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Diversification of Indonesian Export Markets to Non-Traditional Countries

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Abstract

The Ukraine-Soviet Union war and the Covid-19 pandemic made the world economy experience complex problems. Indonesia was also affected, especially the decline in exports, so it needed to find new trading partners. This study aims to determine the potential diversification of Indonesia's export market to non-traditional countries, namely Turkey, Brazil, Georgia and the Russian Federation as well as 10 economic commodities. The data used in this study is secondary data. This data is obtained through the GTAP database (Global Trade Analysis Project) version 10. In this GTAP database there are input - output data from 121 countries representing 98% of world GDP. The results of this study are Brazil and Turkey can become Indonesia's trading partners, while Georgia and the Russian Federation have little opportunity to establish trade cooperation with Indonesia.

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INTRODUCTION

Each country certainly wants to expand its export market so it is necessary to establish trade cooperation with non-traditional exporting countries. Sabaruddin et al. (2015) explained that an aggressive export market penetration would certainly get competitors from other countries that had already established trade cooperation. It costs a lot of money besides being smart in choosing commodities that are marketed to that country and in return receiving superior commodities from the new trading partner country.(Hotsawadi and Widyastutik, 2020).

Sabaruddin (2014) states, the strategy of increasing exports to non-traditional countries is not something new for countries such as China, India, Korea and other developed countries. Even ASEAN member countries such as Singapore, Malaysia and Vietnam have used this strategy. Mold & Mukwaya (2017) explained that trade liberalization is the reduction of barriers to trade, one of which is the reduction of tariffs. One way to reduce tariff barriers can be done through free trade agreements or commonly known as free trade agreements (FTA) which can provide various benefits for participating countries. For example, Vietnam, which is an ASEAN member country, has established an FTA cooperation scheme with the EAEU (Armenia, Belarus, Kazakhstan, Kyrgyzstan, and the Russian Federation) since October 2016.

Furthermore, Singapore followed in the footsteps of Vietnam, which first signed the EAEU FTA cooperation. FTA can have a positive impact as well as a negative impact on countries that are members of the FTA. A country will get a positive impact if the country is able to compete in the FTA market. However, the FTA market will especially have a negative impact on non-member countries. This is in accordance with research conducted by researchYanase & Tsubuku (2022) which states that the existence of an FTA increases the economic welfare of member countries but will reduce the economic welfare of non-members. This is because with a reduction in tariffs, member countries will prefer to trade between member countries and will reduce imports from non-member countries.

If Indonesia wants to follow in the footsteps of the countries mentioned above in establishing trade cooperation with non-traditional countries, it needs hard work to make it happen. The selection of Indonesia's non-traditional export countries needs to be careful and based on scientific analysis, one of which is using the GTAP program. Research findingsSham et al. (2021) This helped provide solutions for the countries of Indonesia and Turkey in starting trade after the two countries failed in nine negotiations. Research using the GTAP program combined with the CGE program with the One Belt One Road model focuses on investment, efficiency, and risks related to energy and water (Cai et al., 2016; Cheng et al., 2016; Duan et al., 2018; Xu et al., 2016). al., 2017; Han et al., 2018; Zhang et al., 2018; Shaikh et al., 2016). Based on the method used, Malle's research (2017) focuses more on the cooperative behavior of China and Russia regarding One Belt One Road. With Pivot, Clarke (2016) analyzes the opportunities and challenges of Eurasia China. While the study of Li and Hilmola (2019) is more of a literature review study related to One Belt One Road.

Through the existence of an FTA, it will reduce one of the barriers to international trade, namely tariffs. FTA will have a positive impact on the country's economy. This is in line with researchMold & Mukwaya (2017) which stated that the impact of the TFTA Tripartite Free Trade Area in 26 African countries had a positive impact on increasing regional trade by 29%, especially for the manufacturing sector such as the light and heavy manufacturing industry and the processed food industry. This is certainly the opposite if trade barriers are even increased, such as an embargo or a trade war. This is in accordance with researchBenuria et al. (2022) which stated that the trade war between America and China had an impact on decreasing profits,

decreasing investment and increasing inventories in the short term. Companies that export and import to various countries are not too affected by this trade war, but if the company only trades in one country, namely China and America, the impact is very significant.

Indonesia itself has tried to build trade openness by opening a bilateral cooperation scheme within a broader framework, namely the Indonesia-Chile CEPA.Chile is Indonesia's third largest trading partner in the South American region after Brazil and Argentina. Chile has a strategic location politically and geographically making it ideal to be a hub for Indonesian products in South America, with a total population of around 642+ million people. It has an international scale port, spread from north to south that connects all regions of Chile. The existence of bilateral cooperation between the two countries will have a positive impact on both countries both economically and in improving welfare. This is because the main purpose of doing trade is to seek profit so that if the two countries do not benefit equally, of course, bilateral cooperation will not occur. The positive impact of bilateral cooperation is proven through researchChen et al. (2022)which states that bilateral trade between BRICS countries leads to increased access to fossil energy which in turn is able to improve the economy of BRICS countries.

Table 1. Potential Non-Traditional Countries Based on the Highest Demand Index

No.	Country	DI value	No.	Country	DI value
1	Russian Federation	6.93	9	Jamaica	3.44
2	Brazil	6.92	10	United Arab Emirates	3.04
3	Pakistan	4.80	11	norway	2.94
4	Georgia	4.69	12	Uruguay	2.62
5	Nigeria	4.41	13	Cote d'Ivore	2.42
6	Kazakhstan	4.22	14	Trinidad and Tobago	2.36
7	Turkey	3.74	15	Myanmar	2.33
8	Kuwait	3.51	16	Egypt, Arab Rep	2.33
			17	Oman	2.30

Source: Hotsawadi and Widyastutik, (2020)

Furthermore, the mapping of non-traditional countries using GTAP was carried out byHotsawadi and Widyastutik (2020) and ITAPS in collaboration with BI (2018) identified potential non-traditional countries as Indonesian export markets (quadrant II), namely Brazil, Cote d'Ivoire, Egypt, Arab Republic, Rep. Georgia, Jamaica, Kazakhstan. Kuwait, Myanmar, Nigeria, Norway, Oman, Pakistan, Russian Federation, Trinidad and Tobago, UAE and Uruguay. Based on these considerations, the potential and impact of trade cooperation with selected countries is analyzed (expert judgment).

Figure 1 showsIndonesia's trade balance trend is decreasing with non-traditional countries from 2015 to 2021. Indonesia is experiencing a dbilateral trade balance deficit with Brazil, Cote d'Ivoire (Ivory Coast), Kuwait, Nigeria, Norway, Oman, Trinidad and Tobago, and the United Arab Emirates.The condition of the declining trade balance trend indicates that Indonesia has not taken advantage of the trade cooperation scheme, including through tariff reductions.

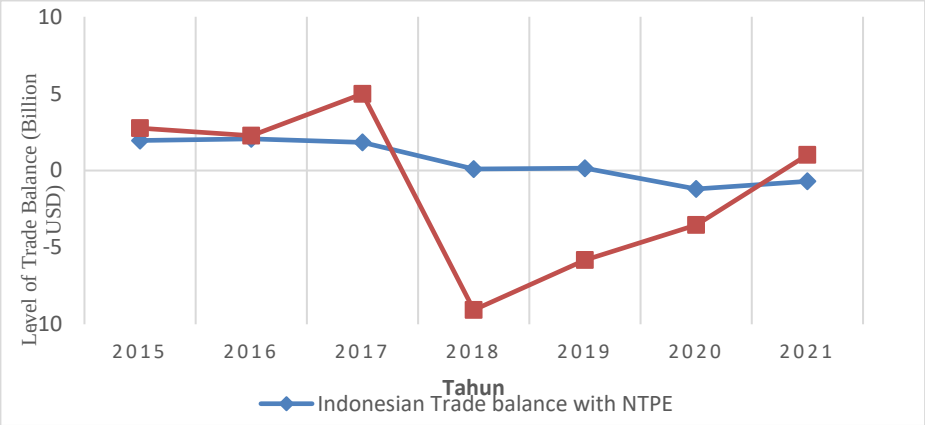

Figure 1. Trend of Indonesia's trade balance with non-traditional countries with potential export destinations in 2015-2021 (billion USD).
Source: Trademap (2020)

Accordingly, this study was conducted to see and analyze the potential impact of international trade cooperation between Indonesia and Non-Traditional Countries on the Indonesian economy. Non-traditional countries analyzed in this study include Turkey, Brazil, Russian Federation and Georgia. Broadly speaking, Indonesia's existing tariffs for products requested offer are as shown in the table.

Table 2. Import Tariffs of Non-Traditional Countries for Indonesian Request Offer Products

Product Description	Code	Import Tariff (%)			
		Turkey	Brazil	Georgia	Russian Federation
Fishing	fsh	30,974	9.96	0	7.86
Manufacturers nec	omf	0.036	23.2	0.84	8.39
Vegetable oils and fats	vol	2.416	10	0	2.12
Chemical products	chm	1,139	8.61	1,267	3.88
Textiles	tex	4.876	17.46	0	3.61
Crops nec	ocr	92.255	10.03	0.002	0.92
Leather products	lea	5.862	34.91	0	5
Food products nec	ofd	16,452	12.95	8,552	2.85
Wood products	lum	0.508	2.86	7.404	5.47

Source: GTAP 10 database version (processed), 2022

Research on free trade (FTA) using the GTAP program has been widely carried out including: Qi & Zhang (2018) discusses the effect of the free trade agreement between China and Australia on the economy not only of the two countries involved but throughout the world with special reference to New Zealand. This study uses general balance analysis and uses the GTAP database version 8 analysis tool, Laksani, Dian Dwi and Salam (2016) discuss abouthow big is the impact of the entry into force of the ASEAN-Hong Kong FTA goods trade agreement on Indonesia's trade performance. The analytical method used is the Computable General Equilibrium (CGE) model using the Global Trade Analysis Project (GTAP) version 8.

Hussain & Shah (2017) assessing the economic impact of tariff removal under the tariff free trade agreement (FTA) of Pakistan and China on various macroeconomic and trade variables. The aim is to examine the effects of pre and post FTA Pakistan and China on macroeconomic factors such as real gross domestic product (GDP), trade balance, output and trade in various sectors, welfare in the context of Pakistan. In this case, the general equilibrium structure modeling (CGE) from the Global Trade Analysis Project (GTAP) model can be calculated and the database is used to

analyze the aggregate effects as well as the sectoral implications. The GTAP version 9 database has data on 140 countries.

StudySham et al. (2021) analyze the effect of reducing import tariffs on the ongoing free trade agreement (FTA) between Indonesia and Turkey. This research method uses secondary data analysis using Global Trade Analysis Project (GTAP) software version 8 and the data source is obtained from the database on GTAP. The results show that based on two simulations carried out both partial and full liberalization, Indonesia got better results than Turkey in both macroeconomic and sectoral output.

Research on trade wars using GTAP has also been carried out, including:S. Chen & Li (2017) andZia et al. (2021) in his research using the Global Trade Analysis Project (GTAP) simulation to predict the economic impact of FTAs in China and the UK. The simulation results show that the China-UK free trade agreement (hereinafter CUFTA) will bring more benefits than harm to China and the UK and achieving zero tariffs or reducing TBT is mutually beneficial for China and the UK, with growth in GDP, economic prosperity, as well as imports and exports. On exports, Rosyadi and Widodo (2018) analyze the possible global impact of the United States' plan to impose an increase in import tariffs on China. The study uses a GTAP model implementation simulating the short-term effects of full protection and manufacturing-specific protection with appropriate retaliatory responses from China.

Research on the Free Trade Area for two countries has also been carried out so that two countries or two regions can trade using various scenarios contained in the GTAP program, including research fromBoughanmi et al (2016) using the Global Trade Analysis Project (GTAP) version 8.1 with a 2007 database to evaluate that fostering trade partnerships is a better economic measure than engaging in preferential trade regulations with trading blocks located outside the region.

In this analysis there are 4 scenarios that represent various trade integration routes by considering the issue of non-tariff barriers and trade facilitation measures, Hussain and Shah (2017) aim to assess the economic impact of tariff elimination under the tariff free trade agreement (FTA) of Pakistan and China with various macroeconomic and trade variables. This study uses a computable general equilibrium (CGE) model from the Global Trade Analysis Project (GTAP) version 9 which has data on 140 countries and the database is used to analyze aggregate effects and sectoral implications, the hypothetical elimination of import wheat tariffs coupled with changes in productivity will have an impact on wheat supply. domestic, price and usage factors in Morocco. This study uses a methodology based on the GTAP version 8 model with 129 countries with 57 commodity group sectors.

Research conducted by Stenberg and Siriwardana (2015) examines the impact of unilateral trade liberalization of forest products among member countries of the Asia-Pacific Economic Cooperation (APEC). The model used is the Global Trade Analysis Project (GTAP). The results show that in general, the more countries that participate in trade liberalization, the welfare can be improved with the exception of the North America region which consists of three countries, the United States, Canada and Mexico.

This research will use GTAP dynamic analysis tool version 10 using 2 simulations. Simulation 1 is a situation where the request offer commodity is subject to zero tariffs. The second simulation is a simulation where there is a 95% tariff reduction for all sectors except for highly sensitive products. Table 2 shows a list of highly sensitive products used in simulation 1 and simulation 2.

Table 3. Highly Sensitive products

Code (GTAP)	Commodity
1	Careal grains nec
3	Sugar cane, sugar beet
6	Meat Produtsn.ec
20	Dairy Products
23	Processed rice
24	Sugar
26	Baverages and tobacco products

Source: GTAP version 10 (processed), 2022

Through these two simulations, this study aims to determine which non-traditional countries have the potential to establish bilateral trade relations with Indonesia. The existence of the possibility of trade can be seen through the impact of simulation 1 and simulation 2 on the level of welfare, GDP, investment, exports and trade balance for both Indonesia and potential non-traditional bilateral countries, namely Turkey, Brazil, Georgia and the Russian Federation.

This study not only analyzes the diversification of exports to a country but to several non-traditional countries such as Turkey, Georgia, Brazil and the Russian Federation. The advantage of this research is that it can explain what commodities have the potential to be exported to these 4 countries, so they are very implementable helping Indonesia make decisions if it will open trade with non-traditional exporting countries. Many studies using GTAP have been carried out but not many have used version 10 with the latest input and output data for each country. Macroeconomic research is continued to a microeconomic approach, namely showing Indonesia's leading commodities for export to each country, so that this research in addition to using the latest version of the GTAP program, version 10, also analyzes export diversification to non-traditional countries by showing the advantages of Indonesian commodities to other countries. the country under study. This research focuses on opening up opportunities for export diversification to non-traditional Indonesian export countries such as Turkey, Brazil, Georgia and the Russian Federation by considering products that arehighly sensitive products.

RESEARCH METHODS

The scope of this research is a decision-making plan regarding the possibility of diversifying Indonesia's exports through bilateral cooperation with FTA (Free Trade Area) to non-traditional countries, namely Turkey, Brazil, Georgia and the Russian Federation. This researchwill see how Indonesia's potential to establish relations with non-traditional countries is seen through increasing welfare, GDP, investment, exports and trade balances for both countries, both Indonesia and non-traditional countries.

The data used in this study is secondary data. This data is obtained through the GTAP (Global Trade Analysis Project) database version 10. In this database there are input – output data, the value of the primary input value added for the production sector, intermediate inputs, transportation, protection level, bilateral trade, subsidies, and taxes from 121 countries that represent 98% of world GDP. This study will use data from Indonesia and 4 non-traditional countries namely Turkey, Brazil, Georgia and the Russian Federation and the commodities studied will be divided into 10 economic commodities.

Indonesia is not only trying to establish cooperation with countries in South America. However, countries in the Middle East are also being explored as non-traditional countries for developing Indonesian exports. One of the potential countries is Turkey. The input output data is static data with the GTAP program, then the static input output data can be changed by entering the shock into the program which is then called simulation. To find potential commodities using the Demand Index (DI) and Structural Match Index (SMI) methods.

The results of the GTAP program analysis are descriptive information and are very useful for making a country's policy, especially policies in conducting trade with other countries. This study uses 2 simulations, simulation 1 is a situation where there is zero tariff for commodity request offer. Meanwhile for simulation 2 is a situation where there is a 95% tariff reduction for all sectors except for highly sensitive products, for example Indonesia, agricultural commodities. These two simulations represent the situation in which the FTA (Free Trade Area) occurs, namely the absence of tariff barriers for the two countries to be able to conduct international trade.

RESULTS AND DISCUSSION

Bilateral trade liberalization between Indonesia and each non-traditional country encourages an increase in output in various sectors in Indonesia. Based on the GTAP general balance model approach, welfare is projected through an equivalent variation approach which shows the sum of the surplus received from both the consumer and producer side. Indonesia, which is oriented towards community empowerment, certainly prioritizes welfare, so that in this study, we look at the welfare side as a benchmark for conducting trade cooperation. The cooperation carried out by Indonesia with each non-traditional country consisting of Turkey, Brazil, Russian Federation and Georgia led to an increase in welfare in Indonesia. Figure 2 shows that bilateral trade cooperation with Brazil has a higher impact on the level of welfare in Indonesia than bilateral cooperation between Indonesia – Turkey, Indonesia – Georgia and the Indonesian Russian Federation.

However, when compared to the impact of Indonesia-Georgia and Indonesia-Russian Federation trade liberalization on welfare, the increase in welfare received by Indonesia is higher when conducting bilateral trade cooperation with Turkey. The reduction in trade barriers through the reduction of import tariffs has resulted in lower prices received by consumers and relatively more product choices. This will encourage an increase in household consumption by shifting the Consumption Possibility Frontier (CPF) curve upwards. For producers, intensive bilateral trade cooperation with Turkey, Brazil, Russian Federation and Georgia reduces trade costs so that resource allocation is more efficient. This will encourage increased production for the producers.

International trade must be able to benefit both parties to be able to occur, with a reduction in tariffs, it is hoped that both countries will be able to support mutual benefits and improve the economy together. This is in line with research fromSham et al. (2021), which stated that the existence of an FTA (Free Trade Area) between Indonesia and Turkey would benefit both countries from 10 commodity sectors. Indonesia experienced positive growth for 6 sectors while Turkey experienced positive growth for 4 sectors. However, the opposite can also happen, if there is a disruption in the partnership relationship between the two countries, it will have an impact on the economies of the two countries concerned and will give rise to other opportunistic countries to be able to enter the market. This is in accordance with researchZia et al. (2021) which states that the result of the US-China trade war has caused a decline in the GDP of both countries and has created a new opportunist country that is trying to take advantage of the trade war.

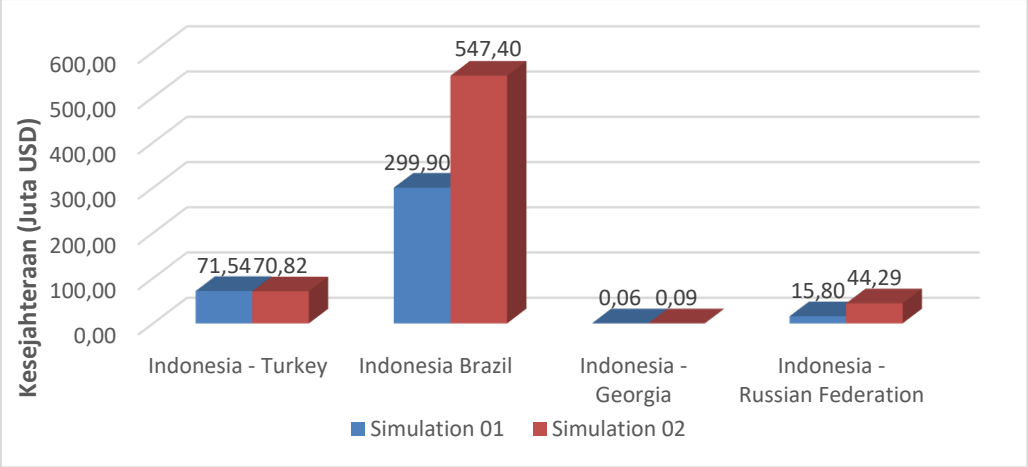

Figure 2. Simulation Results 1 and 2 on Welfare
Source: GTAP 10 database version (processed), 2022

Real GDP is one component of macroeconomic variables which is generally analyzed as the impact of a country's policies on other countries in the aspect of international trade. Based on the expenditure approach, GDP is obtained by adding up the various constituent components including consumption, government spending, investment and net exports (the difference between exports and imports). Figure 3 shows the impact of Indonesia's trade cooperation with non-traditional countries including Turkey, Brazil, Russian Federation and Georgia. This is in line with researchSham et al. (2021)which stated that Indonesia experienced positive growth for 6 sectors while Turkey had positive growth for 4 sectors. Similar to the level of welfare, the impact of trade liberalization on GDP is higher when Indonesia cooperates bilaterally with Brazil compared to bilateral cooperation between Indonesia-Turkey, Indonesia-Russian Federation and Indonesia-Georgia.

The increase in Indonesia's real GDP occurred in the simulation of reducing import tariffs by 95% for all commodities except for highly sensitive products by 0.0096%. However, the bilateral trade cooperation scheme between Indonesia and Turkey is more profitable for Indonesia as indicated by the increase in real GDP which is higher than the scenarios of cooperation between Indonesia - Georgia and Indonesia - Russian Federation. This is in line with research

Elimination of trade barriers through a bilateral import tariff reduction scheme between Indonesia and Turkey, Russian Federation, Brazil and Georgia will reduce trade costs, not only improving resource allocation through specialization with a comparative advantage but also significantly as a "knock on effect" in the economy. . Reduced trade costs encourage an increase in production for producers. In terms of consumption, with the opening of imports, consumers will get relatively cheaper prices and relatively many choices. Consumers obtain goods at relatively cheap prices as a result of the trade creation effect.

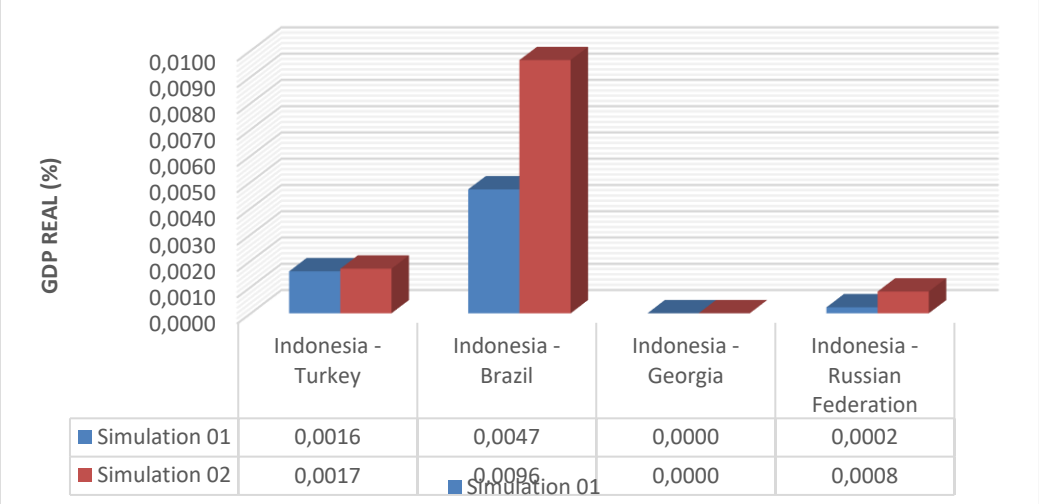

Figure 3. Simulation Results 1 and 2 Against GDP
Source: GTAP 10 database version (processed), 2022

Another variable that becomes the focus at the macro level as a result of Indonesia's trade liberalization bilaterally with Turkey, Russian Federation, Brazil and Georgia is the macro investment indicator. In the bilateral cooperation scheme between Indonesia and non-traditional countries (Turkey, Georgia, Brazil and the Russian Federation) it is indicated that it will provide an increase in capital inflows for Indonesia. The comprehensiveness of trade liberalization scheme has provided room for increased investment. Agreements to liberalize trade with Turkey, Brazil, the Russian Federation and Georgia will encourage

businesses to adapt to the business environment without obstacles. Investment attractiveness will be even higher with the trade liberalization scheme so as to provide incentives for investors to increase their investment. Figure 4 shows the impact of bilateral trade cooperation between Indonesia and Non-Traditional Countries on investment.

The results of the study indicate that the increase in investment in Indonesia will be higher when conducting bilateral trade cooperation with Brazil compared to cooperation with other countries. This research is in line with researchMold & Mukwaya (2017)that the higher the trade liberalization agreement between Indonesia and non-traditional countries, the higher the investment value in Indonesia will be. However, the bilateral trade cooperation scheme between Indonesia and Turkey is more profitable for Indonesia, which is indicated by the increase in the investment value which is higher than the scenarios of cooperation between Indonesia - Georgia and Indonesia - Russian Federation. Bilateral trade liberalization between Indonesia and Turkey through zero import tariffs on request-offer commodities has encouraged an increase in investment in Indonesia by 0.0142%.

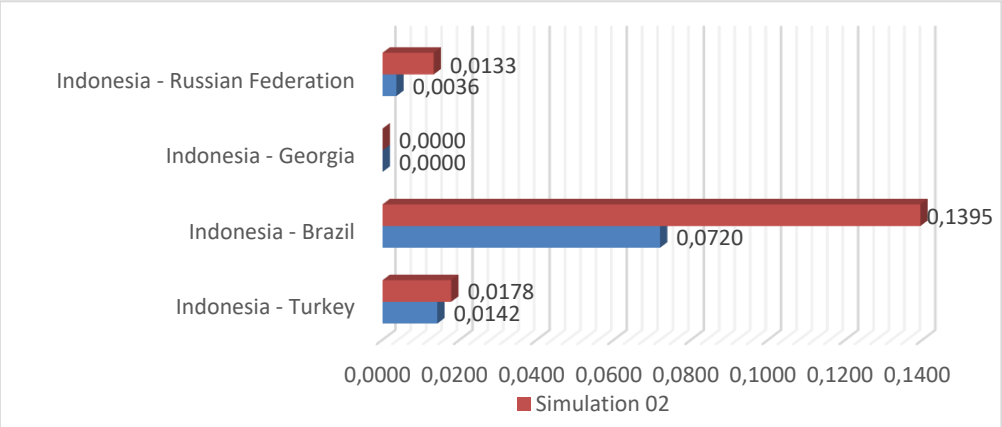

Figure 4. Simulation Results 1 and 2 on Investment
Source: GTAP 10 database version (processed), 2022

Increasing exports between the two countries is one of the objectives of holding bilateral cooperation between the two countries. In Figure 4, it can be seen that in simulation 1, Indonesia will benefit the most from establishing bilateral cooperation with Brazil because if Indonesia trades with Brazil, Indonesia's exports will increase by 0.147%. Meanwhile, for simulation 2, Indonesia will benefit the most if it cooperates with Turkey, because if Indonesia cooperates with Turkey, there will be an increase of 0.0451%.

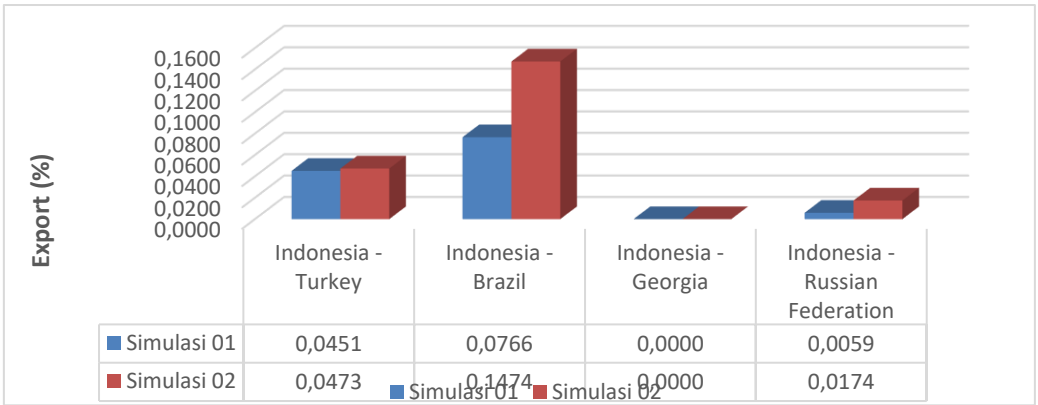

Figure 5. Simulation Results 1 and 2 on Exports
Source: GTAP 10 database version, processed

Export Product Dynamics (EPD) is one indicator that can provide a representation of the level of export competitiveness. This metric has the ability to compare the dynamics of Indonesia's export products in terms of market attractiveness and information on the strength of the sector. Market attractiveness is calculated based on the growth of demand for Indonesian export products in each of the Non-Traditional Countries consisting of Turkey, Brazil, Russian Federation and Georgia, while information on the strength of Indonesian export products is measured based on the growth of the market share of a country in the region. non-traditional market. The combination of market attractiveness and business strength resulted in the export positioning of Indonesian export products into four categories, namely "rising star", "falling star", "lost opportunity", and "retreat".

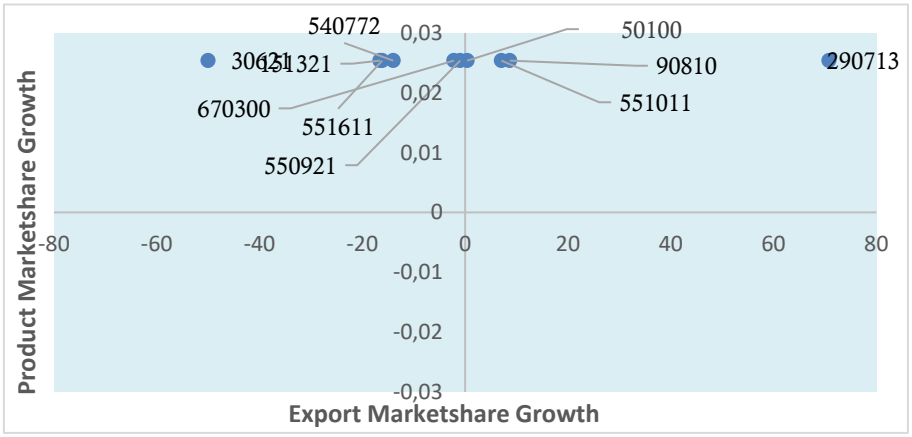

Figure 6. Indonesian EPD in Turkey
Source: WITS (2021), processed

Figure 6 is Indonesia's EPD against Turkey. Indonesia has 4 categories of rising star EPD against Turkey, namely product code 50100 (wigs), 290713 (chemical compounds octylphenol and nonylphenol, usually used to make detergents, cleaners, and the like), 90810 (ceramic) and 551011 (yarn (other than sewing thread).) of synthetic staple fibres). In addition, Indonesia also has 6 product categories that are categorized as EPD lost opportunity, namely product code 30621 (lobster and sea shrimp), 151321 (palm oil), 670300 (real hair, but used to make wigs), 540772 (woven cloth), 550921 (yarn (other than sewing thread) of artificial staple fiber), and 551611 (woven fabric of artificial staple fiber).

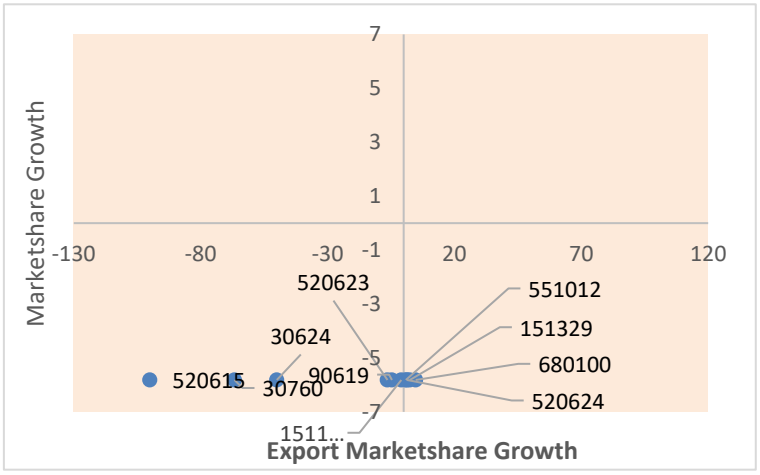

Figure 7. Indonesian EPD in Brazil
Source: WITS (2021), processed

Figure 7 is a picture that shows the value of Indonesia's EPD against Brazil. Unlike Turkey, Indonesia does not have a single EPD worth rising star or lost opportunity to Brazil. Indonesia only got 4 falling stars and 6 retreats for EPD with Brazil.

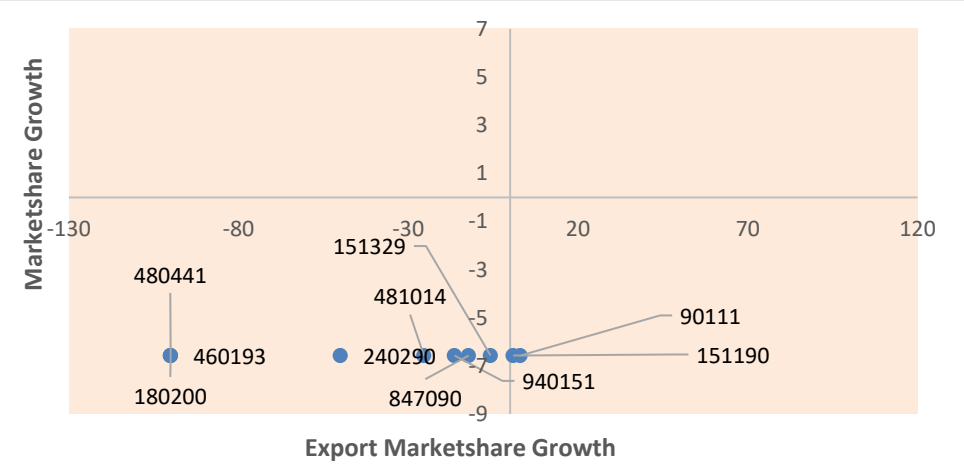

Figure 8. Indonesian EPD in Georgia
Source: WITS (2021), processed

Figure 8 is an image that shows the value of Indonesia's EPD against Georgia. Indonesia's EPD against Georgia has the same results as Indonesia's EPD against Brazil, namely that there are no products that have a rising star EPD value or a lost opportunity. Indonesia's EPD value against Georgia only has 2 falling star categories and 8 retreats.

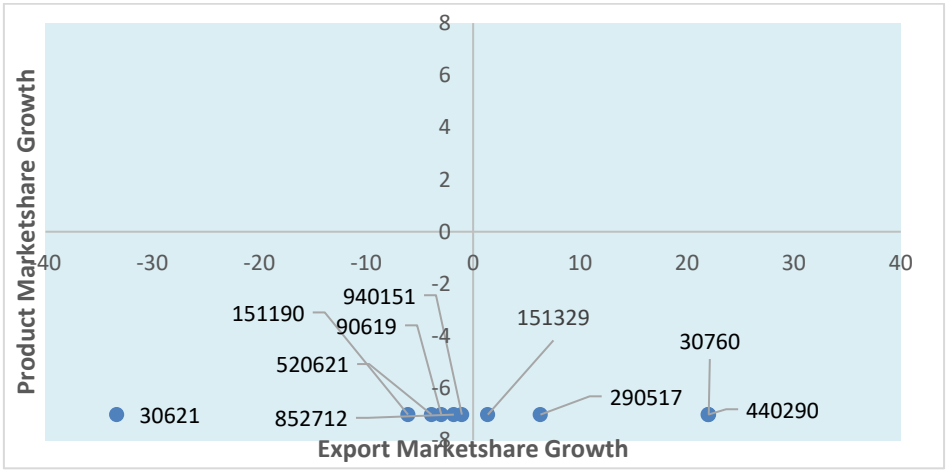

Figure 9. Indonesian EPD in the Russian Federation
Source: WITS (2021), processed

Figure 9 is an image that shows the value of Indonesia's EPD against the Russian Federation. Indonesia's EPD value against Russia has the same result as Indonesia's EPD value against Brazil and Georgia, which is neither raising star nor lost opportunity. Indonesia's EPD value against Russia there are only 4 categories of falling star products and 6 categories of retreat products.

The trade balance variable is one of the focus objectives of the impact of bilateral trade liberalization between Indonesia and Turkey, the Russian Federation, Brazil and Georgia. StudyMold & Mukwaya (2017) that the higher the trade liberalization agreement between Indonesia and non-traditional countries, the higher the investment value in Indonesia will be. The agreement to reduce import tariffs bilaterally with each of these countries led to a trade deficit

for Indonesia. The trade balance deficit for Indonesia occurred throughout the simulation of cooperation, either through zero tariff agreements for request-offer products or reducing import tariffs by 95% for all sectors except for highly sensitive products. The condition of Indonesia's trade balance experienced the highest deficit when conducting bilateral cooperation with Brazil.

The simulation results also show that Indonesia's export growth also experienced the highest increase when conducting bilateral trade cooperation with Brazil compared to other countries (table 4).Sham et al. (2021)which stated that Indonesia experienced positive growth for 6 sectors, the impact of trade liberalization on GDP was higher when Indonesia cooperated bilaterally with Brazil compared to bilateral cooperation between Indonesia-Turkey, Indonesia-Russian Federation and Indonesia-Georgia.

The condition of the trade balance deficit implies that trade liberalization between Indonesia and each country including Turkey, Brazil, Georgia and the Russian Federation on a bilateral basis causes the growth rate of imports of Indonesian products to be relatively higher than the rate of export growth. This indicates that Indonesia's export offerings are slow to respond to opportunities for bilateral trade liberalization with each of these countries.

Table 4. Simulation Results 1 and 2 Against the Trade Balance

Scheme Cooperation	SIMULATION	Balance of trade
Indonesian - Turkey	SIM 01	-10.6156
	SIM 02	-20.5703
Indonesian - Brazil	SIM 01	-122,378
	SIM 02	-235,436
Indonesian - Georgian	SIM 01	-0.03801
	SIM 02	-0.07184
Indonesia - Russian Federation	SIM 01	-4.66338
	SIM 02	-23.2628
Sim 01	= Zero tariffs for request-offer commodities	
Sim 02	= 95% tariff reduction for all sectors except Highly sensitive products	

Source: GTAP 10 database version (processed), 2022

Table 5. Simulation Results 1 and 2 on the Economy of Non-Traditional Countries

Cooperation Scheme	Simulation	Welfare (US$ Million)	GDP (%)	Investation (%)	Export (%)	Trade Balance (US$ Million)
Turkey	SIM 01	16.883982	0.002859	0.011019	0.055856	-21.255205
	SIM 02	31.991417	0.002951	0.017597	0.054813	-33.730194
Brazil	SIM 01	-243,801	-0.00245	-0.02629	0.2839	124.3688
	SIM 02	287.3424	0.00211	0.0982	0.385	-511,319
Georgia	SIM 01	0.04302	0.00006	0.00055	0.0012	-0.04445
	SIM 02	0.27985	0.00035	0.00259	0.0008	-0.2652
Russian Federation	SIM 01	-3.35504	-0.000265	0.00025	0.0057	-4.85528
	SIM 02	-2.69811	-0.000443	0.00224	0.0116	-13.6565

SIM 1: Rates Down 50% for Request and Offer products

SIM 2: Rates Down 95% for Request and Offer products

Source: GTAP 10 database version (processed), 2022

Table 5 is the macroeconomic impact that occurs in non-traditional countries when establishing bilateral cooperation with Indonesia. An international trade must be able to benefit both parties if only one-party benefits, it is likely that trade between countries cannot occur. This

causes us to know how the impact of bilateral cooperation for both countries, both for Indonesia and non-traditional countries. In table 5 it can be seen that the countries that benefit from bilateral cooperation with Indonesia are Turkey for simulations 1 and 2, Brazil for simulation 2 and Georgia for simulations 1 and 2. Turkey in simulation 1 received an increase in welfare of $16.89 million. However, it had a negative impact on Turkey's trade balance of $-21.25 million.

Meanwhile, for simulation 2 Turkey got an increase in welfare of $31.99 million, but experienced a decrease in the trade balance of $-33.7 million. Bilateral trade cooperation between Indonesia and Turkey is possible because even though in the short term the Indonesia-Turkey trade balance is in deficit, it still has a positive impact on the welfare of Indonesia as a whole. In addition, through EPD assessment, Indonesia's bilateral relationship with Turkey has 6 potential losses and 4 rising stars that are able to be optimized by both countries through international trade. In this case, in order for Indonesia's trade balance to be better, Indonesia must improve the performance of commodities that have lost opportunities and further improve products that have become rising stars. The results of the analysis of this study strengthen the findings of the studySham et al. (2021) using static GTAP version 8 andPanjaitan et al. (2020) using GTAP static version 9.

In the short term, bilateral trade cooperation with Brazil can be carried out in simulation 2 or Free Trade Area (FTA) but each country protects highly sensitive products. Bilateral trade with Brazil in simulation 2 had a positive impact on welfare of $287.34 million, but Brazil's trade balance decreased by $-511.3 million. Through simulation 2, there is a possibility that Indonesia can establish mutually beneficial cooperation with Brazil because even though the trade balance has experienced quite a lot of minuses. Indonesia must work hard to improve superior products that fall into the category of falling star to raising star.

Bilateral trade cooperation with Georgia for simulations 1 and 2 had a positive impact on improving welfare, but the value was very small, respectively, at $0.043 million and $0.27 million. This states that if bilateral cooperation is established between Indonesia and Georgia, the impact on the two countries will be very small, so the possibility of such bilateral cooperation being carried out is almost impossible in the short term. Meanwhile, for the Russian Federation, it is impossible for bilateral cooperation to be established because Russia does not get any benefits and even loses if doing bilateral cooperation. In general, an FTA by choosing trade in the superior products of each country will benefit both parties when viewed from the welfare of the people (Hussain & Shah, 2017). On the other hand, the trade war is not only unfavorable to the two countries in conflict, but also to the welfare of the rest of the world. Zhia, Z., Intan, Y., Purwaningsih, Y., & Riyanto, G, 2021).

CONCLUSION

This study states that Indonesia still has the opportunity to be able to increase the diversification of its export market to other non-traditional countries, especially Turkey, both for simulation 1, where there is zero commodity tariff request offer and in simulation 2 where there is a 95% reduction in tariffs for all sectors except Highly sensitive products. In addition, through the EPD (Export Dynamic Product) assessment, Indonesia has 4 products with rising star ratings and 6 loss opportunity products. These products will later need to be optimized by the two countries so that Indonesia and Turkey both get an increase in trade which has an impact on an increase in welfare and an increase in the trade balance.

Under normal conditions, other non-traditional countries that have possible opportunities to establish cooperation with Indonesia are Brazil during simulation 2, namely a 95% reduction in import tariffs because both Indonesia and Brazil benefit from each other. The state of Georgia also benefits from collaborating with Indonesia, but the benefits generated are very small so the possibility of establishing cooperation with Indonesia is not a

short-term priority. Meanwhile, the Russian Federation cannot establish trade cooperation with Indonesia because the Russian Federation does not benefit if both countries do not benefit.

Recommendations that can be given in this study are bilateral trade agreements between Turkey and Indonesia. Turkey is a priority to get immediate attention in terms of export diversification because Turkey is an entry point for Middle Eastern countries which of course need a lot of halal commodities from Indonesia in addition to other commodities needed by both countries by giving priority to several Indonesian superior products that do not conflict with Turkish products that get protection. . The next country that urgently needs to make a bilateral trade agreement is Brazil, which is the gateway to Latin American countries.

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