



Shall the Indonesia-OIC Countries' Free Trade Agreements on Modest Fashion Be Implemented?

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Abstract

A free trade agreement (FTA) could be a first step towards greater economic integration among OIC countries. This paper explores the impact of the proposed Indonesia-OIC Countries FTA on the modest fashion industry under a general equilibrium framework, focusing on indicators such as welfare, GDP, trade balance, investment, and employment opportunity. It utilizes computable general equilibrium (CGE) analysis using the Global Trade Analysis Project (GTAP) model. For analysis purposes, 65 GTAP sectors, representing the whole regional economy, have been aggregated into four sectors, and 141 GTAP regions, representing the whole world, have been aggregated into 13 regions. The scenario is Indonesia conducting an FTA with ten potential OIC export destination countries by reducing import tariffs for modest fashion products to 0%. It is predicted that Indonesia will receive the highest welfare increase of USD 140.83 million, followed by Morocco. The highest positive impact on real GDP will be experienced by Indonesia, with a positive change of 0.004%, followed by Morocco and Turkey. Egypt is projected to experience the largest decline in real GDP. Indonesia is projected to experience the most significant trade balance deficit, amounting to USD 198.13 million. Almost all OIC countries will experience an increase in investment, especially Indonesia, which is predicted to increase by 0.069%. Both skilled and unskilled workers will experience increased employment opportunities across all modest fashion industries. This paper contributes to the literature by focusing on critical aspects of the FTA's impact on modest fashion through the elimination of import tariffs among OIC countries.

Keywords: export, free trade, preferential tariff, textile, wearing apparel.

JEL Classification: C68, F13, F47.

Introduction

Halal products include halal food, modest fashion, pharmaceuticals and cosmetics, and halal media and recreation. Based on the State of the Global Islamic Economy

Report 2022, Indonesia's position in the modest fashion category is in the top 3, as shown in Table 1. A noteworthy shift is toward e-commerce, with high growth in sales in the significant modest fashion markets of Turkey, Indonesia, Malaysia, and the GCC, particularly among younger consumers (DinarStandard, 2022).

Table 1. Top 10 Indicator Score Rank in the Modest Fashion Sector

No.	Countries	No.	Countries
1	United Arab Emirates	6.	Italy
2	Turkey	7.	Singapore
3	Indonesia	8.	France
4	China	9.	Malaysia
5	Spain	10.	Germany

Source: DinarStandard, 2022.

The Gross Domestic Product (GDP) growth from Organization of Islamic Cooperation (OIC) member countries is increasing by 18.6 percent to US\$8.5 trillion in 2021. In addition, intra-trade between OIC countries grew by 33% to USD 382 billion in 2021 (SESRIC, 2022). One of the strategic opportunities that OIC countries can implement is strengthening the halal industry and economy through strategic partnerships and free trade agreements (DinarStandard, 2019). Indonesia's efforts to expand free trade agreements with partner countries are exploratory (Tsutsumi et al., 2019). These are used to achieve several objectives, one of which is to provide trade benefits and guarantee market entry (Whalley, 1998).

Several studies show that free trade agreements, including in Indonesia, significantly impact a country's exports. Kien (2009) claims that the ASEAN Free Trade Area (AFTA) significantly affects increasing exports. The European Union (EU), the North American Free Trade Agreement (NAFTA), and the AFTA also have a significant effect on exports (Lim, 2011). Within the scope of Indonesia, research by Sebayang (2011) and Effendi (2014) shows that AFTA significantly affects Indonesian exports. Lembang and Pratomo (2013) also argue that the ASEAN-China Free Trade Area (ACFTA) significantly affects Indonesian exports. In addition, Luthfianto et al. (2016) find that trade cooperation with ASEAN countries can increase Indonesia's manufacturing exports.

Other studies show different results. Anh Thu et al. (2015) claim that the ACFTA and the ASEAN-Japan Comprehensive Economic Partnership (AJCEP) have no effect on increasing a country's exports, and even the ASEAN-Korea Free Trade Area (AKFTA) has a negative effect on a country's exports. AFTA and

ACFTA have no significant effect on exports of Indonesian agricultural products (Dianniar, 2013). Moreover, Mareta (2018) finds that AKFTA does not significantly affect Indonesia's manufacturing exports. These confirm that although, from a theoretical viewpoint, free trade agreements can increase trade profits and a country's exports, in practice, a country may face challenges in utilizing them optimally. This may be due to many factors, such as the unpreparedness of resources and industry in particular countries to produce goods for export or being hampered by complicated regulations and bureaucracy.

Indonesia is quite active in establishing free trade agreements with other countries. However, Indonesia's FTAs focus on Southeast and East Asia. At the same time, for the Americas, Central Asia, West Asia, Africa, and Europe, Indonesia only has a free trade agreement with Chile within the Indonesia-Chile CEPA framework and Palestine within the framework of the MoU-Indonesia Palestine. These conditions highlight the need for more free trade agreements with OIC member countries, most of which are in West Asia, Africa, Central Asia, and Europe.

Indonesia has only three trade agreements with OIC countries out of 56 countries, namely with Malaysia and Brunei Darussalam within the AFTA and ATIGA frameworks and Pakistan within the IPPTA framework. Nonetheless, the agreements with the three countries yielded remarkable results. Exports of Indonesian halal products to Malaysia and Pakistan, countries that have free trade agreements with Indonesia, have ranked first and second highest in recent decades.

Many previous studies have discussed the impact of public policy on the economy. Two approaches commonly used are regression and simulation methods in the form of Computable General Equilibrium (CGE). In the regression model, we can use the gravity model to analyze the economy, primarily related to the flow of goods and services (Mátyás, 1998). It can be applied to assess FTA by using a dummy variable that indicates the relationship between free trade agreements with certain countries (Anggraini et al., 2023; Dianniar, 2013; Lim, 2011; Muchtar et al., 2024; Urata and Okabe, 2007). In simulation approaches, we can use the WEAP model (Farrokhzadeh et al., 2020; Shahraki et al., 2016; Shahraki et al., 2019; Shahraki et al., 2021), mathematical programming method (Ghalehsard et al., 2021), data envelopment analysis (Shahraki and Karim, 2018; Shahraki and Keshtegar, 2019), Stochastic Frontier Analysis (Shahraki, 2019), the Stackelberg–Nash–Cournot equilibrium model and Nerlove's supply model (Moghadam et al., 2023), the artificial neural network method (Shahraki and Emami, 2020), and Computable General Equilibrium (Bekkers and Rojas-Ramagosa, 2018; Kustiari

and Hermanto, 2017; Lu, 2016; Lu, 2018; Nekhay, 2020; Phat and Hanh, 2019; Rosyadi and Widodo, 2018; Tsutsumi et al., 2019; Zidouemba and Jallab, 2021).

Numerous studies examine how free trade agreements influence a country's exports or imports. In addition, some of them discuss specifically the impact of one or more free trade agreements on exports or imports. However, previous studies have not explicitly examined the impact of trade agreements on Indonesian modest fashion products to several Muslim countries with great potential, namely OIC. This paper aims to analyze the impact of the proposed Indonesia-OIC Countries FTA on the modest fashion industry in terms of welfare, GDP, trade balance, investment, and job opportunities. This research explores diversity among OIC countries and how these structural differences influence FTA dynamics, such as the dominant economic sector and level of development in the modest fashion industry. This study also contributes to the impact of FTAs on the modest fashion industry in OIC countries.

Literature Review

Before the advent of Adam Smith's absolute advantage theory, international trade was influenced by mercantilism (Salvatore, 2013). It is argued that a country will be powerful if it has a surplus in net exports, i.e., exports are greater than imports. Consequently, mercantilism encouraged exports and suppressed imports because it was considered highly nationalistic and lowered people's living standards. The theory of international trade is then developed with the emergence of the theory of absolute advantage by Adam Smith. This theory is further developed with the theory of comparative advantage by David Ricardo, who claims that a country that is inefficient and has an absolute disadvantage in goods produced compared to partner countries can still carry out mutually beneficial transactions for both parties.

Krugman et al. (2018) affirmed that international trade is based on differences in capabilities between countries and aims to achieve economies of scale. Using the GTAP model linked to the CGE, Kustiari and Hermanto (2017) claim that implementing the Indonesia-India FTA for palm oil products can improve the welfare of both countries. Even though India's welfare (GDP) increase is more significant than Indonesia's, Indonesia's trade balance surplus is more significant than India's.

Imposing high import tariffs on goods from China and the United States policy tends to decline several economic indicators, such as GDP and welfare levels (Rosyadi and Widodo, 2018). However, the test results show that the policy

of increasing import tariffs impacts the tendency for an increase in the US trade balance.

Tsutsumi et al. (2019) analyze the potential impact of eliminating import tariffs in Indonesia on three key sectors or commodities in the form of palm oil, fisheries, processed foods, and textiles and apparel with three trading partners, namely the European Union (EU), the Gulf Cooperation Council (GCC), and India using the CGE model. Indonesia will better liberalize further trade barriers with the EU and India. However, specifically for GCC countries, the results show the opposite; namely, Indonesia is predicted to be not too optimistic when conducting trade cooperation with this region because the initial GCC trade volume with Indonesia was not high enough.

Phat and Hanh (2019) examine the impact of the European–Vietnam FTA on the Vietnamese economy in terms of eliminating tariffs in the industrial sector. Using the CGE model, the research results show that eliminating tariffs in the industrial sector will lead to a trade balance deficit because the value of imports increases by 12.54%, while the value of exports slightly increases by 2.71%. However, Vietnam's welfare level is predicted to increase by 9.13%.

Nekhay et al. (2020) evaluate the impact of the Deep and Comprehensive Free Trade Agreement (DCFTA) between the EU and Ukraine by adopting the CGE-GTAP model for three simulated scenarios: unilateral trade liberalization, bilateral trade liberalization with exemptions, and bilateral trade without exemptions. The GTAP database shows that DCFTA has a minimal impact on GDP growth in the European Union and Ukraine based on the three scenarios. Regarding the impact on the trade balance, Ukraine will experience a deficit in all three scenarios. However, the EU will experience an increase in the trade balance surplus.

Zidouemba and Jallab (2021) examine the prospective impacts of the African Continental Free Trade Area (AfCFTA) on macroeconomic indicators and the role of its trade agreement. The findings show that the AfCFTA significantly augments GDP and trade flows. In line with this, Lim et al. (2020) claim that the ASEAN-Korea FTA tends to create trade among countries and recover ASEAN and Korea's economic welfare.

Trans-Atlantic Trade and Investment Partnership (T-TIP) is predicted to increase the EU-U.S. industry trade for textiles. T-TIP is predicted to significantly enlarge the EU's apparel exports to the United States (Lu, 2018). However, implementing the Trans-Pacific Partnership (TPP) is projected to harm the USA's textile and apparel manufacturing (Lu, 2016).

Dickerson (1999) argues that the development of a country's textile and apparel industry is in line with that country's economic advancement stage due to the issue of heterogeneity. The textile industry might rely on sophisticated machinery for production; therefore, it is capital and technology-intensive and mainly occurs in developed countries (Nordås, 2004). In contrast, the apparel industry entails many labor inputs with low technology and skill entry barriers. Apparel manufacturing is highly labor-intensive, primarily in developing countries where cheap labor is more plentiful (Dicken, 2015).

Some recent studies have examined the economic impact of trade agreements by adopting the CGE model (Bekkers and Rojas-Ramagosa, 2018; Kustiari and Hermanto, 2017; Lu, 2016; 2018; Nekhay et al., 2020; Phat and Hanh, 2019; Rosyadi and Widodo, 2018; Tsutsumi et al., 2019; Zidouemba and Jallab, 2021). These studies suggest that implementing FTA will benefit its members' economic welfare and increase trade. However, many researchers have yet to reach a consensus on the potential trade diversion effect of the trade agreement on textiles and apparel. Raza et al. (2014) and Aslan et al. (2015) found that the Trans-Atlantic Trade and Investment Partnership will adversely affect exports of some developing and least-developed countries. In addition, Rojas-Romagosa (2016) argued that the trade diversion effect might be relatively minor because the pattern of intra-region trades already existed among some countries.

Methodology

The Model and Simulations

This study uses CGE simulations to analyze the impact of implementing free trade cooperation on Indonesia and OIC countries in the modest fashion product sector using the GTAP database version 11. Modest fashion products used in this study include textiles, wearing apparel, and leather products.

The potential impact of FTAs between Indonesia and OIC countries was analyzed using the GTAP model, namely a multi-country, multi-commodity computable general equilibrium (CGE) model. It contains micro and macroeconomic variables and the model's input-output framework. Income distribution within each country is divided into three primary sectors: private, government, and savings, as outlined by Hertel (1997). The distribution among these sectors is based on the Cobb-Douglas utility function for both private and government sectors and the Leontief function for savings. The GTAP model uses the Armington assumption to handle imported demand and other international trade information. This assumption suggests that commodities traded between

nations are imperfectly substitutable. In the GTAP model, the percentage change in the quantity of import demand is calculated using the following equation:

$$qxs(i,r,s) = -ams(i,r,s) + qim(i,s) - ESUBM(i) * [pms(i,r,s) - ams(i,r,s) - pim(i,s)] \quad (1)$$

The variables and data sources are presented in Table 2.

Table 2. Variables and Data Sources

Variable	Definition	Source
$qxs(i,r,s)$	percentage change in bilateral trade flows of commodity i from country r to country s	GTAP 11 database
$ams(i,r,s)$	percentage change of technology of commodity i from country r in country s, which is assumed to be 0	GTAP 11 database
$qim(i,s)$	percentage change in total imports of commodity i into country s	GTAP 11 database
$ESUBM(i)$	elasticity of substitution among imports of commodity i	GTAP 11 database
$pms(i,r,s)$	percentage change in the price of imports of commodity i from country r in country s	GTAP 11 database
$pim(i,s)$	percentage change in average import price of commodity i in country s	GTAP 11 database

The firm produces a homogeneous final product using Cobb Douglas's production function that requires physical capital and labor:

$$Y_t = A_t K_t^\alpha (N_t)^{1-\alpha} \quad (2)$$

where A_t indicates the level of technology (Hicks neutral) available to the economy in period t and $0 < \alpha, (1 - \alpha) < 1$ is the productivity of capital and labor.

In each period, the firm pursues maximizing profits: Π

$$\Pi_t = A_t K_t^\alpha (N_t)^{1-\alpha} - R_t K_t - W_t N_t \quad (3)$$

In equilibrium (long-term), firms' profits are zero, and each factor of production will receive as much revenue as its final output:

$$W_t = (1 - \alpha) Y_t / N_t \quad (4)$$

$$R_t = \alpha Y_t / K_t \quad (5)$$

GTAP 11 uses production functions that show the necessary intermediates and factors to produce a unit of output in every sector. These inter-sectoral input–output linkages indicate the different sources of intermediates in goods and services (Aguiar et al., 2019). This model also covers a utility function, which

shows all consumer preferences in the economy, taxes, and government transfers to other agents of the economy. Furthermore, this model also has equations to describe national account identities and the microeconomic optimization behavior of firms and households; both must be accomplished simultaneously. Hence, the CGE model provides a detailed illustration of the economy by integrating actual economic data into a precise theoretical framework.

Hertel and van der Mensbrugghe (2019) argued that GTAP employs the constant difference of elasticities (CDE) functional form to specify private household demands. The calibration of the CDE parameters for GTAP 10 tracks the procedure used in the GTAP 4 database discussed in Liu et al. (1998). The procedure is an alteration of Surry's (1997) method that uses maximum entropy to calibrate a non-homothetic CDE expenditure function. Its procedure was improved to accommodate more goods with varying budget shares. Hence, this approach was a robustness check for this CGE simulation.

This research aggregates the world economy into four sectors (textiles, wearing apparel, leather products, and other sectors) and 13 regions (Indonesia, Turkey, Bangladesh, United Arab Emirates, Malaysia, Pakistan, Egypt, Saudi Arabia, Morocco, Nigeria, Kuwait, Other OIC, Rest of the World). Capital and land are treated as sector-specific. In this model, sectors are linked using domestic and imported intermediate inputs, and cross-border trade in final goods. This paper simulates a zero-tariff scenario. Under the zero-tariff scenario, this research assumes that Indonesia and the other OIC countries implement a free trade agreement. This research incorporates the perfect competition assumption in this model and predicts welfare using the share of spending on domestic goods and the trade elasticity (Valverde and Latorre, 2020).

The Data

This paper presents Indonesia's trade performance with OIC countries over the last eleven years, as shown in Figure 1. The figure shows Indonesia's export market share remained relatively stagnant, ranging from 11% to 14% between 2011 and 2021. These data indicate that Indonesia needs to optimize its export market potential in OIC countries.

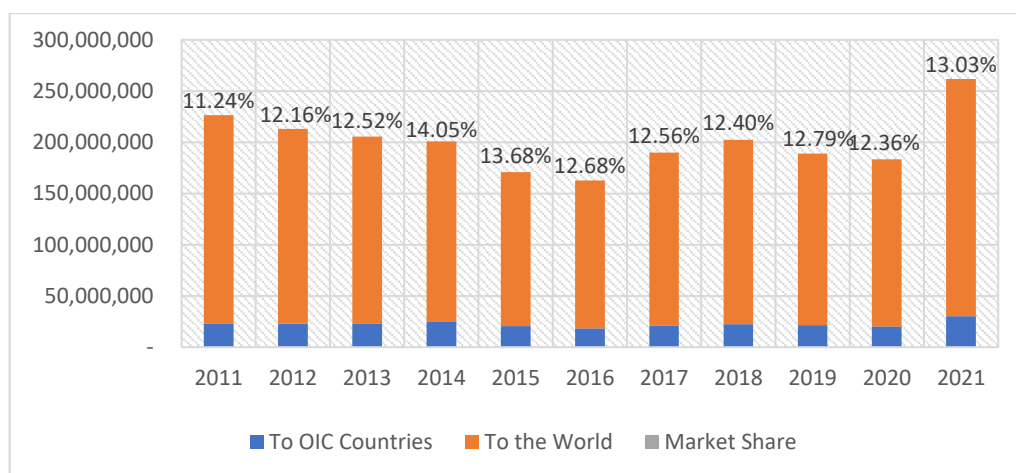


Figure 1. The Comparison of Indonesian Export to OIC Countries and the World, 2011-2021 (Thousand USD)

Source: International Trade Centre, 2023.

The import side also reflects the trade performance of Indonesia with other OIC countries. Figure 2 shows that Indonesia's share of imports from OIC countries fluctuated between 10% and 18%. Indonesia should continue trade relations with OIC countries to improve its future trade performance.

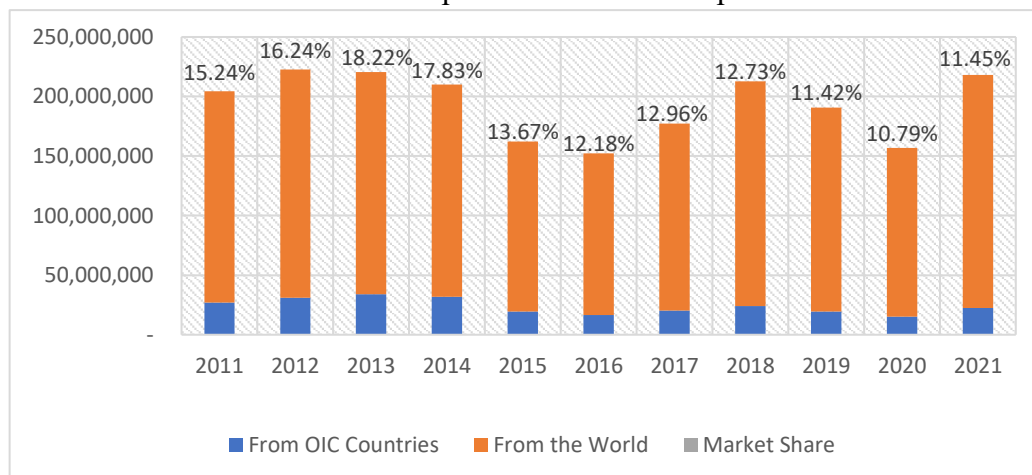


Figure 2. The Comparison of Indonesian Imports from OIC Countries and the World, 2011-2021 (Thousand USD)

Source: International Trade Centre, 2023.

Figure 3 shows the 10 OIC countries with the highest values of Indonesian exports of textiles and clothing in 2019. These countries have great potential as export destination markets, especially for modest fashion products.

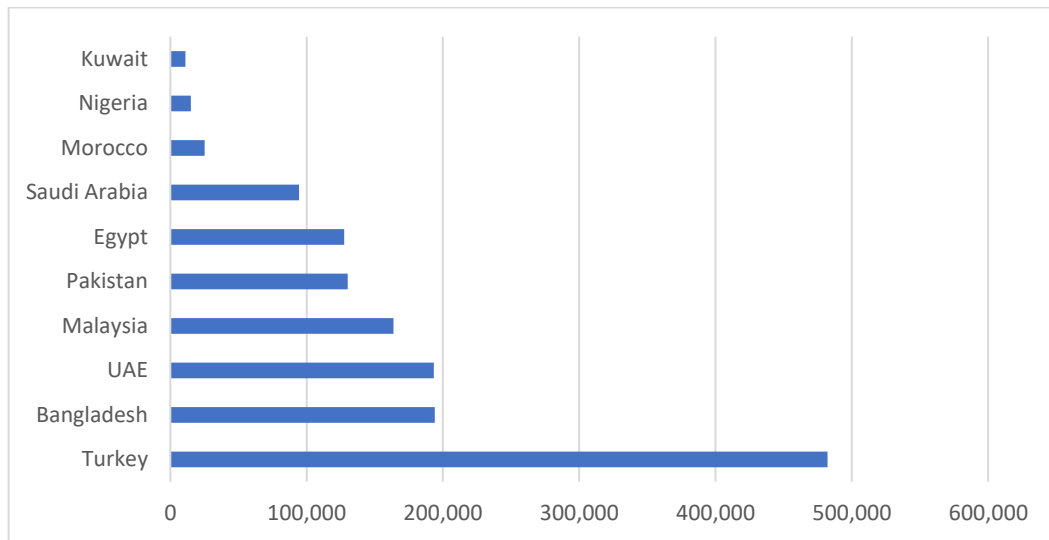


Figure 3. Ten OIC Countries Potential Export Destinations in 2019 (Million USD)

Source: International Trade Centre, 2023.

The data shows that 10 OIC countries have potential export markets for Indonesian commodities. These countries are Turkey, Bangladesh, the United Arab Emirates, Malaysia, Pakistan, Egypt, Saudi Arabia, Morocco, Nigeria, and Kuwait. Six of ten emerging OIC countries are the Developing Eight (D-8) group members. The D-8 group consists of Indonesia, Malaysia, Egypt, Turkey, Pakistan, Bangladesh, and Nigeria, so it is one of the potential markets for developing Indonesian goods export destinations, especially for modest fashion commodities. In addition, modest fashion refers to clothing that covers the body according to specific cultural or religious beliefs, particularly for the interests of Muslim countries.

Results and Discussion

International trade cooperation between Indonesia and selected OIC countries is examined through a scenario of bilaterally reducing import tariffs to 0% for the modest fashion industry, which consists of textiles, wearing apparel, and leather products. This study examines the impact of international trade cooperation between Indonesia and selected OIC countries on Indonesia's macroeconomic performance, including projected welfare (measured by equivalent variation), real GDP, the trade balance, and investment.

Table 3 presents the simulation results of a 0% bilateral import tariff reduction scheme between Indonesia and ten selected OIC countries—Turkey,

Bangladesh, the United Arab Emirates, Malaysia, Pakistan, Egypt, Saudi Arabia, Morocco, Nigeria, and Kuwait—on several macroeconomic indicators.

Table 3. The Impact of FTA Implementation between Indonesia and OIC Countries

Countries	Macroeconomic Indicators			
	Welfare (Million USD)	Real GDP (%)	Trade Balance (Million USD)	Investment (%)
Indonesia	140.83	0.003563	-198.13	0.0689
Turkey	-2.23	0.000212	-11.76	0.0037
Bangladesh	1.84	-0.003166	-25.09	0.0196
United Arab Emirates	-6.10	-0.000860	-2.39	0.0024
Malaysia	-3.72	-0.000027	2.29	-0.0046
Pakistan	-7.14	-0.000961	2.60	-0.0014
Egypt	-26.59	-0.004441	6.80	0.0038
Saudi Arabia	0.43	-0.000111	-1.96	0.0006
Morocco	2.81	0.000524	-10.33	0.0305
Nigeria	-1.83	-0.000179	1.19	-0.0022
Kuwait	-0.03	-0.000128	-0.43	0.0003
Other OIC	0.72	-0.000068	2.79	-0.0006
Rest Of World	-107.24	-0.000024	234.93	-0.0013

Source: Research finding.

Welfare

Table 3 shows the potential impact of liberalization policies in the modest fashion industry on the welfare of Indonesia and other OIC countries. Indonesia would receive the highest welfare increase of USD 140.83 million, followed by Morocco, Bangladesh, and Saudi Arabia, with welfare changes of USD 2.81 million, USD 1.84 million, and USD 0.43 million, respectively.

Other OIC member countries, as well as non-OIC countries, would experience negative or declining welfare values. The decline in welfare ranges from USD 0.03 million to USD 26.59 million. Regarding the decline in the welfare of OIC member countries, Kuwait is predicted to experience the smallest decrease in welfare, of USD 0.03 million. Egypt is predicted to experience the largest decrease in welfare among OIC countries, amounting to USD 26.59 million. Meanwhile, for non-OIC countries, the largest decline in welfare would be USD 107.24 million.

The positive welfare response in these simulations indicates that the bilateral trade liberalization scheme with the ten selected OIC countries would increase

producer and consumer surplus. From the consumer side, the welfare gains under the bilateral trade liberalization scheme between Indonesia and the ten selected OIC countries (Turkey, Bangladesh, the United Arab Emirates, Malaysia, Pakistan, Egypt, Saudi Arabia, Morocco, Nigeria, and Kuwait) are due to trade effects. The trade creation effect arising from the cooperative scheme to reduce import tariffs leads to lower prices for consumers and a wider choice of products or commodities than before the intensification of trade cooperation (Dianniar, 2013; Laksani and Salam, 2016; Lee et al., 2014; Plummer et al., 2010).

From the producer side, the welfare gains obtained through the trade liberalization scheme between Indonesia and OIC countries stem from lower trade costs resulting from the mutual reduction of import tariffs. Thus, this scheme would incentivize producers to increase production, thereby raising producer surplus.

Based on the simulation, most other OIC countries are projected to experience positive welfare changes. Although some OIC countries would experience a decline in welfare, these measures are expected to bring greater economic and social benefits in the long term, such as increased trade. Stiffer competition due to FTAs could stimulate innovation, raise productivity in economic sectors, and generate significant long-term benefits.

Real GDP

Based on Table 3, the most significant impact of trade liberalization on real GDP would be experienced by Indonesia, with a positive change of 0.003563%, followed by Morocco and Turkey with 0.000524% and 0.000212%, respectively. The countries with the most significant negative real GDP impact are Egypt and Bangladesh, which are 0.004441% and 0.003166%, respectively. Non-OIC countries and other OIC countries will experience negative GDP changes even though the values might be negligible, namely 0.000024% and 0.000068%.

For Indonesia, with a GDP of USD 1,186 billion in 2021 according to the World Bank, the positive change in real GDP would reach USD 42.3 million. These results align with those of Kustiari and Hermanto (2017), who examined the impact of free trade agreements between Indonesia and India for several commodities and predicted an increase in Indonesia's real GDP. Several other studies have also corroborated the results of this simulation (Dung, 2009; Ganguly and Das, 2017; Nekhay et al., 2020).

The textile industry accounted for 6.12% of the GDP of Indonesia's manufacturing sector in 2021, or 1.04% of total GDP (ARC Group, 2022), and

consumption is one component in the calculation of real GDP. In this study, the consumption effect is one of the policy impacts on the macroeconomic variables observed following a reduction in import tariffs under a trade cooperation scheme between Indonesia and OIC countries. The simulation results show a consumption effect, including an increase in household consumption in Indonesia, both private and government. The increase in Indonesian household consumption is due to an upward shift of the consumption possibility frontier.

Table 4. The Impact of FTA Implementation between Indonesia and 10 Selected OIC Countries on Private and Government Household Expenditure

Countries	Household Consumption Expenditures	
	Private (%)	Government (%)
Indonesia	0.01869	0.01887
Turkey	-0.00031	-0.00031
Bangladesh	0.00072	0.00073
United Arab Emirates	-0.00196	-0.00197
Malaysia	-0.00135	-0.00136
Pakistan	-0.00226	-0.00229
Egypt	-0.01203	-0.01228
Saudi Arabia	0.00007	0.00007
Morocco	0.00339	0.00342
Nigeria	-0.00055	-0.00056
Kuwait	-0.00003	-0.00003
Other OIC	0.00004	0.00004
Rest of World	-0.00018	-0.00018

Source: Research finding.

The bilateral trade cooperation simulation between Indonesia and ten selected OIC countries shows an increase in Indonesian household consumption, both private and government. Table 4 shows that the greater the trade liberalization between Indonesia and the 10 OIC countries, the higher the level of Indonesian household consumption. An increase in the value of private and government household consumption indicates this pattern.

The reduction in import tariffs agreed upon between Indonesia and the OIC countries might lead to lower prices of imported goods or products from each country. Relatively lower import prices cause the public to increase their consumption of imported goods. The increase in Indonesian household consumption would be much higher when Indonesia enters into trade cooperation

with the ten selected OIC countries. OIC member countries dominate global Muslim consumer spending on modest fashion. Their spending on apparel and footwear was worth USD 239 billion in 2021 and is predicted to increase to USD 361 billion by 2026 (Islamic Centre for Development of Trade, 2022). The results of this study align with research conducted by Massijaya et al. (2019), which shows a higher increase in consumption for Indonesian regional households due to increasingly liberal trade within the Indian Ocean Rim Association (IORA) region. Romer (2012) also claimed that the income level positively affects the value of household consumption. It can be seen that the lower the price level of a commodity or product, the higher the level of household consumption in that country, *ceteris paribus*. Real GDP changes are consistent with the comparative advantage of each country. Indonesia, Turkey, and Morocco have a comparative advantage in textile commodities, which contributes to increases in each country's GDP.

Although most OIC countries' GDPs would decline, the FTA could be a first step toward greater economic integration among OIC countries. Such integration can deepen economic cooperation and build the foundation for larger joint projects in the future. By opening markets and creating a more efficient trading environment, FTAs can increase the competitiveness of OIC countries in the global market, leading to new export opportunities and encouraging long-term economic growth.

Trade Balance

The simulation results also show various potential effects of bilateral trade liberalization between Indonesia and ten selected OIC countries on the trade balance with countries worldwide. Four countries would experience surpluses, and seven would suffer trade balance deficits. Egypt would experience the highest trade balance surplus among OIC member countries, amounting to USD 6.80 million. In addition, the rest of the world would experience the largest increase in trade balance surplus, amounting to USD 234.93 million.

Indonesia might experience the largest trade balance deficit, of USD 198.13 million. Other OIC countries would also experience a trade balance deficit. These results show that the liberalization policy in the modest fashion industry between Indonesia and the ten selected OIC countries would generate a trade balance surplus for a group of countries outside the OIC. Under the simulated conditions, most OIC countries would experience a trade balance deficit if a free-trade policy for modest fashion products were enforced. Table 5 shows the potential impact of

bilateral FTA implementation between Indonesia and ten selected OIC countries on exports of the modest fashion industry.

Table 5. The Impact of FTA Implementation between Indonesia and 10 Selected OIC Countries on Export for Modest Fashion (%)

Countries	Textile	Wearing Apparel	Leather products	Other Sectors
Indonesia	12.427	1.469	2.152	-0.314
Turkey	0.434	0.502	0.186	-0.019
Bangladesh	0.305	0.387	-0.064	-0.368
United Arab Emirates	0.200	0.139	-0.085	0.006
Malaysia	-0.365	-0.276	-0.229	0.002
Pakistan	0.094	0.296	0.118	0.020
Egypt	0.049	0.921	0.754	0.100
Saudi Arabia	1.440	3.309	0.025	0.000
Morocco	0.029	0.318	0.057	-0.028
Nigeria	-0.036	1.032	-0.061	0.016
Kuwait	-0.344	-0.192	-0.380	0.002
Other OIC	-0.217	-0.027	-0.095	0.001
Rest Of World	-0.147	-0.070	-0.047	0.003

Source: Research finding.

For commodities that fall under modest fashion, there is an increase in export value for Indonesia's textile, wearing apparel, and leather product sectors of 12.427%, 1.469%, and 2.152%, respectively. The large export increase would lead to a surplus in Indonesia's trade balance in these sectors. This result aligns with several previous studies showing that trade policies in the form of free trade agreements positively affect Indonesian exports (Alam, 2015; Lembang and Pratomo, 2013; Tsutsumi et al., 2019). The results of this simulation also reinforce those of Kustiari and Hermanto (2017), that claim that Indonesia's free trade agreement scheme with partner countries has the potential to improve the trade balance. In particular, Tsutsumi et al. (2019) predict that the free trade agreement between Indonesia and the Gulf Cooperation Council (GCC) countries would improve the trade balance.

However, the aggregate increase in exports in these three sectors would not be sufficient to improve Indonesia's overall trade balance because other sectors are predicted to experience a decline in exports of 0.314%. On average, the textile industry's contribution to total Indonesian exports in 2021 was 5.67%; hence, no less than 94% of export contribution is determined by other sectors. Although an FTA would increase exports in Indonesia's modest fashion industry, its share is

less dominant compared with other sectors that are predicted to experience a decline. Based on the simulation, Indonesia would experience a trade balance deficit. Some commodities, such as vegetable fats and oils, mineral fuels, and metal ores, contribute the most to Indonesia's exports. Other OIC countries apart from the ten selected ones, such as Saudi Arabia, Turkey, Bangladesh, the United Arab Emirates, Pakistan, and others, would also experience increased exports in the modest fashion industry.

Table 6. The Impact of FTA Implementation between Indonesia and 10 Selected OIC Countries on Import Value for Modest Fashion (%)

Countries	Textile	Wearing Apparel	Leather products	Other Sectors
Indonesia	1.062	10.534	0.711	0.187
Turkey	1.033	0.175	1.882	0.005
Bangladesh	0.826	0.213	0.199	0.135
United Arab Emirates	0.366	0.063	0.150	-0.003
Malaysia	-0.073	-0.003	-0.009	-0.002
Pakistan	0.774	0.686	0.269	-0.010
Egypt	0.632	2.351	15.427	-0.033
Saudi Arabia	0.249	0.068	0.085	0.000
Morocco	0.143	0.205	0.579	0.014
Nigeria	0.004	0.487	-0.011	-0.006
Kuwait	0.116	0.093	0.091	-0.001
Other OIC	-0.008	0.002	-0.003	-0.001
Rest Of World	-0.019	-0.002	-0.008	-0.002

Source: Research finding.

Table 6 shows the potential impact of bilateral FTA implementation between Indonesia and ten selected OIC countries on the import value of modest fashion commodities. For commodities included in the modest fashion category, there is an increase in the value of imports for Indonesia's textile, wearing apparel, and leather product sectors of 1.062%, 10.534%, and 0.711%, respectively. Almost all OIC countries would also experience an increase in import value in the modest fashion industry, except for Malaysia, which would experience a decrease in import values for the textile, wearing apparel, and leather product sectors of 0.073%, 0.003%, and 0.009%, respectively. Nigeria is projected to experience a decrease in the value of imports for the leather product sector of 0.011%. The rest of the world would experience a surplus of USD 234.93 million, followed by Egypt, Pakistan, Malaysia, and Nigeria. These simulations support the data that OIC countries imported USD 34.96 billion in modest fashion in 2021 and exported

USD 101.94 billion, recording the highest positive trade balance of USD 66.6 billion over the last five years (Islamic Centre for Development of Trade, 2022).

FTAs can open the door to larger markets among OIC countries. Although trade deficits may occur initially in most OIC countries, greater access to export markets can increase trade volumes and create new export opportunities and economic growth. Decisions regarding FTAs are often made with long-term benefits in mind. Despite initial negative impacts, these measures are expected to expand economic and social benefits in the long term. In addition, OIC countries can build economic strength and resilience against global crises, such as economic recessions or events detrimental to world trade. FTAs can strengthen economic integration among OIC countries, creating closer economic networks and improving regional connectivity.

Investment

Investment deals targeting OIC-based modest fashion companies amounted to USD 1.5 million in 2021 (Islamic Centre for Development of Trade, 2022). The simulation results show that there would be an increase in the value of investment in Indonesia when conducting international trade with these OIC countries on a bilateral basis. This is due to the bilateral reduction in import tariffs set by Indonesia with each selected OIC country, which would lower transaction costs. It would encourage the formation of a better business climate in which exporters benefit from reduced barriers to exporting goods or commodities. Thus, the reduction of trade barriers in Indonesia would boost investment. Table 3 shows that almost all OIC countries would experience an increase in investment value, especially Indonesia, whose investment might increase by 0.0689%, followed by Morocco at 0.0305%. As for countries outside the OIC, their investment value is projected to decrease, as is that of some OIC countries, such as Malaysia, Pakistan, and Nigeria. These data show that the potential for increased investment in Indonesia rises when conducting trade cooperation with the ten selected OIC countries. Thus, free trade cooperation between Indonesia and OIC countries could increase foreign interest in and confidence in investing in Indonesia.

The results of this study align with Gastanaga et al. (1998), who argued that trade liberalization policies positively influence a country's level of investment. The results of this study indicate that the lower the import tariffs, the greater the

degree of trade liberalization between the countries concerned. Thus, this condition would encourage foreign investors' confidence to invest in the country.

Employment Opportunity

Employment opportunity is one of the indicators analyzed in relation to trade liberalization between Indonesia and ten selected OIC countries. In the GTAP analysis model, labor is classified into two groups, skilled and unskilled labor, in each sector. Workers classified as skilled are also regarded as professional workers. Based on the International Labour Organization (ILO) definition, skilled labor comprises workers involved in management and administration, professionals, and other occupations that fall into skill categories 3 and 4. In contrast, unskilled labor comprises the workforce in skill categories 1 and 2, namely low and medium skill levels.

In the CGE model, labor transfers can only occur between sectors within the same region (Oktaviani and Puspitawati, 2017). Thus, this condition indicates that there would be no labor movement from one country to another in the general equilibrium model. The simulation results show an increase in the workforce in various sectors in Indonesia due to trade liberalization. Table 7 shows several Indonesian commodities that would experience increased job opportunities under the FTA scheme between Indonesia and ten selected OIC countries.

Table 7. The Impact of FTA Implementation between Indonesia and 10 Selected OIC Countries on Job Opportunities in Indonesia (%)

Description	UnSkLab	SkLab
Textile	5.488	5.507
Wearing Apparel	0.122	0.139
Leather products	1.811	1.829
Financial Service	0.014	0.031
Other Sectors	-0.035	-0.018

Source: Research finding.

Textiles and related products are among the most critical industries for Indonesia's economy, providing jobs to more than 3.7 million Indonesians (ARC Group, 2022). Based on Table 12, Indonesian workers would receive increased job opportunities in the textile, wearing apparel, and leather products sectors, even though other sectors might experience a decline. The larger share of increased employment opportunities would go to skilled workers across all modest fashion

industries. Skilled workers are projected to obtain an increase in employment opportunities of 5.51%, 0.14%, 1.83%, and 0.03% in the textile, wearing apparel, leather products, and financial services sectors, respectively. Meanwhile, unskilled workers would receive increased employment opportunities of 5.49%, 0.12%, and 1.81% in the textile, wearing apparel, and leather products sectors. This aligns with research conducted by Stephan and Ademayowa (2015), who argue that the higher the volume of products produced, the more job opportunities are needed, and vice versa. Thus, increasing employment opportunities would encourage more workers to be employed in such sectors.

To ensure a more rigorous robustness check, this study conducts additional simulations under different scenarios of tariff rate reductions, e.g., reducing import tariffs for modest fashion products by 50% (sim1) and 100% (sim2). Figure 4 provides sufficient evidence of the consistency of the results, as both scenarios mostly show the same directions.

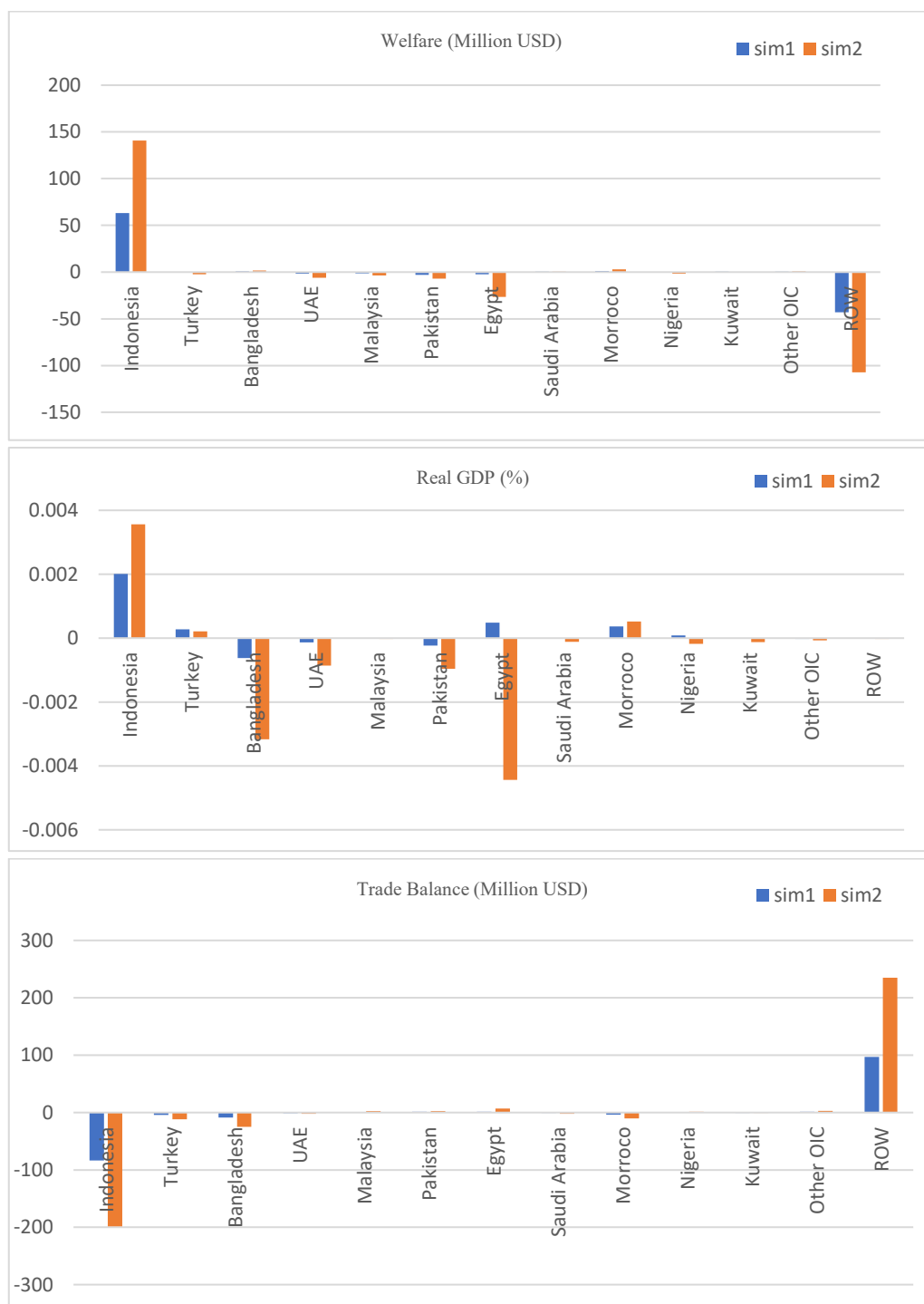


Figure 4. Robustness Check
Source: GTAP 11, processed.

Policy Implications

The simulation results show that, in general, trade liberalization between Indonesia and ten selected OIC countries, namely Turkey, Bangladesh, the United Arab Emirates, Malaysia, Pakistan, Egypt, Saudi Arabia, Morocco, Nigeria, and Kuwait, would have a positive impact on Indonesia. Thus, to boost Indonesia's trade performance by diversifying export markets toward OIC countries, the government of Indonesia should prioritize bilateral trade cooperation with these countries. A preferential trade agreement scheme is a relevant starting point for Indonesia's commitment to intensive bilateral trade with the ten selected OIC countries. In addition, Indonesia should consider country size when formulating trade agreements with potential trade partners (Alaamshani et al., 2023).

The trade policy of reducing import tariffs on commodities in the modest fashion industry would positively affect Indonesia's welfare, real GDP, investment, and job opportunities. However, Indonesia would experience a trade balance deficit. The government of Indonesia needs to make efforts to mitigate losses in various other sectors predicted to be adversely affected by this economic integration. Mitigation strategies that need to be implemented include providing trade facilities that support the modest fashion industry, especially through increased capacity building for related business actors, creating a more conducive business climate, strengthening capital and facilitating bureaucratic processes, and providing incentives or tax facilities.

From an Islamic perspective, modest fashion is an emerging phenomenon that refers to non-transparent clothing that covers a large part of the body in accordance with religious dictates (Radwan et al., 2020). Compared with other OIC countries, which comprise 56 Islamic or Muslim-majority countries mainly in Asia and Africa, Indonesia has a competitive advantage in the modest fashion industry, namely in textiles, wearing apparel, and leather products. Indonesia has a rich diversity of cultures and traditions; its modest fashion industry has experienced rapid development in recent years. Indonesia also has a skilled workforce in the fashion industry. Finally, the modest fashion industry in Indonesia has effectively used digital platforms and social media to market its products. In order to make the modest fashion industry global, the Indonesian government should internationally promote selected local industries while remaining open to other global players. Indonesia should collaborate with OIC countries that share similar cultural or religious values to enlarge this niche market by implementing an appropriate strategy.

Conclusion

Based on the results of the discussion and analysis, the impact of free trade cooperation between Indonesia and 10 potential OIC export destination countries—in the form of bilaterally reducing import tariffs to 0% for modest fashion commodities (textiles, wearing apparel, and leather products)—can be assessed in terms of macroeconomic performance. The macroeconomic impact is assessed in terms of welfare, real GDP, the trade balance, investment, and job opportunities.

It is predicted that Indonesia would receive the highest increase in welfare, amounting to USD 140.83 million, followed by Morocco and Bangladesh. However, other OIC member countries and non-OIC countries would experience a decrease in their level of welfare. The most significant impact on real GDP would be experienced by Indonesia, with a positive change of 0.004%, followed by Morocco and Turkey. The country that would experience the most significant negative real GDP change is Egypt, at -0.004% . Non-OIC countries and other OIC countries would experience negative changes in GDP, even though the values are relatively minor. Four countries would experience a surplus, whereas the other OIC countries are predicted to suffer a trade balance deficit. Egypt would experience the highest surplus of USD 6.80 million, followed by Pakistan, Malaysia, and Nigeria. Indonesia has the potential to experience the largest trade balance deficit, amounting to USD 198.13 million, followed by other OIC countries. Almost all OIC countries are forecast to experience an increase in investment, particularly Indonesia, whose investment might increase by 0.0689%. Skilled and unskilled workers would receive increased employment opportunities in all modest fashion industries. In addition, skilled workers would experience increased job opportunities if Indonesia and the 10 potential OIC export destinations implement the FTA.

The government of Indonesia should prioritize bilateral trade cooperation with OIC countries through a preferential trade agreement as the starting point of Indonesia's commitment to intensive bilateral trade with the ten selected OIC countries, namely Turkey, Bangladesh, the United Arab Emirates, Malaysia, Pakistan, Egypt, Saudi Arabia, Morocco, Nigeria, and Kuwait. Mitigation strategies that need to be implemented to reduce losses include providing trade facilities, especially through increased capacity building for related business actors, creating a more conducive business climate, strengthening capital and facilitating bureaucratic processes, and providing tax facilities. A limitation of this study is that the data presented cover only some OIC countries. It employs only 31

countries out of a total of 56 OIC countries. The primary constraint of the present research lies in utilizing a static general equilibrium trade model based on 2017 data to obtain a comprehensive assessment of the proposed trade agreement. Further studies might use a dynamic stochastic general equilibrium model to strengthen the findings (Keshavarzi et al., 2023).

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