

## SHOULD INDONESIA LEAVE THE FREE TRADE AGREEMENT?

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### INFORMASI ARTIKEL

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### ABSTRACT:

*The main purpose of the government joining the free trade agreement (FTA) is to increase domestic production and exports. Providing cheap or even free tariffs to other countries, of course, expect the same thing when we export to that country along with the loss of import duty revenue. This study aims to examine whether tariffs along with other variables affect exports. The data used is export-import unbalanced panel data from 2017 to 2020 which is divided based on the classification of business fields. The method is using regression by random effect model. The test results show that the tariffs have no significant effect on increasing exports. In aggregate, Indonesia does not benefit from trade with FTA's countries. The government needs to evaluate unfavorable agreements and provide stimulus to increase production capacity so as not to lose the benefits of the free trade agreement. The success of other FTA such as the growth of Gross Domestic Product of household consumption is not measured in this study.*

**Keywords:** free trade agreement; import; export; revenue; tariff

### ABSTRAK:

Tujuan utama pemerintah bergabung dalam perjanjian perdagangan bebas (FTA) adalah untuk meningkatkan produksi dalam negeri dan ekspor. Memberikan tarif murah atau bahkan gratis ke negara lain, tentunya mengharapkan hal yang sama ketika kita mengekspor ke negara tersebut meskipun akan kehilangan penerimaan bea masuk. Penelitian ini bertujuan untuk menguji apakah tarif beserta variabel lainnya berpengaruh terhadap ekspor. Data yang digunakan adalah data panel unbalanced ekspor-impor tahun 2017 hingga 2020 yang dibagi berdasarkan klasifikasi bidang usaha. Metode yang digunakan adalah regresi dengan model random effect. Hasil pengujian menunjukkan bahwa tarif tidak berpengaruh signifikan terhadap peningkatan ekspor. Secara agregat, Indonesia tidak mendapatkan keuntungan perdagangan dengan negara yang mempunyai FTA. Pemerintah perlu mengevaluasi kesepakatan-kesepakatan yang kurang menguntungkan dan memberikan stimulus untuk meningkatkan kapasitas produksi agar tidak kehilangan manfaat dari kesepakatan perdagangan bebas. Keberhasilan FTA yang lain seperti pertumbuhan Produk Domestik Bruto dari konsumsi rumah tangga tidak diukur pada penelitian ini.

**Kata Kunci:** perjanjian perdagangan bebas; impor; ekspor; pendapatan; tarif

## 1. INTRODUCTION

All countries that follow free trade agreements have hopes that it will increase economic growth because if trade transactions increase, it can provide a stimulus to production. Fitrio (2019) using data from ASEAN countries from 1985 to 2015, states that FTAs have a significant effect on increasing the volume of exports and imports. Other researchers such as Wong et al's (2021) also observed that ACFTA has increased the aggregate between countries. Optimism over the increase in trade transactions has made Indonesia also actively involved in increasing the number of free trade cooperation. Indonesia and fourteen other countries signed the Regional Comprehensive Economic Partnership (RCEP) in November 2020, including ten ASEAN member countries and five ASEAN trading partner countries, namely

China, South Korea, New Zealand, Japan, and Australia. Surono(2012) explained that previously Indonesia had a Free Trade Agreement (FTA), both multilateral FTA scheme and a bilateral FTA scheme. Some of these agreements include the ASEAN Free Trade Area, with the latest agreement scheme in the form of the ASEAN Trade in Goods Agreement (ATIGA), since January 1, 1993; the ASEAN-China FTA, since July 21, 2004; ASEAN-Korea FTA, since January 1, 2007; Indonesia-Japan Economic Partnership Agreement (IJEPA), since July 1, 2008, ASEAN-India FTA, since September 8, 2010; and the ASEAN-Australia-New Zealand FTA (AANZ-FTA), since 2010.

Indonesia has five major trading partners with four of them having FTA agreements. Figure 1 will show Indonesia's trade balance with major trading partners.

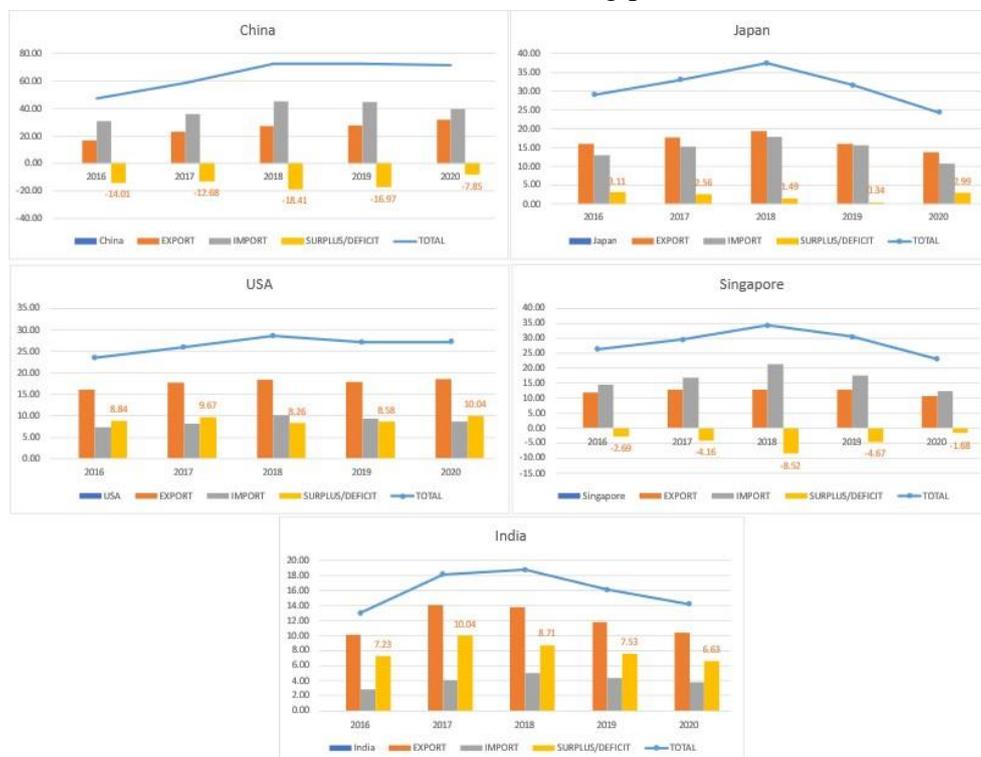


Figure 1. Export-Import Indonesia's Main Trading Partners,  
Source: Ministry Of Trade Republic Of Indonesia (2021) processed by the author

The data in figure 1 shows that in the last five years, on average, Indonesia obtained a surplus in Japan (+2 billion USD) and India (+8 billion USD), then a deficit in China (-14 billion USD) and Singapore (-4 billion USD), meanwhile, the USA, which does not have an FTA agreement with Indonesia, get a surplus (+9 billion USD). FTA does not always seem to benefit a country, such as Indonesia's trade balance with China and Singapore.

Indonesia has reduced import duty rates from year to year as shown in Figure 2. The average import duty rate in Indonesia is currently only around 1%. Hayakawa et al (2020) found that a 1% reduction in import tariffs in a country increases exports by 0.6-1%.



Figure 2. Export Import and Tariff (Right Axis) MFN Indonesia, Source: Indonesian Customs (2021) processed by the author

Figure 2 shows that the decrease in the average import duty rate from 2018 by 1.62% to 1.46% was followed by an increase in exports, but not so with a decrease in tariffs in 2019 and 2020. The actual tariff is not directly related to exports, because there are a series of processes in it. The company buys raw materials using FTA facilities, the raw

materials are obtained cheaper so that it will support production activities. Goods or services that are produced more certainly have more competitive prices and can compete in international markets when exported.

Based on it, in this study, tariffs will be analyzed with other factors that can affect exports. The factors studied include all variables related to customs activities. This is done to focus more on trade activities between countries. Bakari (2016) conducted a study using export-import data in Canada from 1990 to 2015 and concluded that there is a strong correlation between imports and exports. An increase in imports will be followed by an increase in exports and vice versa. Another study conducted by Velampy & Achchuthan (2013) also found that imports and exports influenced each other in Sri Lanka from 1970 to 2010. In previous studies, import data were never separated between imports using FTA and imports without FTA. In this study, to see the significant effect, the import variable will be divided into two, namely import with FTA and non-FTA. Another factor that can affect international trade activities is the exchange rate. Adam et al (2017) conducted a study related to the effect of the Rupiah/US Dollar exchange rate on Indonesia's export volume using data from January 2001 to November 2015. This long-term effect is negative, where every 1% increase in the rupiah/US dollar is always followed by a decrease in exports by 0.24%. Fountas & Aristotelous (2005) researched that before the euro took effect, Ireland showed a significant positive effect of the exchange rate on exports, and then in Belgium, Denmark, France,

Germany, Ireland, Italy, the Netherlands, and the UK showed a significant negative effect on exports. Domestic exporters get a benefit if the rupiah depreciates because profits in rupiah currency will increase and foreign buyers feel that they are buying goods at lower prices, but also suffer losses when the price of raw materials becomes more expensive. Exchange rates could have a positive or negative effect.

The purpose of this study is to find out whether Indonesia benefits from an FTA. The benefits referred to in this study are benefits in the trade balance, not other benefits such as an increase in GDP from household consumption due to cheap imported goods. The effect of tariffs along with other variables in customs activities, namely the value of imports and the exchange rate will be analyzed to see which factors have a significant effect on exports. The next goal is to be able to provide advice to the Government of Indonesia on whether this FTA is worth continuing, regardless of pressure from other countries. This study has a novelty, that in previous studies, tests on imports that affect exports are rarely divided between imports with FTA and imports without FTA. This will give an idea as to whether imports with FTA facilities have more effect on increasing exports than imports that do not use FTA facilities. This study limits the effect on exports from customs activities only, independent variables that influence exports originating from non-customs activities are not included in this research variable, for example, Foreign Direct Investment, Promotion, non-tariff barriers policy, etc.

## 2. RESEARCH METHOD

### Data Source

This research uses customs activity variables. Secondary data was obtained from Indonesian Customs on customs activities from 2017 to 2020. The data is an unbalanced panel data consisting of 88 rows of data grouped according to the classification of business fields. Some of the variables used are exports, imports, exchange rates, and tariffs. Import variables are divided into imports with FTA facilities and imports without FTA facilities to see the difference in the effect of imports using FTA and those not using FTA.

### Definition of Operational Variable

Because there are unit differences between rates and other variables, a natural logarithm transformation was used for variables other than tariffs. The meaning of the variables used in this study are:

#### a. Dependent Variable

LOGEXPORT is a natural logarithmic transformation of the export value of foreign exchange. The data is obtained from the annual accumulation of goods export declaration (PEB) for one group of business fields in USD units. The level of exports shows the ability of a country to produce goods or services, so exports are commonly used as a factor that affects economic growth (Bakari & Mabrouki, 2017).

#### b. Independent Variable

LOGRATE is the natural logarithmic transformation of the exchange rate. The exchange rate determines the amount of payment in transactions between countries. Exchange rates on import and

export transactions in Indonesia follow the Minister of Finance as the state general treasurer. The Fiscal Policy Agency publishes the exchange rate every week with a validity period from Wednesday to Tuesday.

LOGCIF\_FTA is the natural logarithm transformation of imported foreign exchange using FTA tariffs. Import foreign exchange is the sum of Cost Insurance and Freight (CIF) reported through import declaration (PIB).

LOGCIF\_NONFTA is a natural logarithmic transformation of imported foreign exchange that does not use FTA tariffs.

TARIFF is the rate used to calculate import duty. The tariff is calculated by dividing import duty by the CIF in rupiah. Countries that get FTA facilities have a rate preference of up to zero percent, or in another sense, there are exemptions or tariff reductions. This rate determines the value of goods because it is also used as the basis for calculating income tax and value-added tax.

### Conceptual Framework and Hypothesis

This study tries to analyze the effect of tariffs on increasing exports. Reducing tariffs will certainly increase imports, but is it true that joining a free trade agreement will automatically increase exports? Other variables tested are imports with FTA, imports without FTA, and the exchange rate. The conceptual framework of this research is presented in Figure 3.

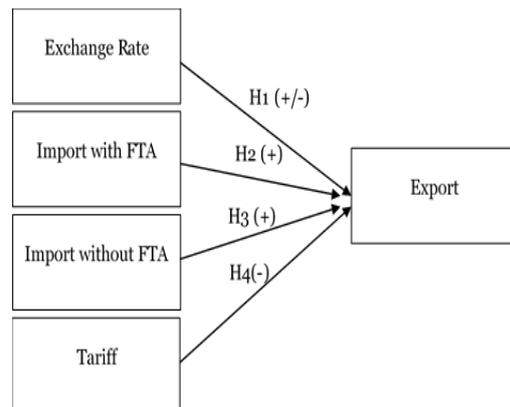


Figure 3. Conceptual Framework

Based on the conceptual framework in Figure 3 above, it will be reduced to the following hypotheses

H1: Exchange rate has a significant effect on exports

The positive effect means that if the rupiah depreciates, it will encourage an increase in exports. The United States continues to pressure the Yuan to appreciate to reduce its trade balance deficit (Ni, 2021). The weak yuan exchange rate causes these goods to become cheaper in the destination country so that exporters will benefit from this. China as one of the world's biggest exporters is enjoying a weak yuan with increasing economic growth and exports. However, Adam et al (2017) and Fountas & Aristotle (2005) found different things. They point out that the exchange rate can also have a negative effect, for example, the high cost of imported raw materials can reduce production capacity.

H2: Import with FTA has a positive effect on exports

Imports with free trade agreements are expected to be used to obtain raw materials from abroad at lower prices because they get exemptions or tariff reductions. Fitrio (2019) stated that the FTA will drive the

volume of imports and exports. The use of FTA facilities for the import of raw materials, for example, can encourage production and exports.

H3: Import without FTA has a positive effect on exports

Bakari (2016) shows that correlation between export and import in Canada is above 90%. Idramadhini & Sitompul's (2015) said that exports and imports influence each other. Increased trade transactions, whether not using FTA facilities can also affect export performance.

H4: Tariff has a negative effect on exports

One of the goals of a country joining a free trade agreement is to improve its economic performance. According to Muchtar (2015) using a general equilibrium economic model that can be calculated on international trade, namely the Global Trade Analysis Project, the simulation of tariff reduction shows that export performance will increase followed by increases in wages, investment, and social welfare.

### 3. RESULT AND DISCUSSION

To explain the relationship between exports, exchange rates, tariffs, and imports, it is necessary to compile them in a robust model. The results of this model will show whether the independent variable significantly affects the dependent variable.

#### The Best Panel Data Regression Model

In general, there are three choices of methods in choosing the best panel data regression model, common effect model (CEM), fixed effect model (FEM), and random effect model (REM). The

approach that can be used is the Chow, Hausman and LM test.

#### 1. Chow's Test

This test could choose the best model between the common effect model and the fixed effect model. The hypothesis of the chow's test is:

Ho : (the effect of unit cross-section as a whole is meaningless) common effect model

H1 : there is at least one;  $i = 1, 2, \dots, n$  (mean area effect) fixed effect model

**Table 1. Chow Test Result**

Effects Test	Statistic	d.f.	Prob.
Cross-section F	18.488841	(21,59)	0.0000
Cross-section Chi-square	172.177302	21	0.0000

Chow test result by using  $\alpha=5\%$  shows that FEM was better than CEM (Prob Chi Square=0,0000).

#### 2. Hausman's and LM Test

In the case of an unbalanced panel, random-effects analysis requires much stronger assumptions, whereas REM as currently developed, is for balanced panels (Wooldridge, 2016), although in the end, Wooldridge (2019) found a possible way to do random effect on an unbalanced panel, especially now that the software's ability to process data is already robust. Jacob et al (2014) said, if the data is incomplete for all periods, it is a type of unbalanced panel data and can be formed according to the two-way error component regression model. Based on this, in this case, it can be continued to do the Hausman test to know whether the REM is a better model than FEM. The hypothesis of the Hausman test is as follows:

Ho: correlation  $(X_{it}, \epsilon_{it}) = 0$  (cross-sectional effect not related to other regressors) REM;  
 H1: correlation  $(X_{it}, \epsilon_{it}) \neq 0$  (cross-sectional effect associated with other regressors) FEM  
 (Irwansyah et al, 2021)

**Table 2. Hausman and LM Test Result**

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.742462	4	0.1501
Breusch-Pagan	78.68498 (0.0000)		

Hausman's test result by using  $\alpha = 5\%$  shows that H1 was rejected (Prob=0,1501). Acceptance of H0 means that the cross-sectional effect is related to other regressors so that the random effect model is better than the fixed-effect model (Irwansyah et al, 2021). Breusch-Pagan's test result by using  $\alpha = 5\%$  shows that H0 was rejected (Prob=0,000). Acceptance of H1 means that the random effect model is better than the common-effect model.

**Classic Assumption Test**

The classical assumption test aims to meet the assumptions of an unbiased regression model or Best Linear Unbiased Estimate (BLUE) (Ghozali, 2016). REM uses the Generalized Least Squares (GLS) approach with homoscedastic assumptions and no cross-sectional correlation (Basuki & Prawoto, 2015), so that in REM, the classical assumption test is only carried out on the normality test and multicollinearity test. The normality test can be seen in the following figure.



Figure 4. Normality Test Result

H0 in the Jarque-Bera test is data with normal distribution, if the probability value is greater than the value of  $\alpha$  then H0 is accepted and H1 is rejected, which means the data is normally distributed. Based on Figure 4, the results of the Jarque-Bera test (0,270050) are greater than the value of  $\alpha = 5\%$ , so H0 is accepted, meaning that the data in this study are normally distributed data.

Next is the multicollinearity test. According to Ghozali (2016), the multicollinearity test serves to determine whether there is a correlation between independent variables. Multicollinearity confuse and is inefficient because it tests one variable more than once. The value of the correlation matrix between two independent variables must be less than 0.90 to be said to be free from multicollinearity problems (Ghozali, 2016). The results of the multicollinearity test are presented in Table 3.

**Table 3. Multicollinearity Test**

	LOGRATE	LOGCIF_FTA	LOGCIF_NONFTA	TARIFF
LOGRATE	1.000000	0.037928	0.003041	-0.178596
LOGCIF_FTA	0.037928	1.000000	0.687477	-0.061036
LOGCIF_NONFTA	0.003041	0.687477	1.000000	-0.398285
TARIFF	-0.178596	-0.061036	-0.398285	1.000000

Based on Table 3, there is no correlation between independent variables that is greater than 0.90, so that the model in this study does not have multicollinearity problems.

### Regression Result

The results of the regression using the REM model are as follows:

**Table 4. REM Result**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-20.53509	21.44030	-0.957780	0.3411
LOGRATE	2.337921	2.217894	1.054118	0.2950
LOGCIF_FTA	0.284117	0.114383	2.483910	0.0151
LOGCIF_NONFTA	0.590334	0.159388	3.703749	0.0004
TARIFF	3.979700	11.41214	0.348725	0.7282
R-squared	0.371577	Mean dependent var		3.864866
Adjusted R-squared	0.340156	S.D. dependent var		1.066128
S.E. of regression	0.883714	Sum squared resid		62.47603
F-statistic	11.82570	Durbin-Watson stat		1.374608
Prob(F-statistic)	0.000000			

The explanation of the results in Table 4 is as follows:

#### 1. R-squared

The analysis of the coefficient of determination or R-squared shows the ability of the research model to explain variations in the dependent variable (Ghozali, 2016). The R-squared value indicates that the dependent variable of export foreign exchange can be explained by the independent variables in the form of exchange rates, tariffs, and imported foreign exchange by 37,16%, while the remaining 62,84% is influenced by other factors outside the variables in this study.

#### 2. Simultaneous Significance Test (F-Statistic)

The f-test can show whether the independent variables used in the study can have a simultaneous influence on the dependent variable (Ghozali, 2016). A good regression model is when all the independent variables together will affect the dependent variable. The f-test is performed by comparing the probability value of F-statistics with the value of  $\alpha$ .

**H0 : all independent variables in the study simultaneously do not affect on the dependent variable**

**H1 : all independent variables in the study simultaneously affect the dependent variable**

The expected value of the F-statistic probability is smaller than the value of  $\alpha$ . The results of the F test presented in Table 4 show a number of 0.0000 or less than  $\alpha = 5\%$ . This shows that H1 is accepted, which means that the variables of the exchange rate, tariff, and import foreign exchange simultaneously affect the dependent variable, namely export foreign exchange.

#### 3. Partial Significance Test (T Test)

The T-Test is used to determine whether the independent variable affects the dependent variable partially (Ghozali, 2016). The regression model requires at least one independent variable which partially has a significant effect on the dependent variable so that the model can obtain a significant F-statistic probability value. The t-test is performed by comparing the t-value with the t-table or by comparing the p-value of the independent variable with the value of  $\alpha$ . The t-test hypothesis is as follows:

H0 : the independent variable has no significant effect on the dependent variable.

H1 : the independent variable has a significant effect on the dependent variable.

The p-value of each independent variable is shown in table 4, it can be seen that there are two variables that H1 is rejected, namely the tariff and exchange rate. The tariff variable has a p-value of 0.7282 or above of 5%. The second variable rejected by H1 is the exchange

rate. The exchange rate has a p-value of 0.2950. Two other variables reject H0 and accept H1 namely Import Variable with FTA, and Import without FTA which show p-values of 0.0151 and 0,0004, respectively.

Based on the results of the regression, the following model can be formed:

$$\begin{aligned} \text{LogExport}_{it} = & -20.53509 + 2.337921 \text{ LogRate}_t + 0.284117 \\ & \text{LogCIF\_FTA}_{it} + 0.590334 \\ & \text{LogCIF\_NONFTA}_{it} - 3.979700 \text{ TARIFF}_{it} \\ & + \varepsilon_{it} \end{aligned}$$

## Interpretation Model

### 1. Exchange Rate

The exchange rate has no significant effect on Exports (H1 was rejected, p value=0,2950). This result is different from the research by Fountas & Aristotelous (2005), that in some countries, the exchange rate has a significant positive effect on exports, and in other countries, it can also have a significant negative effect. This is similar to the results of Nyeadi et al (2014) research which states that changes in the exchange rate also have no impact on export performance in Ghana. This incident can be caused by the inability of the company to increase production so that if the products produced are the same, the profit from the depreciation of the exchange rate will not be obtained. According to Nyeadi et al (2014), the government should focus more on increasing production instead of concentrating on the exchange rate and inflation. This is different from China which is trying to keep the Yuan depreciate so that goods from China still feel cheap in the destination country (Pransuamitra, 2021). Another cause of

not getting profits from the depreciation of the exchange rate is the high cost of raw materials. The depreciation of the exchange rate weighed on the company's finances when it needed imported raw materials, thus affecting production capabilities.

### 2. Import (CIF with FTA and CIF non-FTA)

Imports using FTA facilities have a significant positive effect on exports with p-value = 0.0151. This is understandable in aggregate because the purpose of FTA cooperation is to increase world trade transactions. The absence of tariff barriers will increase the volume of trade between countries. Surprisingly, it also happened to non-facility import foreign exchange. Non-facility Imports turned out to have a significant positive effect on exports with p-value = 0.0004. This is supported by the illustration in figure 5 below:



Source: BPS (Statistics Indonesia) processed by the author

Figure 5. The Indonesia Export-Import Data 1990 to 2020.

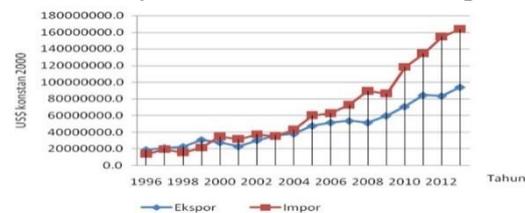
Indonesia's export-import data from 1990 to 2020 has a similar trend. Export and import seem to be two linear lines. This shows that export performance is influenced by imports and maybe vice versa. Babatunde (2014) shows that there is bi-directional causality between aggregate exports and imports in Nigeria in the data from 1960 to 2014. Bakari

(2016) shows that exports and imports in Canada from 1990 to 2015 have a Pearson correlation above 90%. Velnampy & Achchuthan (2013) found a strong relationship between imports and exports in Sri Lanka's export and import data from 1970 to 2010. These results also support the results of Idramadhini & Sitompul (2015). They show that export can influence import by the Vector Autoregression (VAR) method and Granger Causality Test. Some of the results of these studies indicate that an increase in the value of exports will increase the value of imports and vice versa. This can be explained as follows, that the exporting country, also requires imports, especially for raw materials. The increase in imports of raw materials will automatically boost production so that exports will also increase. Imports, whether using FTA facilities or not using FTAs, have been shown to have a strong influence on exports

### 3. Tariff

Tariffs show no significant effect on the value of exports ( $p\text{-value}=0.7282$ ). Indonesia's tax revenues have the potential to lose import duties in the hope of increasing domestic production and exports. Based on this research data from 2017 to 2020, it is clear that the reduction in tariffs is not the main reason for the increase in Indonesia's exports. These results indicate that the increase in Indonesia's exports is not entirely due to the decline in FTAs, but is more due to the increasing volume of world trade and other reasons other than customs variables, such as the enhancement of information and communication

technology, foreign direct investment, non-tariff barriers, promotions, marketplaces, and others. The following data compiled by Jamilah et al (2016) show that the increase in Indonesia's trade volume with China since ACFTA in 2004 shows a sharp increase, even though the value of Indonesia's exports is getting farther away from the value of its imports.



Source: UNCTAD in Jamilah et al (2016)

Figure 6. The Indonesia - China Trade Balance from 1996 to 2013.

At first glance, these results seem different from Fitrio's research. R. A. (2019), Wong et al (2021) and Hayakawa et al (2020). Fitrio (2019) conducted a study on the impact of FTAs on nine ASEAN countries which stated that FTAs increased export volumes by 1.47% and imports by 1.53%. Wong et al's (2021) research on 79 trading partners of ASEAN member countries plus China shows that ACFTA has increased the aggregate trade of intra-aligned and extra-aligned countries. Since the existence of the FTA agreement, in aggregate it can be seen that the volume of trade between countries is increasing, but all these studies do not specifically examine the impact of reducing tariffs on exports by comparing it with non-FTA imports.

Figure 1 has shown that for the five main trading partners, trade with countries that do not have an FTA agreement with Indonesia is the most profitable, namely the United States with an average surplus

in the last five years of 9 billion dollars. Indonesia also benefits from the extension of the generalized system of preference (GSP) facility (Aldila, 2019). GSP is an import duty exemption facility granted to developing countries, and since 1980 Indonesia has received the GSP facility. In 2019, around 13% of Indonesia's exports to the United States used GSP (Aldila, 2019). Indonesia's four other main trading partners have FTA agreements, with India and Japan, Indonesia has a surplus, while with China and Singapore Indonesia has a deficit.

**Should Indonesia leave the FTA?**

Based on the five main trading partners, it is clear that Indonesia does not seem to benefit much from the trade balance. Maybe Indonesia should review FTA cooperation with other countries that are not profitable, such as China and Singapore. Figure 7 will show us the total

trade balance with countries that have FTA agreements.

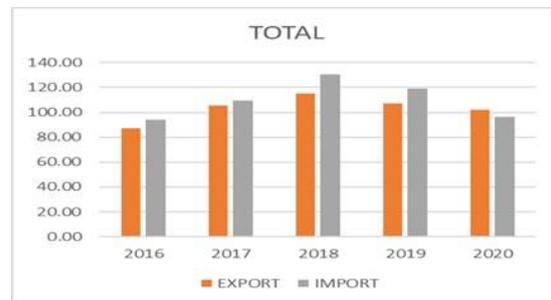
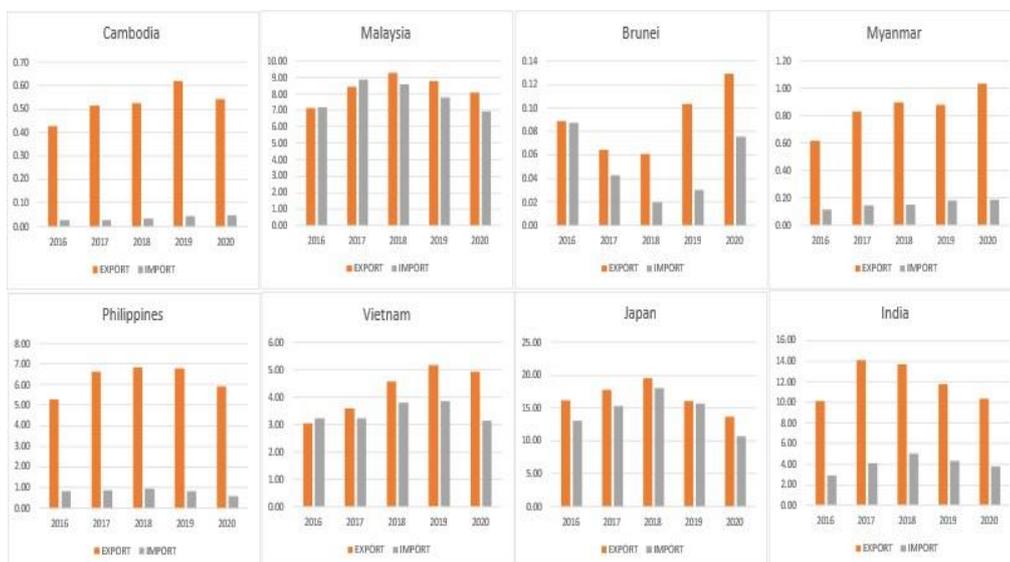


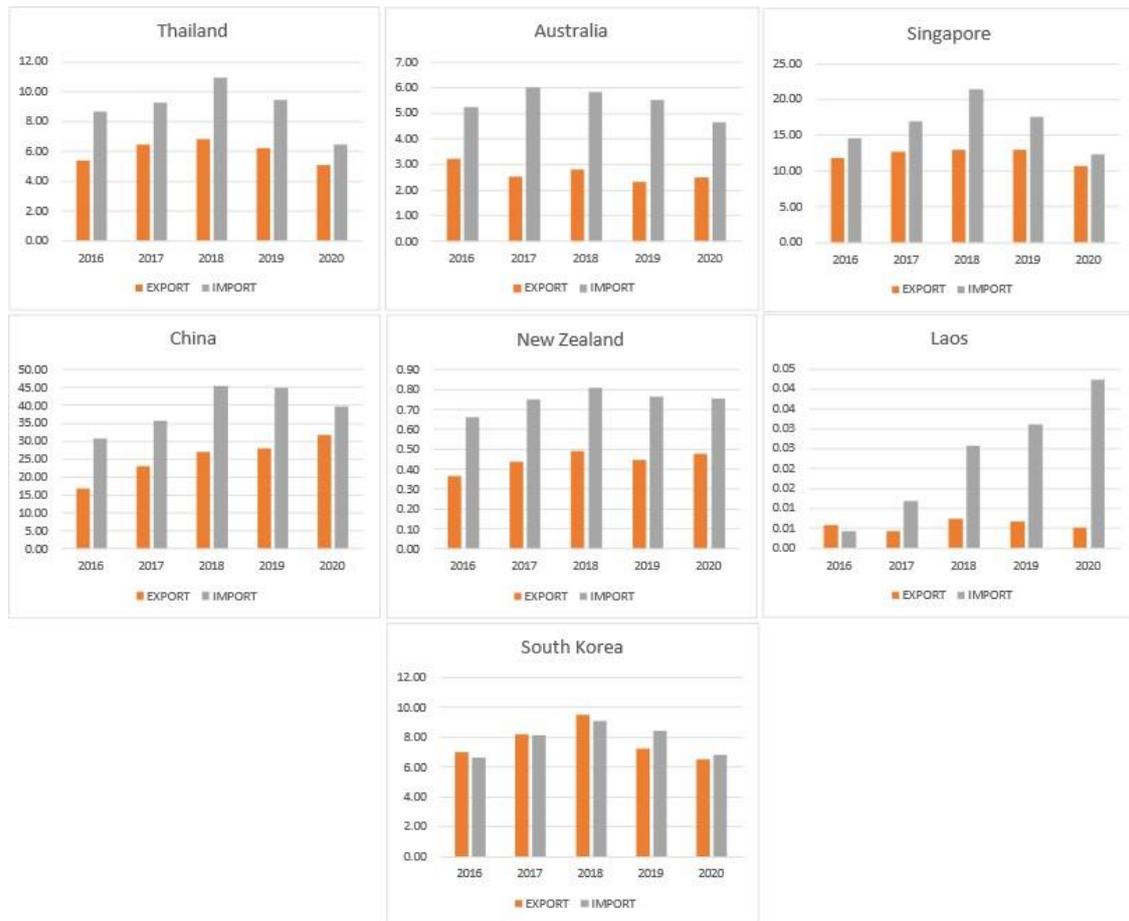
Figure 7. Indonesia's Trade Balance With FTA, Source: Ministry Of Trade Republic Of Indonesia (2021) processed by the author

It can be shown from figure 7 that Indonesia has a deficit with an average value of 6.4 billion USD in the last five years. For the complete information, please see the table in the attachment. Now let's look at Indonesia's FTA trading partners specifically, there are eight countries show a surplus in figure 8 and seven countries show a deficit in figure 9.



Source: Ministry Of Trade Republic Of Indonesia (2021) processed by the author

Figure 8. Indonesia's Trade Balance (surplus),



Source: Ministry Of Trade Republic Of Indonesia (2021) processed by the author

Figure 9. Indonesia's Trade Balance (deficit)

The surpluses are shown in figure 8 that Cambodia has surpluses USD 489 million, Malaysia USD 472 million, Brunei USD 38 million, Myanmar USD 693 million, Philippines USD 5.4 billion, Vietnam USD 815 million, Japan USD 2 billion, India 8 billion USD. The deficits shown in figure 9 are respectively Thailand 2.9 billion USD, Australia 2.7 billion USD, Singapore 4.3 billion USD, China 13.98 billion USD, New Zealand 303 million USD, Laos 17 million USD, and South Korea 133 million USD (Details are in the appendix).

So, should Indonesia leave the FTA? The amount of the surplus in figure 8

shows that the FTA also brings benefits to Indonesia, although in total this FTA agreement is still detrimental to Indonesia. The size of the deficit in figure 9 shows that Indonesia can evaluate both agreements and barriers in trade with those countries. If the success of the FTA is only seen from the trade balance with countries that have free trade agreements, then Indonesia loses because import tariffs do not affect exports and instead cooperate with countries that do not have tariff agreements more profitable, such as the United States. An FTA agreement without increasing production will only make Indonesia just a consumer country, so the main focus of the government should be to

increase production. The R-Squared value of 37.16% also shows that there are 62.84% of other factors that affect exports, so it is not only in terms of exchange rates, tariffs, and imports.

#### 4. CONCLUSION

Based on the analysis, tariffs and exchange rates do not have a significant effect on exports, while other variables such as imports, whether using FTA or not, show a significant positive effect. Based on discussion, Indonesia still has a trade balance deficit with its FTA partners, so a free trade agreement has not yet brought benefits on the export. It is necessary to conduct a more in-depth evaluation of which agreements continue to harm the trade balance. Because of tariffs, exchange rates, and imports only affect around 37.16% of exports, the government needs to focus on other factors, for example increasing production.

Noted that the model and grouping of panel data used cannot capture the added value of changes in the type of goods from those imported as raw materials to finished goods that are exported, because they are divided based on business classification. The success of FTA in this study is only measured in exports, although cheap imported goods used for household consumption will also increase GDP, so that in future research the effect of FTA and household consumption can be examined.

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