Efficient Vol 4 (2) (2021): 1230-1241 DOI: https://doi.org/10.15294/efficient.v4i2.45848



## **EFFICIENT**

# **Indonesian Journal of Development Economics**

https://journal.unnes.ac.id/sju/index.php/efficient



# The US-China Trade War and Factors Affecting Indonesian **Exports**

## Lailatul Maghfiroh<sup>™</sup>

Development Economic Study Program, Economics Faculty, Universitas Negeri Semarang

Permalink/DOI: https://doi.org/10.15294/efficient.v4i2.45848

Received: December 2020; Accepted: March 2021; Published: June 2021

#### Abstract

This study aimed to determine the short and long-term effects of trade wars, consumer price index (CPI), interest rates, money supply, and the exchange rate on exports. This study belonged to quantitative research. It used an Error Correction Model (ECM) analysis with secondary data. The results of the analysis showed that consumer price index (CPI) in the short and long-term had a negative and significant effect on exports, while the money supply, the trade war between United Stated and China had significant positive effects on exports in the long run, but no effect on the short-term. Money supply had a significant positive effect on exports in the long run, while in the short-term there was no significant effect on exports. The last, interest rates had a negative and significant effect on exports in the long run, while the short-term did not.

Keywords: Exchange rate, Trade War, Interest rate, Money Supply, consumer price index, exports

### Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh jangka pendek dan jangka panjang perang dagang, indeks harga konsumen (IHK), suku bunga, jumlah uang beredar (JUB), nilai tukar terhadap ekspor. Data yang digunakan dalam penelitian ini adalah data sekunder, dan menggunakan jenis penelitian kuantitatif. Penelitian ini menggunakan alat analisis Error Correction Model (ECM). Hasil analisis menunjukkan bahwa indeks harga konsumen (IHK) dalam jangka pendek dan jangka panjang berpengaruh negatif dan signifikan terhadap ekspor, sedangkan jumlah uang beredar (JUB), perang dagang antara Amerika Serikat dan China berpengaruh signifikan. berpengaruh positif terhadap ekspor dalam jangka panjang sedangkan dalam jangka pendek tidak berpengaruh terhadap ekspor. Jumlah uang beredar (JUB) berpengaruh positif signifikan terhadap ekspor dalam jangka panjang sedangkan jangka pendek tidak berpengaruh signifikan terhadap ekspor, suku bunga berpengaruh negatif dan signifikan terhadap ekspor dalam jangka panjang sedangkan jangka pendek tidak berpengaruh signifikan terhadap ekspor.

Kata Kunci: Nilai tukar, Perang Dagang, Suku bunga, Uang Beredar, indeks harga konsumen, ekspor

How to Cite: Maghfiroh, L. (2021). The US-China Trade War and Factors Affecting Indonesian Exports. Efficient: Indonesian Journal of Development Economics, 4(2), 1230-1241. https://doi.org/10.15294/efficient.v4i2.45848

© 2021 Semarang State University. All rights reserved

<sup>™</sup> Correspondence Address : Address: Gedung L2 Lantai 2 FE Unnes Kampus Sekaran, Gunungpati, Semarang, 50229 E-mail: maghfirohlailatul34@gmail.com

## **INTRODUCTION**

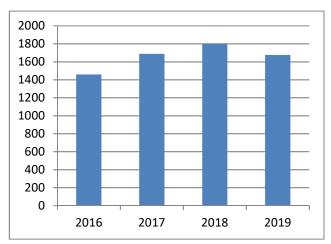
International trade is an activity involving supply (export) and demand (import) between countries. (Boediono, 1999). Through export activities, a country can market its products in order to penetrate the international market and import to obtain goods at low cost and meet the needs that are not produced in that country. The increase in domestic exports is also inseparable from the influence of interest rates as the price of investment and exchange rates. Interest rates affect export activities from the production side, namely the higher credit interest rates, the lower amount of loan entrepreneurs or exporters will produce. Thus, it affects the number of offers to create exporters (Suprianto, 2017).

International trade will expand the opportunities and potential resources owned by a country. Indonesia is one of the countries that adheres to an open economy and is actively involved in international organizations such as GATT (General Agreement on Tariff and Trade), APEC (Asia-Pacific Economic Cooperation), AFTA (Free Trade Area) and WTO (World Trade Organization). Becoming a member of an international organization will provide benefits, especially for developing countries because it will assist in the negotiation process and export policies that will stimulate export development (Laird, 2006).

Export is an important part of international trade. Countries that carry out export activities are very likely to get many benefits, including being able to expand the existing domestic market by obtaining overseas markets, encouraging the smooth flow of domestic trade, providing a multiplier effect on other economic activities, and overcoming the problem of domestic overproduction so that

industry domestic continues to carry out production optimally (Pambudi & Budiningharto, 2011).

Based on this explanation, exports are very important for the Indonesian economy. In addition, exports are influenced by the global economy. That is why exports can experience shocks such as during the United States financial crisis in 2008 which ultimately had an impact on European and Asian countries. Currently, the global economy is experiencing shocks again with the trade war between the United States and China because both countries become the world's strongest economic countries.



**Figure 1.** Indonesian Export Value 2016-2019 Source : Ministry of Trade (2019)

Figure 1 shows the increase movement of export value in Indonesia from 2016 to 2018, but decrease in 2019. The export value in 2018 wasUSD 180,012.67 million, but decreased to USD 167,496.99 million in 2019. This decline in export value can be explained in Wangke's research (2019) which states that global uncertainty increase will result in damage systems and mechanisms of international trade as an impact from the trade wars of the United States and China.

According to Anggraeni (2019), a trade war can be interpreted as an import policy through an increase in tariffs between countries that have trade conflicts. Actual rate policies are permitted under GATT. GATT member countries generally use a lot of tariff policies to protect domestic production of goods and services and also to increase state income. The trade war between the United States and China can cause global economic turmoil.

Many countries are affected by the trade war between the United States and China, especially developing countries and countries that are trading partners of the United States and China. The trade war has resulted in a global economic slowdown which will have an impact on prices and demand for commodities that are the mainstay Indonesia's exports. Since the time of presidential campaign, President of the United States Donald Trump directed the United States economy towards protectionism.

This can be seen from the deteriorating economic ties between the United States and China which have led to a trade war. President Donald Trump's administration imposed import tariffs of USD 50- USD 60 billion for a number of Chinese products that enter the United States in an effort to improve the domestic economy and reduce the trade balance deficit of the two countries.

President Trump announced an increase in import tariffs of up to 15 percent for steel and 10 percent for aluminum because he considered the country to be unfair in bilateral trade. The Chinese government retaliated against the actions of the United States by increasing import tariffs by 25 percent on US imported products and will bring this issue to the WTO as well.

The occurrence of a trade deficit can also affect the IDR exchange rate because Indonesia implements a floating exchange rate system determined by the market, which one of them is used for export and import payments. According to Mankiw (2006: 231) factors that affect exports include consumer tastes, prices, exchange rates (exchange rates), consumer income and government policies on international trade. In addition, investment is also thought to be the influence of fluctuations in exports (Mahendra & Kesumajaya, 2015).

Table 1. IDR Exchange Rate 2016-2019

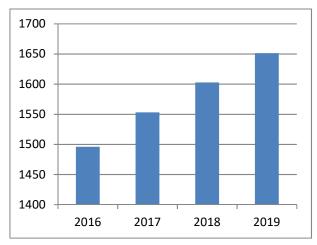
| Month     | IDR exchange rate |        |        |        |  |
|-----------|-------------------|--------|--------|--------|--|
| WIOIIII   | 2016              | 2017   | 2018   | 2019   |  |
| January   | 13,846            | 13,343 | 13,413 | 14,072 |  |
| February  | 13,395            | 13,347 | 13,707 | 14,062 |  |
| March     | 13,276            | 13,321 | 13,756 | 14,244 |  |
| April     | 13,204            | 13,327 | 13,877 | 14,215 |  |
| May       | 13,615            | 13,321 | 13,951 | 14,385 |  |
| June      | 13.18             | 13,319 | 14,404 | 14,141 |  |
| July      | 13,094            | 13,323 | 14,413 | 14,026 |  |
| August    | 13.3              | 13,351 | 14,711 | 14,237 |  |
| September | 12,998            | 13,492 | 14,929 | 14,174 |  |
| October   | 13,051            | 13,572 | 15,227 | 14,008 |  |
| November  | 13,563            | 13,514 | 14,339 | 14,102 |  |
| December  | 13,436            | 13,548 | 14,481 | 13,901 |  |

Source: Indonesian Bank 2019

The exchange rate is an important economic indicator that has a strategic role in an economy. Exchange rate movements have a wide impact on various aspects of the economy, including inflation and export-import performance. An example of exchange rate movements is when depreciation happens the exporter gets benefit because the price of Indonesian export products is cheaper. Another

example of exchange rate movements is that the exporters' appreciation is disadvantaged because the prices of Indonesian export products have become more expensive (Sugeng, 2010).

Table 1 shows that the exchange rate has decreased every year. Worst depreciation rate was in October 2018 amounting to Rp. 15,227 after the financial crisis in 1997. Meanwhile, there was an increase due to capital outflows affecting Indonesian imports as well as the external turmoil, namely the trade war between the United States and China. According to research by Suarsih et al. (2016) exchange rate depreciation in general has a positive impact (causes an increase) on the domestic prices of foodstuffs consumed by the public.



**Figure 2.** The Consumer Price Index 2016-2019 Source : Statistics Indonesia, 2019

Inflation can have an adverse effect on trade, an increase in prices makes the country's goods unable to compete in the international market, so exports will decline. On the other hand, higher domestic production prices as a result of inflation have caused imported goods to become relatively cheap. Then, more imports will be done. Declining exports followed by increased imports led to an imbalance in the

flow of foreign currency, deteriorating the balance of payments (Sukirno, 2013).

Inflation can be reflected in the increase in the Consumer Price Index (CPI). Figure 1.2 shows the consumer price index in Indonesia from 2016 to 2019 has increased. During that year there was an increase in the consumer price index by 10 percent. In 2019 the consumer price index was recorded at 137.60.

Table 2. Interest Rates in 2016-2019

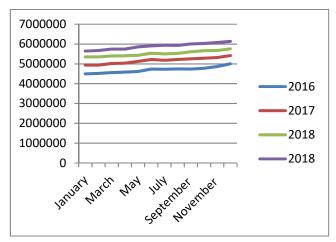
| Month     | Interest Rate |      |      |      |  |
|-----------|---------------|------|------|------|--|
| WIOIIII   | 2016          | 2017 | 2018 | 2019 |  |
| January   | 7.25          | 4.75 | 4.25 | 6.00 |  |
| February  | 7.00          | 4.75 | 4.25 | 6.00 |  |
| March     | 6.75          | 4.75 | 4.25 | 6.00 |  |
| April     | 6.75          | 4.75 | 4.25 | 6.00 |  |
| May       | 6.75          | 4.75 | 4.75 | 6.00 |  |
| June      | 6.50          | 4.75 | 5.25 | 5.75 |  |
| July      | 6.50          | 4.75 | 5.25 | 5.50 |  |
| August    | 5.25          | 4.50 | 5.50 | 5.25 |  |
| September | 5.00          | 4.25 | 5.75 | 5.25 |  |
| October   | 4.75          | 4.25 | 5.75 | 5.00 |  |
| November  | 4.75          | 4.25 | 6.00 | 5.00 |  |
| December  | 4.75          | 4.25 | 6.00 | 5.00 |  |

Source: Bank Indonesia, 2019

According to Nopirin (2000: 70), the classical theory states that high interest rates will cause a high amount of public savings. In addition, high interest rates will also increase the company's capital costs so that companies will experience competition in investment. It means that investors tend to choose to invest in the money market or savings compared to the capital market. On the other hand, low interest rates, both loan and savings interest rates, will have an impact on decreasing people's desire to save, while for companies this condition is very profitable because companies

can take credit to increase capital or invest with low interest rates.

Interest rate developments as presented in Table 2 show fluctuations during 2016-2019 periods. The highest interest rate occurred in January 2016, amounting to 7.25 percent. Furthermore, the interest rate tended to decrease, where the lowest interest rate occurred in January to April 2018, namely 4.25 percent. Interest rates that have decreased will benefit the borrower.



**Figure 3.** Money Supply in 2016-2019 (IDR) Source: Bank Indonesia, 2019

According to Prasetyo (2009: 106), the theory of production costs states that the value of money in circulation originating from metal and money can be viewed as goods. Money demand and production have a positive relationship when the demand for money is high. This will affect production increase.

According to Krugman and Obstfeld (2000) from the supply side, exports are influenced by export prices, domestic prices, real exchange rates, production capacity that can be produced through investment, imports of raw materials and deregulation policies. When the

amount of money that has a basis increases, people prefer to increase the production factor by increasing capital so that it can increase exports.

According to Prasetyo (2009), amount of money in circulation is M<sub>2</sub>+ + savings + time deposit at commercial banks. Bank Based Indonesia's publications throughout 2016, the amount of money in circulation increased by Rp.M<sub>1</sub>506,615.51 and in 2019 the amount of money in circulation has increased by Rp. 491,515. In general, the of money in circulation amount increased from 2016 to 2019 amounting to IDR 14,314,131.12. The following is the development of the amount of money circulating in Indonesia from 2016 to 2019.

### **RESEARCH METHODS**

This research used a quantitative descriptive approach. This type of research was quantitative. Processing numerical (numbers) using statistical methods is the basis for quantitative research. Meanwhile, the data used were in the form of secondary data taken from government agencies and Bank Indonesia sources that have been published or made available. The type of data used was the observation time series data from 2015 to 2019 on a monthly basis.

The variables in this study consisted of the dependent variable and the independent variable. The dependent variable in this study was the value of Indonesia's exports in millions of USD, while the independent variables were the United States trade war dummy (X1), the IDR exchange rate (X2) in millions of Rp against USD, the consumer price index (X3) in points and Interest Rate (X4) expressed in percentage

and amount of money in circulation (X5) expressed in IDR.

The method used in this research was the Error Correction Model. In the Error Correction Model (ECM), there are several steps and conditions that must be met in order for the model to be accepted as an ECM model. All variables must be stationary to the same degree and have cointegration. The long-term and short-term equation models in this study are showed by equation models (1) and (2). the long run model in equation 1 and the short run in equation 2

EX = 
$$\beta$$
0 +  $\beta$ 1 EXCHANGE +  $\beta$ 2 IHK +  $\beta$ 3 SB +  $\beta$ 4  
JUB +  $\beta$ 5 DUMMY + e....(1)

DEKS = 
$$\alpha$$
o +  $\alpha$ 1D (KURS) +  $\alpha$ 2D (CPI) +  $\alpha$ 3D (SB) +  $\alpha$ 4D (JUB) +  $\alpha$ 5D (DUMMY) + ECT (-1) +  $\epsilon$ ..(2)

In details, αο & βο is Constanta; D is the first difference form in the short run model; EKS is the export as variable Y; KURS (X1) is the IDR exchange rate; CPI (X2) is the consumer price index; SB (X3) is the interest rate; JUB (X4) is the amount of money in circulation; DUMMY (X5) is a trade war between the United States and China represents the residuals on the model and ECT stands for the term error correction.

The stationarity test in this study used the Augmented Dickey Fuller (ADF) unit root test, as one of the methods in the stationarity test. The statistical value of each variable was compared with the critical value. If the statistical value is greater than the critical value, then the data is not stationary and vice versa. Furthermore, if in the unit root test all variables are not stationary, it can be continued in the degree of integration test, where all variables must be stationary at the same degree level. Furthermore, after it was known that all variable

data are stationary. The cointegration test was done to determine whether there was a long-run equilibrium correlation in the model. The integration test was carried out through the residual of long-term regression results in equation (1).

After the model met the requirements as an ECM model, a classic assumption test was carried out on the model. Gujarati & Porter (2010) suggest that the classical assumption test must be applied in the regression model. The classical assumption test consists of normality test, autocorrelation test, heteroscedasticity test and multicollinearity test. where the model can be accepted as a good model if it passes all these tests.

In the regression model in the long and short-term, the regression model was carried out by the t statistical test, the F statistical test and the determinant coefficient test or the R-square test (R<sub>2</sub>). Statistics. The t test was conducted to test the significance to determine the significance of each variable. The F test was carried out to see the effect of variable X as a whole on variable Y. The coefficient of determination (R<sub>2</sub>) test was carried out to find out how much the set of variations in the independent variable is able to explain the variation in the dependent variable. variables (Gujarati 2004).

#### **RESULTS AND DISCUSSION**

Regression on the model can be done if the main requirement of the research variable is not necessarily stationary at its level. Based on the unit root test (PP), it was known that all variables in this study were not stationary at the level and stationary in 1st Different (Table 1).

Based on the results of the OLS regression test above, the residual value was then tested by the ADF statistical test to determine whether it was stationary or not. Also, in table 2, it can be seen that the probability value was <critical value (0.05), so it was stationary at the level level, and there was cointegration between variables.

**Table 3.** Unit Root Test (ADF)

| _                |        |               |
|------------------|--------|---------------|
| Variable         | Level  | ıst Different |
| EXPORT           | 0.3077 | 0.0000        |
| EXCHANGE<br>RATE | 0.0931 | 0.0000        |
| CPI              | 0.2282 | 0.0036        |
| SB               | 0.5054 | 0.0000        |
| JUB              | 0.9800 | 0.0290        |

Source : The results of data processing using E-Views 9

Furthermore, based on the cointegration test, there found cointegration between variables in the long run. The results of long term regression in the study are showed in Table 3.

**Table 4.** Cointegration Test Results with the Augmented Dickey-Fuller (ADF) Method at the Level Level

| Variable | t-statistics | Prob   | Decision   |
|----------|--------------|--------|------------|
| Residual | -9.533981    | 0.0000 | Stationary |
| (e)      |              |        |            |

Source : The results of data processing using E-Views 9

In table 3, the t statistical value for the IDR exchange rate variable was equal to 1.774285 <t-table 5% df 55 = 2.0044. It can be concluded that individually in the long run the IDR exchange rate variable did not have a significant effect on exports.

**Table 5.** Regression Results of Long-Run ECM Equations

| Variable         | Coefficient | t-statistic | Prob.  | Adjusted<br>R2 |
|------------------|-------------|-------------|--------|----------------|
| С                | 72874.72    | 4.279246    | 0.0001 | 0.605023       |
| EXCHANGE<br>RATE | 0.672405    | 1.774285    | 0.0817 |                |
| CPI              | -789,2173   | -3.793582   | 0.0004 |                |
| SB               | -893,6683   | -4.949626   | 0.0000 |                |
| JUB              | 0.007368    | 3.393527    | 0.0013 |                |

Source: The results of data processing using E-Views 9.

For the inflation variable, it gained 3.793582 > t-table 5% df 55 = 2.00404, meaning that individually in the long run the consumer price index variable had a significant effect on exports. Based on the results of data processing in table 3, the t-statistic value for the interest rate variable was equal to -4.949626 > t-table 5% df 55 = 2.00404. It can be concluded that individually in the long run the interest rate variable had a significant effect on exports. In terms of the variable amount of money in circulation, the value was 3.393527 > t-table 5% df 55 = 2.00404.

It can be concluded that individually, in the long run, the money supply variable has a significant effect on exports. Based on the results of data processing in table 3, t-statistic value for the the dummy variable of the trade war between the United States and China was equal to 3.044652 > t-table 5% df 55 = 2.00404. It can be concluded that individually in the long run the trade war dummy variable of the United States and China had a significant effect on exports.

| Table 6.  | Regression | Results | of Short-Run | ECM |
|-----------|------------|---------|--------------|-----|
| Equations | S          |         |              |     |

| Variable | Coefficient | t-statistic | Prob.  | Adjusted |
|----------|-------------|-------------|--------|----------|
|          |             |             |        | R2       |
| С        | 192.4128    | 0.832629    | 0.4089 | 0.628029 |
| DKURS    | 0.474750    | 1.015547    | 0.3145 |          |
| DIHK     | -1034,347   | -3.159316   | 0.0026 |          |
| DSB      | -111,9403   | -0.173364   | 0.8630 |          |
| DJUB     | 0.005431    | 2.032688    | 0.0472 |          |
| DUMMY    | -7.560484   | 0.028244    | 0.9776 |          |
| ECT      | -1.6155.40  | -8.265220   | 0.0000 |          |

Source : The results of data processing using E-Views 9

Based on the results of data processing in table 6, the t-statistic value for the IDR exchange rate variable was equal to 1.015547<t-table 5% df 55 = 2.00404. It can be concluded that individually in the short-term the IDR exchange rate variable does not had a significant effect on exports. Based on the results of data processing in table 6, the t-statistic value for the consumer price index variable was equal to -3.159316> t-table 5% df 55 = 2.00404. It can be concluded that individually in the short-term the consumer price index variable had a significant effect on exports.

Based on the results of data processing in table 6, the t-statistic value for the interest rate variable was equal to -0.173364<t-table 5% df 55 = 2.00404. It can be concluded that individually in the short-term the interest rate variable did not have a significant effect on exports. Based on the results of data processing in table 6, the t-statistic value for the variable amount of money in circulation was equal to 2.032688 > t-table 5% df 55 = 2.00404.

It can be concluded that individually in the short run the money supply variable had a significant effect on exports. Based on the results of data processing in table 6, the t-statistic value for the dummy variable of the trade war between the United States and China was equal to-0.0282244 <t-table 5% df 55 = 2.00404. It can be concluded that individually, in the short-term, the trade war dummy variable of the United States and China did not have a significant effect on exports.

The ECT value on the short-term regression results in Table 6. was negative and significant. It has got -1.6155.40with a probability smaller than the critical value (0.0007 <0.05) and the F-stat Probability value smaller than the critical value (0.000000 <0.05). This meant that the model can be accepted as an ECM model. The ECT coefficient (-1) was equal to-1.6155.40 indicating that the export value adjustment was 1 year 6 months.

The results of this study are in line with the results of a previous research conducted by Tang (2008) showing that the price of goods has a negative effect on Malaysian exports in the short and long-term. Based on the regression results with the ECM approach, it is found that the effect of the IDR exchange rate on exports in the short-term (table 6) and the long-term (table 3) was positive and insignificant, but in the long-term and short-term the IDR exchange rate had no effect on exports.

From 2018 to 2019, exchange rate volatility experienced depreciation in the range of IDR 14,000. If the IDR weakened, it would encourage exports to be even bigger because of differences in prices abroad and home. However, Indonesian exports would find it difficult to increase export influenced volume because it was internal domestic factors, namely the trend of the consumer price index which increases every year and will affect production costs. As a result, domestic products were increasingly difficult to compete with products from other countries in the international market. Indonesian exports are exports of goods that are important to other countries so that the exchange rate did not affect the quantity of goods demanded abroad.

The results of this study are in line with the results of a previous research conducted by Epaphra (2016) using the exchange rate variable against the dollar and Tanzanian exports. Based on the regression results with the ECM approach, it was found that the effect of the consumer price index on exports in the short-term (table 4) and the long-term (table 3) was negative and significant, meaning that any increase in the consumer price index would cause a decrease in exports.

The results of this study in the short and long-term had significant effects on Indonesian exports and according to structuralist theory. It is often called the inflation theory in the long run. Inflation is caused by the rigidity or strength of the economic structure in the long run, especially regarding foodstuffs and exported goods.

According to Prasetyo (2009: 219) structuralist theory, an increase in the production factor of goods without being matched by growth in demand will lead to inflation. This causes the country's goods to be unable to compete in the international market so that exports will decline. On the other hand, higher domestic production prices as a result of inflation have caused imported goods to become relatively cheap. Then more imports will be done.

Based on the regression results with the ECM approach, it was found that the interest

rate on exports in the short-term (table 3) was negative and insignificant. The coefficient obtained was -111.9403 with the probability of 0.8630, so it was not significant at  $\alpha = 5\%$ . Hence in the short-term interest rate had no effect on exports.

The above findings happened due to the slow response of lending and deposit rates in response to changes in the BI 7-Day Repo Rate that has been set. Based on BI data, the reference interest rate as of February 2018 maintained the interest rate at the level of 4.25 percent. However, the average loan interest rate per February 2018 was recorded at 11.27 percent. Meanwhile, the average deposit interest rate was around 6.74 percent, so the interest rate variable in a short time has not been able to affect exports.

Then in the long run (table 3) it was found that the effect of interest rates on exports was negative and significant. The coefficient obtained was -893.6683 with a probability of 0.0023 so that it was significant at  $\alpha$  = 5 percent, meaning that every 1 percent increase in interest rates would cause a decrease in exports of USD 893.6683 million, assuming ceteris paribus.

Bank Indonesia decided to keep the BI7DRR interest rate at 6.00 percent. This measure was part of an effort to maintain the attractiveness of domestic financial assets which were expected to maintain stabilization. The increase in interest rates carried out by the Central bank would be responded to by market players and investors to take advantage of this moment to increase production and invest. Along with that, it had an impact on the increase in the production and workforce. As a result, exports and competitiveness have increased.

The results of this study are in line with the results of a previous research conducted by Huong (2014) which states that interest rates have a negative relationship to the trade balance. Based on the regression results with the ECM approach, it was found that the effect of the money supply (JUB) on exports in the short-term (table 4) and the long-term (table 3) was positive and significant. Money demand and production had a positive relationship when the demand for money was high.

This condition would increase the effect on production. In the theory of international trade, exports can be influenced from the supply side. According to Krugman and Obstfeld (2000) from the supply side, exports are influenced by export prices, domestic prices, real exchange rates, production capacity that can be produced through investment, imports of raw materials and deregulation policies. When the amount of money that has a basis increases, people prefer to increase the production factor by increasing capital so that it can increase exports.

Based on the regression results with the ECM approach through the use of dummy variables. The short-run model (table 4) had a negative but insignificant effect on exports, but in the long run it had a significant positive effect on exports. Research findings in the short-term through the use of dummy variables before and after the trade war found that the United States and China had a coefficient value of -7,56048 with a probability of 0.9776 (greater than a critical value of 0.05).

This meant that in the short-term there was no difference before and after the trade war between the United States and China. The short-term impact of the trade war between the United States and China has not been felt by Indonesia. These short-term results are in line

with Putri and Suhadak's (2019) research which used a Paired sample test and found that with the United States and China trade war on March 23, 2018 there is no difference between Indonesian exports to China both before and after the trade war between the United States and China. China.

It is because Indonesia only contributes a few commodities to export products to China from several countries that also export to China, so the trade war between the United States and China has no difference in exports to Indonesia. Then in the long run, through the use of dummy variables before and after the trade war, the United States and China had a coefficient value of 1794,253 with a probability of 0.0036 (less than the critical value of 0.05). This indicated that in the long run there were differences before and after the trade war between the United States and China. With the trade war, the United States and China could increase Indonesia's exports.

In the theory of international trade, it is stated that the factors that influence exports can be seen from the demand side and the supply side (Krugman & Obstfeld, 2000). From the demand side, exports are influenced by export prices, real exchange rates, world income and devaluation policies. Meanwhile, from the supply side, exports are influenced by export prices, domestic prices, real exchange rates, production capacity that can be produced through investment, imports of raw materials and deregulation policies.

The United States trade war has affected Indonesia's export supply because goods previously imported by China from the United States were then diverted from being imported from China to Indonesia. Likewise, the United States, which was previously imported from

China, was transferred to Indonesia. This research is in line with Bhanupong's research (2019) which states that the trade war between the United States and China has a positive influence on Thai exports. This means that when the trade war between the United States and China gets tense, Thailand's exports will increase.

## **CONCLUSION**

The long-term exchange rate of the IDR against the dollar does not have a significant effect on export value. Meanwhile, in the short-term, the exchange rate against the dollar does not have a significant effect on export value. The consumer price index in the long run has a significant effect on export value. Meanwhile, in the short-term, the consumer price index also has a significant effect on export value.

In addition, long-term interest rates have a significant effect on export value. Meanwhile, in the short-term, interest rates do not have a significant effect on export value. For more, the money supply (JUB) in the long and short-term has a significant effect on the value of exports. Then, the dummy of the trade war between the United States and China in the long run has a positive and significant effect on export value.

This means that in the long run there are differences before and after the trade war between the United States and China, one of which is the increase in Indonesia's exports. Meanwhile, in the short-term, the trade war dummy between the United States and China does not have a significant effect on export value. This means that in the short-term there is no difference before and after the trade war between the United States and China.

#### **REFERENCES**

- Anggraeni, N. (2019). Perang Dagang dalam Hukum Perdagangan Internasional. Al-Ahkam, 15(1), 1-7.
- Badan Pusat Statistik. (2020). *Nilai Ekspor*. www.*BPS.go.id*, 17/02/*Th. XXIV*, 1–12.
- Badan Pusat Statistik. (2020). *Indeks Harga Konsumen*. www.BPS.go.id, 17/02/Th. XXIV, 1–12.
- Badan Pusat Statistik. (2020). Konsep Indeks Harga Konsumen. https://www.bps.go.id/subject/3/inflasi.html#subje kViewTab1 diakses pada 13 Februari 2020.
- Bhanupong, N. (2019). Impacts of the U.S.-China Trade War on ASEAN: Case of Thailand. *Asian Economic Panel and the Massachusetts Institute of Technology, 18* (03), 166-188.
- Boediono. (1999). *Teori Pertumbuhan Ekonomi seri Sinopsis*. Edisi Pertama, Cetakan Pertama BPFE, Yogyakarta.
- Epaphra, M. (2016). Determinants of export performance in Tanzania. *Journal of Economics Library*, 3(3), 470-487.
- Gujarati, D. (2004). Basic Econometrics (Ekonometrika Dasar). Alih Bahasa Sumarno Zain. Jakarta: Penerbit Erlangga
- Huong, T. T. X., Vinh, V. X., & Canh, N. P. (2014). Effect of monetary policy to trade balance on open developing country: a case of Vietnam. In Proceedings of the 1 st International Conference on Finance and Economics 2014 (ICFE 2014), Ton Duc Thang University, Ho Chi Minh City, Vietnam, 2-4/06/2014 (pp. 659-669). Ton Duc Thang University
- Kementerian Perdagangan Republik Indonesia. (2019).

  Informasi nilai tukar rupiah.

  https://www.kemendag.go.id/id diakses pada 08

  Januari 2019
- Kementerian Perdagangan Republik Indonesia. (2019).

  \*\*Jumlah Uang Yang Berdedar.\*\*

  https://www.kemendag.go.id/id diakses pada o8

  Januari 2019
- Kementerian Perdagangan Republik Indonesia. (2021).

  Neraca Perdagangan Indonesia dengan Amerika

  Serikat. https://www.kemendag.go.id/id diakses
  pada o8 Januari 2021.
- Kementerian Perdagangan Republik Indonesia. (2020). *Nilai Ekspor Indonesia Menurut Negara Tujuan*.

  https://www.kemendag.go.id/id diakses pada 08

  Juni 2020.
- Kementerian Perdagangan Republik Indonesia. (2021).

  \*Perkembangan Ekspor non migas Indonesia

- Menurut Negara Tujuan.
  https://www.kemendag.go.id/id diakses pada 10
  Januari 2021
  https://statistik.kemendag.go.id/growth-of-non-oil-and-gas-export-destination-country.
- Krugman, P., R. & Maurice, O. (2000). Ekonomi Internasional Teori dan Kebijaksanaan. Jakarta: Rajawali Press.
- Laird, S. (2006) . Export Policy And The WTO The Journal Of International Trade and Economic Development: An International Comparative Review. *Bulletin of Indonesian Economic Studies*, 8(1): 73-88.
- Mahendra, I. G. Y., & Kesumajaya, I. W. W. (2015). Analisis

  Pengaruh Investasi, Inflasi, Kurs Dollar Amerika

  Serikat dan Suku Bunga Kredit Terhadap Ekspor

  Indonesia Tahun 1992-2012. E-Jurnal Ekonomi

  Pembangunan Universitas Udayana, 4(5), 44541.
- Mankiw. N. G., (2006). *Teori Makroekonomi*. Edisi Keenam. (Diterjemahkan oleh Imam Nurmawan). Jakarta: Erlangga.
- Nopirin. (2000). Pengantar Ilmu Ekonomi Makro dan Mikro Edisi Pertama. Yogyakarta: BPFE
- Nopirin. (2010). Ekonomi Internasional Edisi Ketiga. Yogyakarta: BPFE.
- Pambudi, A. D., & Budiningharto, S. (2011). *Analisis Faktor-Faktor Yang Mempengaruhi Ekspor Biji Kakao Indonesia Ke Malaysia Dan Singapura* (Doctoral dissertation, Universitas Diponegoro).

- Prasetyo, P. E. (2009). Fundamental Makroekonomi. Yogyakarta: Beta Offset.
- Putri, A. B., & Suhadak, S. (2019). Uji Beda Ekspor Dan Impor Indonesia Sebelum Dan Sesudah Terjadi Perang Dagang Amerika Serikat Dan China (Studi pada Badan Pusat Statistik Periode September 2017-September 2018). Jurnal Administrasi Bisnis, 71(1).
- Suarsih, S., Achsani, N. A., & Nuryartono, N. (2016). Dampak Perubahan Nilai Tukar Terhadap Indeks Harga Konsumen Bahan Makanan di Indonesia. Jurnal Ekonomi dan Pembangunan Indonesia, 17(1), 1-14.
- Sukirno, Sadono. 2003. *Pengantar Teori Mikro Ekonomi*. Penerbit PT. Salemba, Jakarta.
- Sukirno, Sadono. (2013). *Makroekonomi Teori Pengantar*. Edisi Ketiga. Jakarta: Rajawali Pers.
- Suprianto. (2017). Analisis Pengaruh Kurs dan Suku Bunga Bi Rate Terhadap Ekspor Pertanian Indonesia ke Amerika Serikat. JOM Fekon, 4(1): 1083-1094.
- Sugeng. (2010). Pengaruh Dinamika Penawaran dan Permintaan Valas Terhadap Nilai Tukar Rupiah Dan Kinerja Perekonomian Indonesia. Buletin Ekonomi Moneter dan Perbankan, 312-315.
- Tang, T. C. (2008). The effects of exchange rate variability on Malaysia's disaggregated electrical exports. *Journal of Economic Studies*.
- Wangke Humphrey . (2019). Asean, Indonesia, dan Perang Dagang Amerika Serikat-China. Kajian Singkat Terhadap Isu Aktual Dan Strategis, Vol. Xi, No.11, 8-12.