FACTORS AFFECTING THE EXPORT VALUE OF INDONESIAN NATURAL RUBBER COMMODITIES

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Abstract: Rubber and articles thereof commodities are one of Indonesia's leading exports, and natural rubber dominates among those commodities. However, in the last decade, the export performance of natural rubber commodities has not been optimal, especially in the last three years as seen from the declining export value. The purpose of the study was to determine the effect of production, international prices, and also the exchange rate on Indonesia's natural rubber exports, as well as to see which factors had a dominant influence. The analytical method used is multiple regression using secondary data for a period of 30 years (1991-2020), the export value of natural rubber commodities, production, international prices, and exchange rates. Result of this study, production, international prices, and exchange rates have a positive and significant impact on the export value of Indonesia's natural rubber commodities. The production, international prices, and exchange rates together have a significant effect on the export value of Indonesia's natural rubber commodities. The international price factor is the most dominating factor in influencing the export value of Indonesia's natural rubber commodities.

Keywords: Exchange Rates; Export Value; International Prices; Natural Rubber Commodities; Production

INTRODUCTION

All countries for sure want growth and a good economy, and Indonesia is no exception, according to Elfaki et al. (2020) Encouraging an economy country of openness to trade internationally has a role important, good by period short or period long. Similarly, to that according to Ansari (2017), a country that has a system economy open can't dodge current trading internationally. Indonesia which has a system-open economy needs active in to do trade internationally to improve the growth economy. Trading international activities carried out by Indonesia other than to do Indonesian imports also do export which export activities alone give profit. According to Mankiw (2018), is from various types of goods and services produced domestically for later sold to the international market to get profit in the form of foreign exchange received by the state. As for export activities that itself is very beneficial for the growth of exporting countries because export could give profit in the form of expanding the market, adding foreign exchange, as well as expanding fieldwork (Sukirno, 2016). Other sources mentioned that profit from export is getting a foreign exchange from an effort to do sale commodities owned by other nations (Boediono, 2012).

According to Adam Smith in Salvatore (2014) basically, every country has superiority that is not owned by other countries (absolute advantage) in producing a commodity, then from that need, there are trading activities between countries use complete needs. Indonesia has commodities featured that became mainstays for Indonesia's export activities, namely fats and oils animal/vegetables, then followed by commodities ingredient mineral fuel, commodity iron and steel, then commodity machinery and equipment electronics, commodities metal glorious jewelry/gems following position next. Besides that, there are commodity vehicles and parts thereof, then commodity rubber and goods from rubber, underneath still there is commodity machinery and equipment mechanical, footwear commodities, and the last one there is...
commodity rubber and goods from rubber occupy 7th place based on the score Indonesia's exports in 2020, based on Director General of Plantations, Ministry of Agriculture donation foreign exchange for commodity countries rubber and goods from rubber is contributor foreign exchange biggest second after coconut palm. However, in the last three years (2018-2020) commodity rubber and goods from rubber experienced a significant decrease in the value of exports, as well commodity rubber nature which is contributor largest for commodities rubber and goods from rubber.

Decrease condition export this of course just influenced by many factors, one most influential factor in production. Production is an activity to process and produce goods to use Fulfill the needs of society. Factor production that will use in the research is production from commodity rubber nature produced through plantation rubber in Indonesia. On commodity rubber progress is very slow compared to with commodities others, a significant decrease in plantation area make productivity decrease. Connection influence from production alone to export is unidirectional where if production increases so of course just score export will also increase (Aljebrin, 2017). Research previously already conducted by Krismawan et al. (2021); Sofian (2017); Abdaldaim (2012), Omran (2015); Ari & Meydinawathi (2014); Mahendra (2015); Mutia (2015); Adi (2017); and Gayatri & Setiawati (2016). The result of the research is that variable production takes an effect positively on export. Based on the theory of superiority comparative every area or the State has superior production to something commodity even something sector.

In analyzing influencing factors to score export commodity rubber natural see from side Request must observe to price. Because one of the most important components in influencing Requests is the price (Sukirno, 2012). In this study variable price used is the commodity FOB price rubber natural with the average price for each year concerned. The world market price can boost to offer that will have done by Indonesia to the world because rated will more profitable to sell to the world market rather than the domestic market. In a study previously studied by Krismawan et al. (2021); Yanti & Sudirman (2017); put forward that variable prices listed in the study have a negative relationship with export. whereas other research conducted by, Sofian (2017); and Fihri et al. (2021); put forward Thing on the contrary that variable existing prices in a study take effect positively export.

Besides that, the need to observe whether the score was to change is a consideration into export or not a manufacturer. Previous research has been researched by yanti & Sudirman (2017); Sugiharti et al. (2020); Mutia (2015); Omran (2015); and Ijeachy et al. (2014) found that variable score exchange existing in the study mentioned that score swap takes to effect positive export. Whereas research by Fihri et al. (2021); Putri et al. (2016); Hastina & Masta (2017); Smalwood (2019); and Ansari (2017); state, on the contrary, that score swap takes effect negative export.

This study aims to determine how Indonesia's natural rubber exports are affected by national production, international prices for natural rubber, and the domestic currency exchange rate. Additionally, the purpose of this research is to determine which factors have the greatest impact on the export of natural rubber products from Indonesia.
METHODS

Type research is a type of study descriptive quantitative with the use of tool analysis that is regression multiple. The method used in this study with use method descriptive where method descriptive could use many facets and is larger than other methods (Abdullah, 2015).

The research location used in this study is Indonesian. The reason why Indonesia was chosen namely Indonesia is one of the producers of commodity rubber the world's largest after, however commodity Indonesian rubber itself experience a drop in contribution to the supply of commodity world rubber. Where is the object of this study is to the production commodity Indonesian rubber, the price of international commodity rubber, and the value exchange rupiah with the United States dollar, as well as the score export of commodities rubber Indonesian nature from 1991-2020. Data used in a study is secondary data, and secondary data used is data series time (time series). This study will use secondary data that is, data that has been compiled and published by the agency certain. In the study, this is the data used obtained from the Food and Agriculture Organization, the World Bank, and the Central Bureau of Statistics.

Method data analysis is used as much as possible to produce a score of the parameters of a good model. Many studies explain in study regression could prove that method linear regression produces the best unbiased linear estimator or often called BLUE (best linear unbiased estimator). There are several requirements for research that could be said to be BLUE, the model requirements are linear, unbiased, and have the level of smallest variance which can also be referred to as an efficient estimator (Gujarati, 2012). The equation model could be written as following according to:

$$\log\hat{Y} = \beta_0 + \beta_1 \log X_1 + \beta_2 \log X_2 + \beta_3 \log X_3 + e$$

Where:
- $\beta_0$ : Export value commodity rubber Indonesian nature.
- $\beta_1, \beta_2, \beta_3$ : Coefficient regression
- $X_1, X_2, X_3$ : Quantity production of Indonesian rubber, Price level international commodity rubber, Exchange Rate rupiah against American dollars.
- $e$ : Error term

Variable export commodity rubber and goods from rubber, production, price international, value exchange, in this study use functional logarithm. This thing because on variables the rates have great variety and the happening possibility that variance is not normally distributed. In a study, this will conduct by testing assumption classic. The normality test conducted is to see if the residual value in the statistical model is normally distributed or not. A good regression model is a model with residual values normally distributed, so a test for normality this not performed on each variable but at value residuals. To find out if a regression model is distributed normally or not, one of the tests could use the Histogram diagram method or use method Jarque Bera Statistics (JB Stat). The multicollinearity Test is used to find out if Among variables independent have linkages, the same or not. According to Gujarati (2012), a good regression model shouldn't happen a correlation between variables independent.

There are many ways to detect the existence of multicollinearity, one of them using a correlation matrix. The heteroscedasticity test is to see if there is inequality variance from residual one observation to observation another. A regression model that satisfies requirements where there is similarity variance from residual one observation to another observation is fixed or called homoscedasticity. Test heteroscedasticity by statistics could use many tests one is the Glacier Test. Autocorrelation Test used to view is occur correlation Among something period with a period before. Simple, that
Analysis regression is to see the influence among variable free to variable bound, so you can't there is a correlation between observational data with observation before. Autocorrelation tests only could have been conducted to trace data time (time series) and not necessarily conducted to cross-section data. Some frequent statistical test used is the Durbin-Watson test.

Then hypothesis testing is carried out, namely coefficient determination, significance together, and significance partial. Coefficient determination is something showing the size of a big donation from variable independent to variable dependent. In other words, the coefficient determination shows variations up and down variable dependent explained by the variety values variable independent (Sugiyono, 2014). Significance tests together basically used to test among influence variable independent to variable dependent. If the variable independent has influence simultaneous to the variable dependent, then the equation model regression including in criteria suitable. Significance test Partial this used to test influence by partial or each variable independent to variable dependent used in a statistical model.

To analyze how far from factor production, price international, value exchange, and energy most influential work dominant to score export commodity rubber and goods from rubber so used test elasticity. According to Wijaya (2013) elasticity, alone is something changing the percentage of something variable dependent caused consequence exist change percentage variable independent. Accelerated this study using the double log model where coefficient on result regression interpreted as elasticity, which is coefficient variable independent is percentage changes to variables dependent (Gujarati, 2012). So using the double log model is not necessary again to use analysis elasticity.

RESULTS AND DISCUSSION

Description of Research Data

Following this is data regarding the research data used like score export commodity rubber Indonesian nature (Y), Production rubber nature (X1), International Price (X2), and Exchange Rate (X3):

<table>
<thead>
<tr>
<th>Year</th>
<th>Export Value</th>
<th>Production</th>
<th>Exchange Rate</th>
<th>International Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>965714</td>
<td>1328172</td>
<td>1992</td>
<td>826</td>
</tr>
<tr>
<td>1995</td>
<td>1963636</td>
<td>1573303</td>
<td>2308</td>
<td>1580</td>
</tr>
<tr>
<td>1998</td>
<td>1101453</td>
<td>1661898</td>
<td>16800</td>
<td>722</td>
</tr>
<tr>
<td>2000</td>
<td>888623</td>
<td>1501428</td>
<td>9595</td>
<td>667</td>
</tr>
<tr>
<td>2005</td>
<td>2582875</td>
<td>2270891</td>
<td>9830</td>
<td>1488</td>
</tr>
<tr>
<td>2008</td>
<td>6023323</td>
<td>2743556</td>
<td>10950</td>
<td>2586</td>
</tr>
<tr>
<td>2010</td>
<td>7326605</td>
<td>2734854</td>
<td>8991</td>
<td>3654</td>
</tr>
<tr>
<td>2011</td>
<td>11763667</td>
<td>2990184</td>
<td>9068</td>
<td>4823</td>
</tr>
<tr>
<td>2012</td>
<td>7861947</td>
<td>3012254</td>
<td>9670</td>
<td>3377</td>
</tr>
<tr>
<td>2013</td>
<td>6906952</td>
<td>3237433</td>
<td>12189</td>
<td>2795</td>
</tr>
<tr>
<td>2014</td>
<td>4741574</td>
<td>3153186</td>
<td>12440</td>
<td>1951</td>
</tr>
<tr>
<td>2015</td>
<td>3699055</td>
<td>3145938</td>
<td>13795</td>
<td>1571</td>
</tr>
<tr>
<td>2016</td>
<td>3370341</td>
<td>3357951</td>
<td>13436</td>
<td>1605</td>
</tr>
<tr>
<td>2017</td>
<td>5100920</td>
<td>3680428</td>
<td>13548</td>
<td>1995</td>
</tr>
<tr>
<td>2018</td>
<td>3949287</td>
<td>3630357</td>
<td>14481</td>
<td>1565</td>
</tr>
<tr>
<td>2019</td>
<td>3525203</td>
<td>3543171</td>
<td>13901</td>
<td>1640</td>
</tr>
<tr>
<td>2020</td>
<td>3010091</td>
<td>3037348</td>
<td>14105</td>
<td>1728</td>
</tr>
</tbody>
</table>

Source: BPS (2022), FAO (2022), World Bank (2022)
Based on Table 1 in 1995 world market demand for rubber tall so Indonesia as a producer of rubber natural score export too increase, proving with the price of rubber internationally moment that is very high. However, in 1998 the value of the export commodity rubber Indonesian nature is experiencing lethargy because the world, especially Indonesia, is experiencing a crisis monetary so Indonesia's economy becomes paralyzed, this progress up to year two thousand early. Finally, in 2005 the value of the export commodity rubber Indonesian nature begins stable with a high increase from previous years. In the crisis global economy in 2008 export commodity rubber nature is not affected and the world's demand remains tall seen from the score of increased exports drastic with a level of inflated price from the previous year. With the AETS agreement made by Indonesia, Malaysia, and Thailand made score export commodity rubber Indonesia's natural environment in 2010 increased fast because enhancement production of rubber Indonesian nature price international that year Becomes height, condition even this culminating in 2011 when scored export commodity rubber Indonesia nature is the highest among other years. But from 2012-2016 the price of rubber internationally Keep going experiencing a drop so the score export commodity rubber Indonesia nature also follows experienced a decline, though the results of production of rubber Indonesia nature is stable. The year 2017 becomes fresh air for the export commodity rubber natural Indonesia, price of international and production of rubber Indonesian nature is increasing from the previous year so the score export commodity rubber natural increased from the previous year. But in the last three years i.e., 2018-2020 value export commodity rubber Indonesian nature has experienced a drop because production declined domestically.

Then for production in 1991 as an impact of the revolution green and intensified urbanization during the order new, made production from commodity rubber naturally this Keep going experience growth until 1998 although at the time of that occurred crisis monetary. But in the early 2000s production commodity rubber naturally caught the impact of post-crisis monetary where cost operational increases and farmers are unable to cope problem. In 2005-point back the production of rubber naturally started to strengthen with the existence help of fertilizer and tools from agriculture the government, production of rubber this Keep going increasing until the following years even crisis of the global economy in 2008 did not provide an impact on the production of rubber Indonesian nature. Even though a little experience fluctuation in 2014-2015 hasn't Become a problem because in 2016-2017 production of rubber natural this Keep going increase. But in 2018-2020 production of rubber in Indonesian nature continues to experience a decline caused by disease in trees rubber fall leaves or roots are white and tree rubber must rejuvenation back.

The next price of rubber international was in 1995 price rubber increase because the industry needed ingredients raw rubber-like fields of the automotive moment that increases fast. Whereas from 1998 to 2000 the price of rubber internationally down because of the existence of crises monetary around the world. Until 2005 the industry rubber rise so that price of rubber Becomes increased back. Condition this Keep going continue to 2011 with Support AETS agreement. But in 2012 the price of rubber this Keep going to decrease until 2015 due to abundant supply for abundant world market until lower requests, other than that occurs a decline in the automotive world. Finally, in 2016 and 2017 prices rubber increased return along with the economy importing world rubber such as China, Japan, and the United States. In 2018 happened war United States' trade with China caused restrictions on production, where the commodity rubber decreases his request. However, along with the walk time Request to commodity rubber, this return recovered so the price of international rubber return increased.

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As for the value of exchange Indonesia during the order new use system score swap bound so that from 1991 to 1995 the rupiah did not depreciate or appreciated by big. But in times of crisis monetary government changed policy system score swap Becomes system score swap floating free, and in 1998-rupiah experience very severe depression. Finally, in 2000 the value of the exchange rupiah starting stable back. That thing Keep going continued until the global crisis in 2008 which caused the rupiah to depreciate, which then the following year’s return appreciated until 2010. In 2013 the value of the exchange rupiah back depreciates because of an investigation of interesting foreign funds from Indonesia, until 2018 is a peak from depreciation highest the highest in one decade this where existence impacted war trade between China and the United States so the global economy became unstable.

Analysis Regression multiple

Analysis result regression double processed use application Eviews 10 get seen in Table 2 below this:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-Statistics</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-1.4911</td>
<td>-1.4605</td>
<td>0.1561</td>
</tr>
<tr>
<td>Production</td>
<td>0.5034</td>
<td>4.7979</td>
<td>0.0001</td>
</tr>
<tr>
<td>International Price</td>
<td>1.1174</td>
<td>23.2887</td>
<td>0.0000</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>0.0821</td>
<td>2.2460</td>
<td>0.0334</td>
</tr>
</tbody>
</table>

Source: Processed Data (2022)

So, equation regression based on Table 2 above could be arranged as follows:

\[ \log \hat{Y} = -1.4991 + 0.5034 \log X_1 + 1.1174 \log X_2 + 0.0821 \log X_3 \]

A constant value of -1.4991 means if the score from variable independent (production, value exchange, price international) has a score equal to 0 then the score export commodity rubber natural will be down by 1.4991 percent.

Coefficient variable production has a value of 0.5034 means if the score variable is independent other than is score exchange and price international assumed fixed, then every increase in production by 1 percent so will increase the score export commodity rubber Indonesia's natural resources by 0.5034 percent.

The coefficient variable price international has a value of 1.1174 means if the score variable is independent other that is production and exchange rate assumed fixed, then every increasing price international by 1 percent so will increase the score export commodity rubber Indonesia's natural resources by 1.1174 percent.

The coefficient variable score swap has a value of 0.0821 means if the score variable is independent other than production and price internationally assumed fixed, then every score swap depreciates by 1 percent which will increase the score export commodity rubber Indonesia's natural resources by 0.0821 percent.
Assumption Test Classic

![Normality Test](image)

**Figure 1. Normality Test**
Source: Output EViews 10 (2022)

To view it in statistical models, use the Histogram method as shown in Figure 1 above. The results of the normality test using the residual histogram test obtained a score probability of 0.0540 big than 0.05 and can be concluded that the statistical model this distributed normally.

**Table 3. Multicollinearity Test Results**

<table>
<thead>
<tr>
<th></th>
<th>X₁</th>
<th>X₂</th>
<th>X₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>X₁</td>
<td>1</td>
<td>0.7279</td>
<td>0.7561</td>
</tr>
<tr>
<td>X₂</td>
<td>0.7279</td>
<td>1</td>
<td>0.3149</td>
</tr>
<tr>
<td>X₃</td>
<td>0.7561</td>
<td>0.3149</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Processed Data (2022)

To test is occur multicollinearity in statistical models, that is if the score coefficient correlation is more than 0.8 then there is symptom multicollinearity, on the other hand, if the number coefficient correlation, is not enough than 0.8 then there is no symptom multicollinearity. Based on table 4.2 above does not exist score coefficient between variable independent which exceeds 0.8 then could be concluded in this model does not happen symptom multicollinearity.

**Table 4. Heteroscedasticity Test Results**

<table>
<thead>
<tr>
<th></th>
<th>F-statistics</th>
<th>Prob. F (3.26)</th>
<th>0.3242</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs *R²-squared</td>
<td>3.6869</td>
<td>Prob. Chi-Square (3)</td>
<td>0.2973</td>
</tr>
<tr>
<td>Scaled explained SS</td>
<td>2.9270</td>
<td>Prob. Chi-Square (3)</td>
<td>0.4030</td>
</tr>
</tbody>
</table>

Source: Processed data (2022)

To detect whether or not problem heteroscedasticity is with method regress squared residual to fit the square. If Chi - Squared bigger than 0.05 then the model is free from problem heteroscedasticity. The results from the regression model show a score probability Chi-Square of 0.2973 which means the regression model does not experience heteroscedasticity.

**Table 5. Durbin-Watson Hasil Results**

<table>
<thead>
<tr>
<th>Durbin-Watson stat</th>
<th>1.2609</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Processed data (2022)</td>
<td></td>
</tr>
</tbody>
</table>

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With the method comparing the Durbin-Watson value between DW statistics with the DW table, where if du < d < 4-du then could say that the model is free from problem autocorrelation. Durbin Watson's statistical value obtained is 1.247. Where is the value is 1.2138 < 1.2609 < 2.302, then in this model free from autocorrelation.

**Test Statistics**

Coefficient test determination ($R^2$) has aim to know how much big donation ability variable independent could explain on results variable dependent. On result analysis regression multiple this obtained big number $R^2$ which is 0.9909 which means proportion influence variable independent that is production ($X_1$), price international ($X_2$), and the value of exchange ($X_3$) against variable dependent score export commodity rubber Indonesian nature ($Y$) namely by 99.09 percent and the remaining 0.91 percent explained by other variables that are not included into the research model this.

**Table 6. F-Test Results**

<table>
<thead>
<tr>
<th>F count</th>
<th>F Table</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>942.5177</td>
<td>2.975</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Processed data (2022)

To find out $F_{count}$ test results could see from the score the probability, where if the scoring probability is smaller from = 0.05 then the influence of variable independent to variable dependent is significant. The probability of the obtained $F_{count}$ is 0.0000 which means in statistical models this variable is independent by together taking effect significant to the variable dependent. The $F_{count}$ value obtained of 942.5177 with table $F_{table}$ of 2.975, the result this showing that $F_{count}$ is bigger than $F_{table}$ which means variable independent by together influence variable dependent by significance.

**Table 7. T-Test Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$T_{count}$</th>
<th>$T_{table}$</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>4.7979</td>
<td>1.706</td>
<td>0.0001</td>
</tr>
<tr>
<td>International Price</td>
<td>23.2887</td>
<td>1.706</td>
<td>0.0000</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>2.2460</td>
<td>1.706</td>
<td>0.0334</td>
</tr>
</tbody>
</table>

Source: Data Processed 2022

Variable production has a statistic $t_{count}$ of 4.7979 big than $t_{table}$ 1.706 with a score probability of 0.0001 where the score this smaller than level significance ie 0.05. Could be concluded variable production takes effect significantly to score export commodity rubber Indonesian nature.

Variable price international value of $t_{count}$ of 23.2887 more big than $t_{table}$ 1.706 then scores probability of 0.0000 where score this smaller from level significance ie 0.05. Could be concluded variable prices internationally take effect significantly to score export commodity rubber Indonesian nature.

Variable score swap has $t_{count}$ of 2.2460 big than $t_{table}$ 1.706 as for score probability of 0.0334 where score this smaller from level significance ie 0.05. Could be concluded variable score swaps take effect significantly to score export commodity rubber Indonesian nature.
The Influence Production to Export Value Commodity Rubber Indonesian Nature.

The results of data analysis show that variable production give influences positively by significantly scoring the export rubber nature of Indonesia in the period 1991-2020. As for the value coefficient, variable production is 0.5034 which means with the assumption of variable score exchange and price international fixed, then every increase in production by 1 percent will increase the score of export commodity rubber Indonesia's natural resources by 0.5034 percent. With the score t-test, results show a significant influence on the variable score export commodity rubber Indonesian nature, proven by a scoring coefficient of 0.0001 which is the value of this smaller from level significance i.e. 0.05. This thing occurs because results production of rubber of Indonesian nature is liked and needed by the world market, especially in the United States, China, Japan, India, and also South Korea for processing Becomes goods derivative from rubber. The biggest influence on exports especially in commodities including non-oil and gas is production themselves (Abdaldaim, 2012). Factor production according to Nopirin (2014) needs to pay attention to how much big payment to factor production additions are used, and the number of increased results from the sale of factor production with an addition that. This result match with research conducted by Fihri et al. (2021) that the variable production of Indonesian rubber affects to export volume of Indonesian rubber significantly to China but not to the United States. This means condition export of rubber the one nature of Indonesia's decade currently experiences a drop by continuously which caused production from a commodity declining nature. Decrease production of rubber in Indonesia's nature due to a lot of diseases in plants rubber, like fall leaves and roots white. Besides that, bad management of plants from the start nursery, care as well as rejuvenation caused the production of commodity rubber Indonesian nature to become down.

The International Price Effect on Export Value Commodity Rubber Indonesian Nature

Then for results, data analysis shows that variable price international give influence positively to score export commodity rubber Indonesian nature. Variable price international this have score coefficient is 1.1174 then if the variable independent other that is production and exchange rate assumed fixed, then every increase in price as big as by 1 percent will increase the score of export commodity rubber Indonesia's natural resources amounted to 1.1174 percent. The results of the t-test also show that variable price international take effect significance indicated by the value the resulting probability is of 0.0000 where the score this smaller than the level set significance that is of 0.05. This price alone is an element mix marketing the only one that can give income for the company in the study so the price could give income in the form of scores from results of export commodity rubber Indonesian nature (Krismawan et al., 2021). International price is influential to scoring export rubber Indonesian nature, because, with a change in price internationally, value export will occur change on something export commodities (Sofian, 2017). This result strengthens research conducted by Fihri et al. (2021), wherein the study of the price takes effect by positive to export. Similar to the export of rubber to China and America variable prices take effect significantly (Fihr et al., 2021). It means the taller price is international so score export commodity rubber in Indonesia's nature is also getting better high. That thing occurs because the high prices will make a score from exports also high, apart from that with the high prices so producers that as farm rubber will give a high supply to the world market compared to the domestic market (Ekananda, 2014). But in the last three years with a high price, however, the score of export decreased due to the output of sector plantation medium rubber down.

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The Exchange Rate Effect on Export Value Commodity Rubber Indonesian Nature

On result data analysis shows that the variable score swap gets a scoring coefficient of 0.0821 means if the score variable independent production and price international assumed fixed, then each score swap depreciated 1 percent will increase export commodity rubber natural by 0.0821 percent. Then the results of the t-test are known that variable score swap gives significant influence to score export commodity rubber Indonesian nature, with a score probability of 0.0334 small from level 0.05 significance. In Mankiw (2018) there are theories about Mundell-Fleming mentioned when at the exchange rate declared in the direct term, the Mundell- Fleming theory could depict something correlated IS curve unidirectional with an increase. In line with the results, this is in research conducted by Omran (2015) where exports of non-oil and gas commodities in Sudan are affected by the value of swap positively and significantly. In Indonesia's exports, it turns out that score exchange also has an influence positive by significantly (Adi, 2017). This thing because with domestic currency i.e. rupiah depreciates one perpetrator's dollar effort will get more profit a lot, so the offer will also raise. This means on the value-depreciating rupiah exchange will increase the score of export commodity rubber natural Indonesian.

The Most Dominant Influencing Factor to Export Value Commodity Rubber Indonesian Nature

In research, this is a regression model using the double log model which does not require again analysis elasticity to determine the most dominant factor enough to see the score coefficient highest, where the most influential factor from production, price international, and energy work to score export commodity rubber Indonesian nature is International Price factor. This thing could be proven by the score coefficient on variable price highest international from another variable is 1.1174. Where on factor price international this increase so will make offer rubber Indonesian nature will also increase, and vice versa if price international down so offer rubber Indonesian nature to the world market will be decreased. Besides from that with prices high international take income from the export commodity rubber in Indonesia's nature is increasing. The cause of the ups and downs in price internationally it's not far from Requests from the world market as well as the offers made by producer's rubber natural world. When the industry needs ingredients raw rubber natural like automotive, and so on currently developing so requests for rubber natural certain just increases so the price of international rubber natural will be high. Then if offers are made by producing countries rubber is naturally too tall will make the price of international rubber naturally low. So required collaboration with producing countries rubber natural others to determine how much quota export rubber natural so that the price of international rubber naturally permanent stable if Request rubber naturally this down.

CONCLUSIONS

Based on the results analysis and discussion described in this study research influences factors to score export commodity natural Indonesia, Variable production, price international, value exchange and energy work take to effect positive and significant to score export commodity rubber Indonesian nature. Then variable independent together takes effect by significant to score export commodity rubber Indonesian nature. The most influential factor is dominant to score export commodity rubber Indonesian nature from production, price international and an exchange rate that is price international. So, if the price of an international currently tall score for export commodity rubber Indonesian nature will increase, as well on the contrary when
the price international is currently in a position low so a score of export commodity rubber nature too down. This thing occurs because price international determines how much export you get from export activities commodity rubber Indonesian nature.

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