as India, as indicated by the positive coefficient of international prices in the regression model. This relationship highlights the importance of monitoring international price trends to predict and manage export volumes, especially with key partners such as India, which in 2009 consumed 5.5 million tonnes of palm oil and is still the largest importer of Indonesia (Mujahid Musthafa, 2016). Extreme weather and an increase in India's population that led to high demand also contributed to high imports. If international CPO prices rise, Indonesia's export volume to India is likely to increase, because higher prices in the global market will increase demand and export volumes (Soekartawi, 2013:22).

The Effect of Exchange Rate on the Volume of Indonesia's CPO Exports to India

The positive coefficient suggests that Indonesia's CPO export volume is affected by exchange rate fluctuations, but a low statistical significance of 0.05 indicates that this relationship may not be strong enough for a clear conclusion. A lower exchange rate can make Indonesia's CPO cheaper and more attractive in the India market, increasing export volumes, while a higher exchange rate can be the other way around. Despite the weak positive relationship, factors such as demand price elasticity, India's trade policy, exchange rate fluctuations, and international competition also affect the competitiveness of CPO prices in the India market. The exchange rate, which is the price of one currency against another (Krugman & Maurice in Radifan 2014:262), affects the amount of CPO exports (Aprina in Maygirtasari, Yulianto, and Mawardi 2015:2), with currency

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depreciation increasing export volumes in a floating exchange rate system (Maygirtasari, Yulianto, and Mawardi 2015:3).

The Effect of Export – Import Quotas on Indonesia's CPO Export Volume to India

Indonesia can restrict CPO exports to countries such as India through export quotas, which can reduce export volumes and affect trade relations as well as market availability. India's import policies, such as tariffs or restrictions, can also reduce Indonesia's CPO demand. Conversely, favorable bilateral trade agreements can boost exports. The presence of competing countries and other CPO exporters in the India market also affects export volumes. If the export quota is not strict enough, the impact on export volumes may be minimal. Export volumes are more influenced by other factors such as international market prices, trade policies, tariffs, and market demand in India. These factors, along with the productivity of the agricultural subsector, land area, exchange rate, and international palm oil prices, contribute to Indonesia's CPO export performance, while fluctuations in CPO prices and company quality also affect export intensity (Hadi, 2002; Pratinda and Harta, 2021; Advent, Zulgani, and Nurhayani, 2021; Rosyadi et al., 2021).

The Effect of Tariff and Non-Tariff Policies on the Volume of Indonesia's CPO Exports to India

Higher tariffs on Indonesia's CPO exports to India can increase import costs, reduce demand, and export volume. On the contrary, lower tariffs or tariff reductions through trade agreements can increase the competitiveness of Indonesia's CPO in the India market and increase export volumes. In addition to tariffs, non-tariff policies such as regulations, quotas, or quality standards also affect export volumes. Although specific data on the non-tariff policy is not provided, strict non-tariff barriers in India could hamper CPO exports by increasing compliance costs or restricting market access. Harmonization of non-tariff policies through mutual agreements or harmonization of standards can accelerate trade and increase export volumes. The combined influence of tariff and non-tariff policies on the volume of Indonesia's CPO exports to India shows a positive impact, where this policy makes Indonesia's CPO more competitive. Factors such as tariffs on substitute goods, export subsidies, trade agreements, and conformity with technical standards can also increase export volumes (Nibras G and Widyastutik, 2019).

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CONCLUSION

International CPO prices have a positive and significant effect on export volumes to India, as high prices increase exporters' profits and boost production. On the other hand, the rupiah exchange rate against the rupee has a weak and insignificant positive relationship, as exchange rate fluctuations can reduce the competitiveness of CPO prices in the India market. Export-import quotas show a very weak and insignificant relationship; If the quota is not strict, the impact on export volume is minimal. Export volumes are more influenced by international market prices, trade policies, tariffs, and market demand in India. Tariff and non-tariff policies, on the other hand, have a positive and significant influence, making Indonesia's CPO more competitive in India through factors such as tariffs on substitute goods, export subsidies, trade agreements, and conformity with technical standards.

SUGGESTION

To get a more accurate picture of CPO export patterns and trends, an expansion of the data coverage and analysis period with up-to-date data and a longer time period is required. More in-depth analysis with advanced statistical techniques and econometric models can help measure variable relationships more precisely and predict future export volumes. Factors such as economic growth, inflation, consumption, as well as subsidized, tax, and infrastructure policies in Indonesia, also affect the competitiveness of CPO exports, while exports from other countries such as Malaysia and Thailand can affect Indonesia's market share in India. Researchers are further advised to add new variables and use different analysis methods to obtain additional perspectives on the same topic.

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