

МЕЖДУНАРОДНЫЕ ЭКОНОМИЧЕСКИЕ ОТНОШЕНИЯ

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EFFECTS OF RECIPROCAL TRADE NEGOTIATIONS AND CHINA'S BELT ROAD INITIATIVE

Abstract: Since the beginning of the 21st century with intensified competition in international trade and sluggish development of the economy, a gradual rise of trade protectionism has followed. China, determined to promote free trade, has proposed trade connectivity with the so-called Belt and Road (BRI) countries in the “The Belt and Road” initiative. To study the different effects of free trade on China and the BRI countries, this paper uses the newest GTAP 9.0 model and conducts six simulations of different approaches to trade liberalization including reducing tech barriers (unilateral and bilateral), reducing tariff (unilateral and bilateral), and reducing both tech barriers and tariffs (unilateral and bilateral). It turned out reciprocal negotiations to reduce trade barriers would maximize the benefits pertaining to economic aspects and trade for both sides. The positive effects of reducing non-tariff barriers were larger than when using tariff restrictions. Moreover, this study found that countries located near China, including Thailand, Malaysia, Indonesia and Singapore, would reap more benefits. Economic indicators such as GDP growth, social welfare in the non-BRI countries especially Asian countries would suffer most in case of lower trade barriers between China and the BRI countries. The second-largest negative impact is to European countries. Briefly cutting barriers to trade would promote the growth of economic development and trade volume.

Key words: Belt and Road Initiative; GTAP 9.0; non-tariff barriers; tariff; trade liberalization; effects.

1. Introduction

After the financial crisis in 2008, the global economy entered a new adjustment cycle. The weak growth of the world economy and the increased competition in international trade has led to a rapid rise of trade protectionism. Trade protectionism has increased in developed countries and non-tariff barriers have increasingly been used in order to protect a country's own industries and certain special groups. For example, the United States officially launched the “301 Investigation” on China in August 2017. The basis of the investigation was the Article 301 of the 1974 United States Trade Act, which is seldom used. This investigation launched by the United States is clearly a manifestation of trade

protectionism. Because of the existence of market failures, trade protectionism supporters believe that appropriate interventions can lead to a better economic performance.

The main manifestations of trade protectionism are trade barriers, including tariff and non-tariff barriers. The use of tariffs is the most effective policy when foreign markets

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are distorted. But when the domestic market fails, the optimal policy is not related to the international trade policy but the domestic one. With the opening up of markets, cooperation in international trade has deepened. The tariffs in many countries have dropped significantly since the Uruguay Round negotiations. Thus, non-tariff barriers are widely adopted nowadays due to their inherent hiddenness, leading to their not easily being detected and retaliated. The widely used Technical Barriers to Trade (TBT) is an example of this approach. In many developed countries, TBT has replaced tariffs as the main means of trade protection. According to a WTO report released in 2016, the proportion of technical measures, sanitary and phytosanitary measures is as high as 83,3 % of the global non-tariff measures. The question is whether or not these non-tariff barriers actually protect domestic industries and promote economic development.

While China, determined to promote free trade, has proposed trade connectivity with the so-called Belt and Road countries in the “The Belt and Road”. According to the Tariff Implementation Plan for 2015 released by the Tariff Commission of the State Council, the Chinese average tariff level is still 9,8 %. The average tariff of WTO member countries is about 6 % and the number in developed countries is generally about 3 %. In contrast, the overall level of tariffs in China is still high compared to that of other countries. Because of this, residents consume by using procurement services or engaging in overseas purchases, leading to domestic market losses related these aspects of consumer demand. In addition, this also results in the loss of import trade volume. Therefore, these are arguments for the reduction of Chinese tariffs. In particular, the Belt and Road Initiative (BRI) has been proposed in order to make tariff reduction more likely, and thereby promote and strengthen trading activities with other countries. An important question is what the impact is of

reducing the average rate of tariff on the trade and economy in the BRI countries.

One of the purposes of the Belt and Road International Cooperation Summit held in China in 2017 is to focus on a smooth, efficient, win-win development, and deepening of the Belt and Road economic and trade cooperation. During this summit, China once again emphasized the liberalization and facilitation of trade and investment and the importance of resisting trade protectionism. Such trade liberalization would improve the quality of products and services through market competition, improve management approaches and reduce the cost of production. This would also promote the development of related industries in the country by the introduction of advanced production technologies and management methods. In addition, the departments with comparative advantages in their own country should realize specialization, increase the efficiency of the production, realize scale economies on a global scale and enhance the international competitiveness of their products.

With free trade theory as its cornerstone and inspired by the current world development, almost all countries are stepping up their cooperation and promoting economic globalization so as to raise the social welfare in the world. The proposals inherent in the Belt and Road Initiative promote the practical act of practicing economic globalization, strengthening regional cooperation, promoting mutual development strategies with other countries, complementing each other's' advantages and promoting the liberalization of trade and investment. With the Belt and Road Initiative, the extent of the economic effect of reducing trade barriers between China and the BRI countries deserves to be studied.

The Belt and Road summit proposed to promote the development of trade liberalization, especially proposed to share growth, development and connectivity with the

European Union. The European and Chinese perspective on China's BRI differs, however. Some Western European countries are worried about the impact of the BRI strategy on their economy and trade in that there may be some potential negative side effects such as increasing organized crime rates, illegal transactions and fake products. The negative concerns of German scholars pertaining to the BRI strategy are mainly manifested as economic factors. It has been indicated that combined with the policy of "Made in China 2025" will make China's industrial technology able to catch up with developed industrial countries and thus become a strong competitor to German enterprises. They propose that the BRI strategy will speed up the development of China's industry and lower the costs of transportation. This will make it easier for China to enter the international market, ultimately reducing the competitiveness of German industrial goods and their exports. Therefore, this paper focuses on whether the promotion of trade liberalization and facilitation can bring about the growth of regional and world economies and trade under the BRI. In addition, this paper empirically analyzes the impact of reducing trade barriers on the economy and trade under different free trade modes between China and the BRI countries. It also includes a discussion of a feasibility reference analysis on the vision of deepening the trade cooperation and establishing a regional trade agreement between China and the Belt and Road countries.

2. Literature Review and Analysis

In the mid-2000s, trade protectionism prevailed and many developing countries adopted alternative import strategies as their foreign trade policy in order to protect their markets and industries. In addition, a great variety of trade protection or interventionist theories and policies were favored by developing countries, largely because these

rely heavily on trade tax revenue as their main source of revenue. For example, the development of East Asian countries was largely attributed to government-promoted exports and restrictive import policies [1, 2]. There was not much benefit gained from these policies; on the contrary, there were often losses of open trade and capital markets [3, 4].

During this period, however, some developing countries in for example Latin America tried to adopt trade liberalization policies. These failed largely because of domestic policies and regulations. Developed countries realized trade liberalization earlier by opening up markets. Early in the twenty-first century there was intensified international competition and weak developments in the economy, leading to increased trade protection in developed countries. The main theoretical basis for this is the endogenous protection theory. This theory proposes that trade protection is influenced by endogenous variables. In order to increase a competitive advantage in the domestic product market, domestic private interest groups will step up their lobbying activities in support of trade protection to make the government adopt a highly protected trade policy [5].

In addition to the protection of their own industries, trade protection policies may also be implemented by policymakers to please and support special interest groups. Hillman (1982) explored this from the view of political support in that policymakers will consider the level of industrial protection based on maximizing support from special interest groups to determine the extent to which trade barriers are set [5]. Grossman and Helpman (1994) expanded on this and established a rigorous theoretical model to study the different levels of support for protectionism from various interest groups. Theoretical analysis shows that in a perfectly competitive market, the extent of trade protection depends on two factors: the elasticity of import demand and the ratio of

imports to domestic output. The former shows the distortions of social welfare caused by trade barriers and the latter shows the impact of policies on domestic industries [6]. Marvel and Ray (1983) analyzed the determinants of U.S. tariffs and non-tariff barriers and found that the healthier developing industries receive less protection, while the ones affected by policy and exporters receive more protection [7]. This supports Peltzman-Becker's regulatory theory which proposes that trade protection policies are not designed for the common good, but for the benefit of special interest groups. Gawande (1995) found that non-tariff barriers are widely used in the United States as a way of retaliation against foreign protection policies. In developed countries, as a means of trade protection, trade barriers have a limited role to play in protecting domestic industries and are used more to realize benefits [8].

The original intention of trade barriers was to protect domestic industries and promote economic development. Unlike developed countries, China's trade barriers are mainly set to protect the country's own markets rather than to favor special interest groups. Unlike developing countries, China's fiscal revenue relies mainly on domestic taxes. The trade tax revenue accounts for a relatively small proportion of the overall revenue. Therefore, China's active promotion of trade liberalization is expected to be conducive to the development of the country's economy and trade. In theory, trade liberalization is believed to improve the economic efficiency and international competitiveness of a country and promote the scale of trade, especially in some imperfectly competitive markets [9–13].

In recent years, with the increase of data availability, many scholars have conducted empirical research on the economic effects of trade liberalization, including simulation analysis of the trade liberalization arrangements in different countries or regions. For example, APEC trade liberalization results in increased

capital stock and real GDP growth among member countries [14]. Indonesia increased GDP, output and social welfare through trade liberalization [15], and trade conditions improved after trade liberalization spread to East Asia [16–17]. Empirical studies on trade liberalization between China and other regions by Chinese scholars include the analysis of the "10+3" economic arrangements in East Asia, the FTAs in China and Australia (EU-Korea FTA, the United States-Europe FTA etc.), hold that trade liberalization can increase trade among participating countries and develop their economy.

With the deepening of trade cooperation among various countries and the strengthening of cooperation, trade liberalization has become an irreversible trend. China's decision to promote trade liberalization was demonstrated by the Belt and Road Initiative in 2013. Chinese scholars put forward countermeasures on the BRI implications, as well as the background, strategic planning, economic effects, significance and challenges. Scholars have, however, rarely analyzed the economic effects brought by the reduction of trade barriers under the BRI strategy in BRI countries. Most foreign experts and scholars who have qualitatively analyzed BRI's impact on domestic trade investment and the economy have found positive, negative and mixed effects.

The Danish government, experts and scholars found the impact of BRI on the country's economy and trade to be positive, giving many opportunities for investment and development. Similar effects were found in studies on Greece, Hungary Slovakia, Spain and the United Kingdom. Although some Italian studies have indicated negative environmental impacts, most findings show positive effects. Although the Czech government supports China's BRI strategy, some scholars believe that this will not bring much improvement and help to the country's

own exports and investments, which is similar to views expressed in Germany. Experts and scholars from France and the Netherlands hold a mixed view, however, pointing to both positive and negative effects. Scholars in different countries have various views, often based on their own national conditions [18].

To conclude, foreign trade barriers have mainly been studied focusing on the intrinsic causes and mechanisms of their existence. Trade protection has shifted from the traditional protection of infant industries to a system that gathers financial revenue and please the special interest groups and fulfill other purposes. Due to the differences in scale, the level of development and the national conditions in different countries, research on trade barriers in China are mainly focused on their purpose of protecting certain industries. Therefore, most studies are focused on the impact on domestic industries and the economy of the subdivision of different barriers to trade. There are relatively few empirical studies comprehensively analyzing the different free trade situations and the comparison of different trade barriers; in particular, there are few empirical research articles focusing on the BRI countries reducing trade barriers.

Based on the strategic background of the Belt and Road initiative, this study focuses on its impact on the trade and economy of the BRI countries from the perspective of trade liberalization. It is assumed that reducing trade barriers to promote the development of trade liberalization will promote trade activities among participating countries, increase trade volume and promote economic development. Countries that join China's BRI strategy will benefit. Finally, this article proposes to establish regional trade cooperation. The first part of this paper classifies different trade barriers, including tariff- and non-tariff barriers. The second part analyzes the role of trade barriers as a whole. This paper selects the most suitable GTAP model in the field of

international trade as its analytic framework and uses the latest version of the 9th edition of the database. Finally, in light of the current world situation, this study utilizes China and 65 countries along the Belt and Road as the research objects and analyzes the impact of reducing trade barriers between China and the BRI countries on the economy and trade in the region and with other countries in the world.

3. The GTAP Model, Data Specification and Policy Simulation Scheme Design

Given that this paper analyzes the impact of international trade barriers, empirical analysis is conducted using the GTAP model, which is the most widely used in the field of international trade. The GTAP database contains various economic data on input-output, taxation, output, investment and trade in the same year in many countries. Taking into account the impact of changes in exogenous variables on different economic variables, the GTAP database can provide some quantitative results for analysis and simulation of policy. The most advantageous feature of this empirical analysis is not only the use of the latest GTAP 9.0 database, but also the distinction of the BRI countries by the division of the world's regions and the further breakdown of these countries, so as to study the economic and trade impact that a decline in trade barriers will have on the BRI countries.

3.1. The GTAP model

The GTAP model is created by the Global Trade Analysis Project (GTAP), which is led by professor Thomas W. Hertel at Purdue University and is already widely used in the analysis on trade policy. The model portrays each country or region as a single economy for economic optimization, and then links various economies through international trade and investment relations to form a general equilibrium model of multinational and multisectoral entities.

3.2 Latest database version and group description

The earliest GTAP model database was released in 1993. After several updates and adjustments, the latest version of the GTAP model was released in 2015. This is the ninth version of the database. GTAP9.0 contains more complete data, covers more countries and includes richer data; specifically: (1) 140 regions and 57 departments, (2) bilateral trade data of all countries from 1995 to 2013, (3) bilateral tariff data from 1995 to 2013, (4) improved service trade data for 2004, 2007 and 2011, (5) improved energy data for 2004, 2007 and 2011, (6) carbon dioxide emissions data from all countries in the world, and (7) labor force divided into five types with seven major characteristics. Based on the latest version of the GTAP database, this paper simulates and analyzes the economic and trade impacts on reduction of trade barriers between China and the BRI countries, focusing specifically on aspects related to the reduction of non-tariff trade barriers.

Since the GTAP 9.0 database includes 140 countries and 57 departments, the simulation analysis in this article first groups these countries or regions, then groups the departments and simulates the impact. In regard to the groupings of countries or regions, this study divides them by geographical location, the level of development of each country, and the ranking of the import volume with China. The specific grouping are shown in Table 1 below.

After the groupings of countries or regions are completed, the industries (sectors) are further aggregated and regrouped and then divided into ten groups according to the tradable sectors in China and the characteristics of industries, as shown in Table 2 below:

3.3 Policy simulation plans

This paper argues that the realization of trade liberalization and facilitation between

China and the BRI countries would lead to positive economic results and promote trade development. Based on this, the authors of this article conducted several simulation plans to analyze the economic and trade changes of all countries after reducing the trade barriers of China and the BRI countries.

Bhagwati (2002) believes there are four different forms of free trade worldwide: Two are related to unilateralism and the other two are related to preferential trade. He proposes that both traditional unilateralism and reciprocity in multilateral trade negotiations play a beneficial role in free trade, while aggressive unilateralism and the most-favored-nation treaty are the cancer in the free trade system of the world [19]. The policy simulation programs are therefore in this paper divided into two groups and subdivided according to the different types of trade barriers and then grouped into three different cases of simulated scheme analysis. Trade barriers are classified as tariff and non-tariff barriers. With the deepening of BRI, both BRI parties and China can provide trade facilitation by further reducing non-tariff barriers. At the same time, this will further strengthen international trade cooperation, promote the smooth flow of traditional bilateral trade, promote regional cooperation and accelerate the development of trade liberalization. Therefore, policy simulation plans in this paper also simulate the effects of trade liberalization measures, primarily tariff reduction aided by non-tariff barriers. Specific policy impact programs are shown in the following Table 3.

The purpose of simulation plans 1 and 4 is to study the economic effects after the reduction of tariff barriers. This study assumes the condition that China and the BRI countries would cancel the tariffs after establishing a free trade zone. The purpose of simulation programs 2 and 5 is to study the impact of the decline in non-tariff barriers. The magnitude of reduction in non-tariff barriers refers to the

Table 1

Groups of the countries in the GTAP model		
	China	China
	41 countries in Asia:	
	Malaysia	MYS
	Singapore	SGP
	Vietnam	VNM
	Indonesia	IDN
	Philippines	PHL
	Thailand	THA
BRI countries	4 other countries in ASEAN	AU4
	Iran	IRN
	India	IND
	Other 29 countries in addition to above	A29
	7 countries in CIS:	
	Russia	RUS
	Other 6 countries in CIS	CIS6
	16 countries in Central and Eastern Europe	CEE16
Asia	Japan	JPN
	Korea	KOR
	Taiwan, China	TWN
America	United States	USA
	Canada	CAN
	Other countries in America	ROA
Europe	Germany	DEU
	Switzerland	SWZ
	United Kingdom	ENG
	France	FRA
	Other countries in Europe	ROE
Oceania	Australia	AUS
	Other countries in Oceania	ROO
Latin America and the Caribbean	Chile	CHL
	Brazil	BRA
	Other countries in Latin America	ROL
Africa	Sub-Saharan Africa	SOA
	North Africa	NOA

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Table 2

Groups of the sectors in the GTAP model	
Industrial sector	Subdivision industrial sectors included
Agriculture	Rice, wheat, cereals, vegetables, fruits, nuts, oilseeds, sugar crops, other crops
Animal husbandry	Forest, cattle and sheep livestock, milk, aquatic products, cattle and mutton, animal and vegetable fats
Extractive industries	Coal, oil, gas, minerals and related products, black (ferrous) metals, non-ferrous metals and related products
Food industry	Sugar, food products and other related products, beverages and tobacco products, animal products and other related products, meat products and other products, dairy products, processed rice
Textile industry	Plant fiber, wool and silk products, textiles, clothing, leather products
Light industry	Wood processing and chemical products, wood products, paper products, motor vehicles and spare parts, transportation equipment and other related products
Heavy industry	Electromechanical products and electronic equipment, machinery equipment and other related products, metal products, petrochemical and coal products, non-ferrous metal products, mineral products and other related products, other manufacturing products
Public service	Water, electricity, gas manufacturing and retail
Transport industry	Transport and other related services, maritime transport, air transport
Other service	Trade, telecommunications, finance and other related services, insurance, business services and other related services, entertainment and related services, government, court, medical care, education, residential services, construction

Table 3

Six types of policy impact program in the GTAP model

Form of free trade	Traditional unilateralism	Reciprocal negotiation	Tariff and non-tariff barriers adjustment range
Policy impact program	1.China unilaterally abolishes import tariffs from the BRI countries	4.Both China and BRI countries abolish import tariffs from each other	-100%+0
	2. China unilaterally reduces non-tariff barriers on imported products from BRI countries	5.Both China and BRI countries reduce non-tariff barriers on imported products	0+10%
	3.China abolishes import tariffs and reduces non-tariff barriers on products from BRI countries	6.Both sides abolish import tariffs and reduce non-tariff barriers on imported products	-100+10%

degree of simulation (i.e., a 10 % decrease, see [20]). The purpose of the other two simulation programs is to analyze the overall economic and trade impact of the two trade barriers simultaneously.

In addition to the magnitude of the reduction, the design of the six programs covers most of the possible options for reducing trade barriers and provides reference for the a later establishment of China's regional trade agreements with the BRI countries. This study use stms variables from the GTAP database as the tariff changes simulations. For the change of non-tariff barriers, this paper refers to the literature of Hagemeyer&Michalek (2010) that uses ams variables to measure the impact of non-tariff barriers on national economic development and impact on trade [21].

4. Empirical Analysis Pertaining to the Economic and Trade Effects of Reducing the Trade Barriers between China and the BRI Countries

Through the use of the latest GTAP9.0 database, this paper analyzes the impact of economic and trade effects on different countries and sectors under different forms of trade liberalization on the basis of the simulation analysis of the impact of the two sets of six conditions.

4.1. The mutual trade barriers between China and the BRI countries are generally conducive to the economic and trade development of both sides and generally inhibit the economic and trade activities of non-regional countries.

Based on the policy simulation plan, this paper analyses the six conditions to reduce the impact of trade barriers on the economic and trade relations between China and the BRI countries.

First, free trade would promote economic and trade cooperation between China and most of the BRI countries. In particular, it can greatly

enhance social welfare in China. This result is in line with the views proposed by Escolano that trade liberalization can bring positive effects to the economy. After the liberalization of trade, both sides will develop the industries with comparative advantages and specialize and professionalize their production, thus enhance the producing efficiency and scale and promote frequent economic exchanges and trade activities.

Second, by contrasting the two different modes of trade liberalization, it can be clearly concluded that trade liberalization under reciprocal negotiations has more positive economic and trade effects than the trade liberalization under the traditional unilateralism. For example, the traditional unilateral reduction in trade barriers between China and the BRI countries contributed to an increase in the import value of China and Thailand by 7.27% and 7.15%, respectively, while they increased by 17.05% and 12.94%, respectively, under the reciprocal negotiation. The benefits of bilateral trade liberalization have multiplied the impact of the advantages of reducing trade barriers under traditional unilateralism. The most positive impact on economic and trade relations among the participating countries can be achieved if both sides open up foreign markets and realize free trade with each other.

Third, in the context of the BRI countries, the reduction of trade barriers has greater impact on the Asian countries and regions that are closer to China, including Thailand, Malaysia, Singapore, Indonesia and so on, while this has weaker effects on Eastern European countries. This is mainly because of the close geographical location of East Asian countries and that there is not much difference in production and life styles, coupled with the relatively low transportation costs. After the liberalization of trade between China and the BRI countries, the trade costs have dropped significantly, accelerating mutually beneficial production and trade.

Fourth, globally unilateral and bilateral reduction of trade barriers between China and the BRI countries will have a positive impact on the economic and trade relations among participating countries and adversely affect the economic and trade cooperation of non-participating countries and regions. This mainly results from the trade transfer effect that leads to the decline in trade activities with other countries, particularly Asian countries including Japan and Korea, as well as the decrease in social welfare.

Fifth, due to the geographical location, the reduction of trade barriers between China and the BRI countries has the most negative impact on the economic and trade cooperation among Asian countries in the non-region countries, especially Japan that bears the largest loss. The second most negative impact is to European countries. The greater volume of the country's trade with China, the greater negative impact it would experience, and among them, Germany sees the largest adverse impact. The negative effect on the economy and trade of the United States is relatively minor. Then follows the region of Latin America and the Caribbean, among which Chile and Brazil will experience the worst impact. Finally, the effects to Oceania and African countries are very small.

4.2. Comparative analysis of various forms of six simulation plans

4.2.1. Reduction on non-tariff barriers has greater accelerating impact on the real GDP of the BRI countries than canceling tariffs.

The effect of reciprocal negotiations will be significantly better than the real GDP growth brought to the BRI countries on the basis of the traditional reduction of trade barriers caused by unilateralism. Assuming that China and any of the BRI countries abolish the tariffs at the same time, then GDP growth in both countries would increase.

In comparison, a decline in non-tariff barriers has a greater impact on GDP growth on both sides. After reducing the non-tariff barriers on products exported to China by the BRI countries in Plan 2 by 10 %, the GDP of both sides shows a marked increase. Due to the geographical proximity of the ASEAN countries to China and the high similarity of labor-intensive industries, the GDP of Asian countries will rise rapidly. In other countries, because of the effects of trade transfer, the real GDP growth of the country slows down. South Korea suffers the most, followed by Chinese Taiwan and Japan. If one reduces the non-tariff barriers between China and the BRI countries at the same time, as a result, as shown in the simulation's Condition 5, real GDP growth in the Asian countries, especially in the ASEAN countries, will double. Real GDP growth of other BRI countries will also experience a substantial increase.

In addition, if both sides reduce their tariffs and non-tariff barriers, bilateral free trade will be greatly increased, leading to the largest increase in the real GDP of China. Therefore, the unilateral reduction of the tariff rate has a negative impact on China's market activity and economic growth, but the unilateral reduction of non-tariff barriers leads to the opposite effect. Reduction in bilateral trade barriers will to a great extent be mutually beneficial in promoting both market activities and economic growth.

For example, for the 16 Central and Eastern European countries, it is only by reducing non-tariff barriers under reciprocal negotiation that there will be a considerable positive impact (up to 0.29%) on these countries' real GDP, with little change in other cases. The greatest impacts on the real GDP growth are found among Asian countries, of which the top three countries with the largest increase in real GDP are Thailand, Malaysia and Vietnam.

Table 4

Real GDP change rates in various countries and regions, %

1	Change in real GDP	Traditional unilateralism			Reciprocal negotiation		
		Scheme 1	Scheme 2	Scheme 3	Scheme 4	Scheme 5	Scheme 6
2	3	4	5	6	7	8	
	China	0.03	1.18	1.24	0	1.21	1.22
BRI countries	41 countries in Asia:						
	MYS	0.08	0.14	0.24	0.01	1.37	1.37
	SGP	0.01	0.02	0.04	0	1.65	1.61
	VNM	0.08	0.06	0.17	0.24	2.34	2.82
	IDN	0.03	0.04	0.08	0.03	0.55	0.59
	PHL	0.01	0.04	0.05	0.02	0.98	0.99
	THA	0.19	0.23	0.47	0.14	0.99	1.21
	AU4	0	-0.01	-0.01	-0.15	1.24	1.08
	IRN	0.04	0.06	0.11	0.01	0.35	0.37
	IND	0.01	0.01	0.02	-0.04	0.16	0.12
	A29	0.02	0.02	0.04	0.01	0.5	0.51
	CIS7						
	RUS	0.01	-0.03	-0.02	0.02	0.15	0.18
	CIS6	-0.03	0.02	-0.01	0.02	0.42	0.44
CEE16	0	-0.01	-0.01	0.06	0.2	0.29	
Asia	JPN	0	-0.01	-0.01	-0.01	-0.01	-0.02
	KOR	-0.02	-0.03	-0.06	-0.03	-0.05	-0.08
	TWN	-0.02	-0.03	-0.05	-0.02	-0.03	-0.05
America	USA	0	0	0	0	0	-0.01
	CAN	0	0	0	0	0	-0.01
	ROA	0.01	0	0.01	0.01	0	0
Europe	DEU	-0.01	-0.01	-0.02	-0.02	-0.03	-0.05
	SWZ	0	0	0	0	0	-0.01
	ENG	-0.01	-0.01	-0.02	-0.01	-0.02	-0.04
	FRA	-0.01	-0.01	-0.02	-0.01	-0.02	-0.03
	ROE	-0.01	-0.01	-0.02	-0.01	-0.02	-0.04
Oceania	AUS	0	0	0	-0.01	-0.01	-0.02
	ROO	0	0	0	-0.01	-0.01	-0.01

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End of table 4

1	2	3	4	5	6	7	8
Latin America& Caribbean regions	CHL	0	0	-0.01	-0.01	-0.01	-0.03
	BRA	0	0	0	-0.01	0	-0.01
	ROL	0	-0.01	-0.01	-0.01	-0.01	-0.02
Africa	SOA	0	-0.01	-0.02	-0.02	-0.04	-0.06
	NOA	0	0	0.01	-0.01	-0.01	-0.03

Information resource: RunGTAP simulation result

Among other countries of the world, the adverse impact on Europe is relatively large, especially in countries that have frequent trade with China, such as Germany, but have no effect on Switzerland’s real GDP. It shows negative impact on Poland’s real

GDP, although this impact is small. This is inconsistent that BRI policy trade facilitation have a positive impact on Polish real GDP. Reducing the trade barriers between China and BRI countries has a small impact on real GDP growth of countries on other continents.



Fig.1. Real GDP change rates in various countries and regions (Scheme 2)

4.2.2. The reduction of trade barriers can benefit international trade development and improvement of terms of trade between China and the BRI countries

The trade between China and the BRI countries would be significantly improved, increasing the scale of import and export. Lowering the tariffs and tax rate in Scheme 1 induces costs reduction and improvements in international trade activities. In Scheme 2, reducing non-tariff barriers on what the BRI countries export to China increases the import trade of China. At the same time, partly because China imports more intermediate goods from these countries, the production costs of China will be relatively reduced, thus promoting China's export development. The bilateral reduction of non-tariff barriers in Scheme 5 significantly improves China's import and export trade. Japan's imports drops the most, while Taiwan's exports drops the most.

If one is cutting down bilateral tariffs while reducing non-tariff barriers, as shown in Scheme 6, the trade effect would be enhanced. It can be seen that reducing trade barriers can significantly promote the expansion of the scale of China's import and export trade; particularly when bilateral reductions in trade double the impact on international trade. This is consistent with Theory of Free International Trade that indicate the following: If reducing trade barriers and achieving trade liberalization and facilitation when both sides are specializing in production, as a result of economies of scale, the production activities would be improved, the exchange of products would be strengthened and the trade would be improved.

From other non-BRI countries' or regions' perspectives, their total trade volume will, however, be reduced. Among

them, the trade activities in Asia are the most affected. With the unilateral reduction of trade barriers in China (Scheme 3), imports from Taiwan, South Korea and Japan will decrease by 1,97; 1,47 and 1,24 %, respectively. Reducing trade barriers under reciprocal negotiations has a larger impact on the trade activities. Secondly affected are the European countries, Latin America and the Caribbean regions, of which Germany will be the hardest hit among European countries who have more trade with China (-0,34 % in Scheme 3). Chile and Brazil will be hit harder among Latin American countries (-0,41 and -0,51 %, respectively, in Scheme 3). As for other continents, the influence is relatively small, with the United States' imports falling by 0.28% and exports increasing by 0,11 % under the impact of Scheme 3. The impact on other countries is very small.

Under traditional unilateralism, if China alone reduces its trade barriers, one will see deterioration of the terms of trade in China, but the terms of trade of the BRI countries will be improved (table 6). Under mutually beneficial negotiations, the terms of trade in India and Central and Eastern European countries will deteriorate, as they will in a few ASEAN countries, but the terms of trade in most other ASEAN countries will improve. Non-BRI countries, except for Canada and North Africa, would see an improvement of terms of trade. For other countries, the situation would become worse. Among them, the deterioration in the terms of trade in Asian countries is the most serious. For instance, under Scheme 3, the terms of trade in Japan and South Korea would worsen by 0.63 and 0.78, respectively. The terms of trade in other Asian countries would also deteriorate, but these countries would be less impacted.

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Table 5

Changes in the scale of import and export trade in countries and regions, %

1	2	Traditional unilateralism						Reciprocal negotiation					
		Scheme 1		Scheme 2		Scheme 3		Scheme 4		Scheme 5		Scheme 6	
		IM	EX	IM	EX	IM	EX	IM	EX	IM	EX	IM	EX
3	4	5	6	7	8	9	10	11	12	13	14		
	China	2.91	2.43	3.32	3.05	7.27	6.44	6.56	4.21	7.52	5.18	17.05	11.4
BRI countries	41 countries in Asia:												
	MYS	1.15	0.4	2.46	0.77	3.92	1.26	2.53	1.08	2.96	1.19	6.35	2.63
	SGP	1.13	0.65	2.45	1.43	3.9	2.22	0.8	0.53	2.73	1.73	3.78	2.4
	VNM	0.86	-0.17	0.72	-0.46	1.97	-0.67	10.6	5.84	2.19	-1.46	15.52	6.24
	IDN	1.25	0.51	1.52	0.54	3.27	1.26	2.2	1.5	2.4	1.34	5.67	3.57
	PHL	0.21	0	1.55	0.14	1.74	0.13	1.36	1.05	1.84	-0.02	3.6	1.46
	THA	2.78	-0.47	3.41	-0.63	7.15	-1.27	5.82	0.56	4.57	-1.95	12.94	-1.23
	AU4	-0.12	0.01	-0.09	-0.07	-0.23	-0.05	3.5	2.72	1.55	0.75	5.83	4.22
	IRN	0.63	0.29	1.14	0.36	2	0.76	3.62	2.62	0.96	0.38	5.7	3.87
	IND	0.37	0.35	0.86	0.86	1.41	1.37	2.33	3.24	1.17	1.53	4.85	6.34
	A29	1.2	0.47	1.21	0.33	2.77	0.93	1.86	1.09	1.75	0.69	4.35	2.23
	CIS countries:												
	RUS	0.74	0.29	0.8	0.17	1.84	0.57	1.81	0.87	0.79	0.31	3.32	1.55
	CIS6	0.12	0.08	-0.04	0.06	0.13	0.17	0.28	0.73	-0.42	-0.12	0.02	0.95
CEE16	0.04	0.05	0	0.03	0.06	0.1	0.4	0.5	0.14	0.04	0.72	0.77	
Asia	JPN	-0.42	0.08	-0.75	0	-1.24	0.13	-0.87	0.03	-1.44	-0.13	-2.58	-0.04
	KOR	-0.5	-0.09	-0.87	-0.23	-1.47	-0.33	-0.74	-0.12	-1.23	-0.33	-2.19	-0.49
	TWN	-0.65	-0.21	-1.16	-0.46	-1.97	-0.73	-0.69	-0.14	-1.38	-0.52	-2.31	-0.75
America	USA	-0.11	0.08	-0.15	-0.02	-0.28	0.11	-0.34	0.04	-0.5	-0.18	-0.95	-0.11
	CAN	-0.07	-0.03	-0.09	-0.06	-0.18	-0.1	-0.01	0.02	-0.04	-0.02	-0.06	0.01
	ROA	-0.03	0.05	-0.02	0.03	-0.07	0.11	0.03	0.1	0.06	0.05	0.08	0.19
Europe	DEU	-0.12	0	-0.19	-0.04	-0.34	-0.03	-0.25	0.02	-0.4	-0.07	-0.74	-0.05
	SWZ	-0.06	0	-0.12	-0.03	-0.19	-0.02	-0.15	-0.01	-0.33	-0.1	-0.55	-0.11
	ENG	-0.06	0.01	-0.08	-0.03	-0.14	0	-0.15	0.04	-0.25	-0.07	-0.46	-0.01
	FRA	-0.07	0.03	-0.11	0	-0.21	0.04	-0.19	0.04	-0.26	-0.03	-0.51	0.03
	ROE	-0.08	-0.01	-0.12	-0.04	-0.22	-0.05	-0.18	-0.01	-0.28	-0.09	-0.52	-0.1
Oceania	AUS	-0.04	-0.01	-0.3	-0.16	-0.33	-0.16	-0.42	-0.1	-0.75	-0.3	-1.31	-0.42
	ROO	-0.07	-0.02	-0.11	-0.05	-0.19	-0.07	-0.21	-0.03	-0.17	-0.07	-0.42	-0.09

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End of table 5

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latin America & Caribbean regions	CHL	-0.14	-0.09	-0.25	-0.12	-0.41	-0.23	-0.13	-0.06	-0.28	-0.1	-0.45	-0.17
	BRA	-0.12	0.06	-0.37	-0.21	-0.51	-0.13	-0.16	0.13	-0.42	-0.2	-0.63	-0.01
	ROL	-0.04	0.01	-0.05	-0.02	-0.09	-0.01	-0.14	0.01	-0.14	-0.03	-0.32	-0.01
Africa	SOA	-0.01	-0.06	-0.23	-0.03	-0.24	-0.11	-0.15	-0.08	-0.44	-0.07	-0.66	-0.16
	NOA	-0.02	-0.02	-0.04	-0.05	-0.05	-0.08	-0.15	-0.04	-0.23	-0.08	-0.42	-0.12

Table 6

Changes in the terms of trade in countries and regions (Unit: %)

1	Terms of trade	Traditional unilateralism			Reciprocal negotiation		
		Scheme1	Scheme2	Scheme3	Scheme 4	Scheme 5	Scheme 6
1	2	3	4	5	6	7	8
	China	-0.44	-0.5	-1.17	1.06	1.07	2.39
BRI countries	41 countries in Asia:						
	MYS	0.51	1.13	1.78	0.32	0.93	1.32
	SGP	0.36	0.74	1.23	0.2	0.53	0.83
	VNM	0.51	0.76	1.48	-0.55	0.81	-0.03
	IDN	0.51	0.71	1.42	0.17	0.38	0.61
	PHL	0.16	0.93	1.1	-0.1	0.8	0.54
	THA	1	1.22	2.58	0.71	1.33	2.36
	AU4	0.01	0.11	0.13	-0.71	-0.31	-1.34
	IRN	0.29	0.74	1.15	-0.12	0.64	0.38
	IND	0.09	0.23	0.36	-0.61	-0.1	-0.92
	A29	0.47	0.61	1.22	0.27	0.44	0.76
	CIS countries:						
	RUS	0.32	0.5	0.94	0.18	0.34	0.56
	CIS6	0.06	-0.05	0.04	-0.31	-0.29	-0.7
CEE16	0.02	0	0.03	-0.12	-0.06	-0.25	
Asia	JPN	-0.21	-0.37	-0.63	-0.39	-0.65	-1.17
	KOR	-0.28	-0.44	-0.78	-0.44	-0.62	-1.18
	TWN	-0.36	-0.54	-0.97	-0.47	-0.68	-1.27
America	USA	-0.06	-0.07	-0.14	-0.15	-0.21	-0.4
	CAN	0.01	0	0.02	0.02	0	0.03
	ROA	0.02	0.02	0.05	0.03	0.04	0.07

End of table 6

1	2	3	4	5	6	7	8
Europe	DEU	-0.05	-0.08	-0.15	-0.11	-0.17	-0.32
	SWZ	-0.02	-0.05	-0.09	-0.06	-0.14	-0.22
	ENG	-0.02	-0.02	-0.04	-0.06	-0.1	-0.18
	FRA	-0.04	-0.06	-0.11	-0.09	-0.12	-0.24
	ROE	-0.02	-0.04	-0.07	-0.07	-0.11	-0.2
Oceania	AUS	0.05	-0.1	-0.02	-0.1	-0.29	-0.42
	ROO	0	-0.03	-0.03	-0.07	-0.06	-0.14
Latin America & Caribbean regions	CHL	0.01	-0.07	-0.04	-0.02	-0.12	-0.14
	BRA	-0.04	-0.11	-0.16	-0.07	-0.13	-0.22
	ROL	0.04	0.01	0.07	-0.01	-0.04	-0.04
Africa	SOA	0.08	-0.13	-0.01	0.04	-0.22	-0.19
	NOA	0.08	0.08	0.2	0.06	-0.01	0.07

Information resource: RunGTAP simulation result.

4.2.3. Reducing non-tariff barriers will increase the social welfare in China and BRI countries much more than if abolishing tariffs.

The positive impact of trade liberalization on social welfare under reciprocal negotiation is higher than with traditional unilateralism. China's unilateral abolition of tariffs against the BRI countries (Scheme 1) will greatly reduce the social welfare of BRI countries; yet, China's social welfare will decline slightly. If bilateral tariffs are to be abolished between China and the BRI countries (Scheme 4), China's social welfare will be raised. However, reducing China's non-tariff barriers on import products from the BRI countries (Scheme 2), will improve social welfare in China the most, about 2.78 times more than that of the ASEAN countries. If bilateral non-tariff barriers are being reduced at the same time (Scheme 5), the increase in social welfare in China is about 2,04 times that of the ASEAN countries, while the social welfare in other BRI countries will grow relatively faster.

In addition, the unilateral reduction of tariff and non-tariff barriers in China can increase the social welfare of China and the BRI countries, although the growth rate in regard to social welfare in China is not as large as when only reducing non-tariff barriers. But for the BRI countries, the reduction of tariffs has a greater impact on the welfare than the reduction of non-tariff barriers. As the results in Scheme 6 shows, the bilateral reduction of tariffs and non-tariff barriers maximize the freedom of trade, significantly increasing national social welfare on both sides.

Of all the six schemes, there will be a slight decline in global welfare with bilateral tariff reductions (Scheme 4), and global social welfare can be raised under other scenarios. Overall, reducing the barriers to trade between China and the Belt and Road countries would promote specialized production, allocate and use elements more rationally and effectively, conserve social resources and improve the welfare of both parties. It confirms on the improvement of social welfare in member states through regional trade cooperation.

Table 7

Changes of social welfare in countries and regions (Million dollar)

	Social welfare change	Traditional unilateralism			Reciprocal negotiation		
		Scheme 1	Scheme 2	Scheme 3	Scheme 4	Scheme 5	Scheme 6
	China	-2125.28	16877.48	13555.45	6583.14	27148.16	36198.73
BRI countries	41 countries in Asia:						
	MYS	779.5	1697.42	2706.53	593.91	3201.23	3984.03
	SGP	601.82	1236.58	2057.65	323.73	2661.89	3110.49
	VNM	220.85	289.1	597.73	-37.44	1287.63	1241.99
	IDN	483.73	667.77	1337.48	235.08	1731.62	2060.94
	PHL	89.65	495.56	587.74	-29.98	1227.77	1124.46
	THA	1372.13	1681.64	3523.37	1024.88	3059.6	4573.9
	AU4	-0.04	7.23	8.28	-77.51	166.29	60.28
	IRN	181.92	413.42	664.59	16.4	846.81	910.59
	IND	168.57	337.86	593.88	-1027.11	880.58	-470.97
	A29	3122.79	4127.38	8264.97	1899.85	10214.29	12577.78
	CIS countries:						
	RUS	523.68	600.18	1334.43	521.9	1553.2	2257.51
	CIS6	12.06	-30.48	-4.97	-233.56	226.82	-117.09
CEE16	40.21	-56.79	15.54	-8.56	984.72	933.34	
Asia	JPN	-1232.23	-2266.65	-3766.26	-2292.18	-3941.48	-6994.07
	KOR	-802.51	-1317.82	-2299.13	-1227.76	-1851.57	-3438.35
	TWN	-725.78	-1116.33	-1992.48	-938.69	-1377.57	-2553.23
America	USA	-960.94	-1354.01	-2541.08	-2503	-3835.66	-7080.4
	CAN	63.74	-6.22	85.45	89.66	-13.25	101.19
	ROA	83.81	65.19	176.75	123.63	46.06	192.61
European	DEU	-644.45	-994.21	-1815.4	-1407.85	-2121.68	-4015.76
	SWZ	-35.8	-80.8	-125.7	-78.46	-199.41	-314.42
	ENG	-216.32	-302.38	-570.38	-580.39	-972.37	-1751.33
	FRA	-299.88	-456.8	-848.52	-648.76	-926.33	-1798.14
	ROE	-794.88	-1430.3	-2439.85	-2139.41	-3429.69	-6241.81
Oceania	AUS	78.7	-129.06	-6.12	-167.4	-422.46	-639.49
	ROO	1.94	-11.8	-5.47	-33.46	-29.6	-66.62
Latin America & Caribbean regions	CHL	8.11	-20.53	-6.63	-4.35	-42.27	-46.74
	BRA	-35.72	-101.27	-144.39	-63.48	-125.26	-210.25
	ROL	57.87	-5.59	81.98	-40.29	-118.5	-165.21
Africa	SOA	153.44	-313.34	-83.16	6.09	-581.61	-615.76
	NOA	98.59	93.31	233.18	38.03	-33.31	18.93

Information resource: RunGTAP simulation result.

Geographically, the reduction of trade barriers has a larger positive effect on social welfare in countries like Thailand, Malaysia, Indonesia and Singapore, which are close to China or are similar to China in their economic development. Lowering trade barriers for countries farther away from China does not result in the same clear-cut improvements in social welfare. Overall, the reduction of trade barriers between China and the BRI countries will result in the improvement of social welfare in a majority of countries in the region. The social welfare of other countries in the non-BRI area is declining. Among them, Asian countries such as Japan will see the largest drop in social welfare, followed by South Korea and Taiwan. The decline in social welfare in Europe is relatively larger, especially in Germany. Social welfare in the United States will decline relatively more, while that of other countries will decline less.

4.2.4. Lowering trade barriers would stimulate the consumption by governments and residents in the BRI countries

China's unilateral reduction of trade barriers helps to stimulate government spending and household consumption in the BRI countries. Among them, Thailand, Malaysia, Singapore and Vietnam are the most positively stimulated. In the case of bilateral reciprocal negotiations, domestic consumption in both countries will only grow if both China and the BRI countries lower their non-tariff barriers (Scheme 5) and enhance trade facilitation. If tariffs are canceled on both sides, the consumption of residents in the Philippines, Thailand and India will decline slightly, whereas consumption of governments in most countries will fall, while only a small increase will be made in government spending in Singapore, Thailand and China. For most countries in non-BRI regions, consumption will decline slightly. Both government spending and consumer spending will decline in Asian countries. The same thing will happen

in European countries, but less than in Asia. Other countries and regions see less impact on both resident and government consumption.

5. Conclusions and Suggestions

This paper uses the latest GTAP 9.0 model to analyze the economic and trade effects of lower trade barriers between China and the BRI countries and compare two methods of trade liberalization. By simulating six policy plans, the study first concludes that trade liberalization under reciprocal negotiations has more positive economic and trade effects than trade liberalization under traditional unilateralism. Second, the reduction of non-tariff barriers has greater accelerating impact on economic and trade of the BRI countries than canceling tariffs. Third, in the context of the BRI countries, reduction of trade barriers has greater impacts on the Asian countries and regions that are closer to China, while this has weaker effects on Eastern European countries. Fourth, cutting trade barriers between China and the BRI countries has the most negative impact on the economic and trade cooperation among Asian countries in the non-BRI countries, especially Japan that bears the largest loss. The second-largest negative impact is to European countries, and among them Germany suffers the largest adverse impact.

Briefly cutting barriers to trade would promote the growth of economic development and trade volume. Also, this would extend output and improve social welfare. The findings presented in this article support the conclusions expressed by Bhagwati [19] about the benefits of trade liberalization. If China and BRI countries could make agreement on reducing mutual trade barriers, the economic development and trade cooperation would be promoted largely, especially for the Asia region due to a unique geographical advantage.

The findings of this study suggest that China should consider negotiating regional trade agreements with the BRI countries in

Table 8

Changes in government consumption in countries and regions, %

		Traditional unilateralism			Reciprocal negotiation		
		Scheme 1	Scheme 2	Scheme 3	Scheme 4	Scheme 5	Scheme 6
	China	-0.32	0.53	0.06	0.03	0.9	0.93
BRI countries	41 countries in Asia:						
	MYS	0.55	1.22	1.93	-0.12	1.95	1.74
	SGP	0.42	0.86	1.43	0.23	1.78	2.09
	VNM	0.41	0.66	1.21	-3.05	2.15	-1.62
	IDN	0.06	0.12	0.2	-0.14	0.28	0.06
	PHL	0.09	0.3	0.4	-0.3	0.76	0.28
	THA	0.83	1.01	2.1	0.11	1.73	1.81
	AU4	0.11	0.18	0.33	-1.29	0.59	-1.09
	IRN	0.02	0.13	0.16	-0.61	0.26	-0.54
	IND	0.03	0.09	0.13	-0.29	0.15	-0.26
	A29	0.12	0.2	0.36	-0.09	0.4	0.24
	CIS countries						
	RUS	0.01	0.06	0.07	-0.1	0.15	0
	CIS6	0.01	0.01	0.04	-0.26	0.24	-0.16
CEE16	0.01	0	0.01	-0.08	0.14	0.02	
Asia	JPN	-0.02	-0.03	-0.05	-0.03	-0.05	-0.09
	KOR	-0.06	-0.1	-0.18	-0.09	-0.14	-0.26
	TWN	-0.09	-0.13	-0.24	-0.11	-0.16	-0.3
America	USA	0	0	-0.01	-0.01	-0.02	-0.03
	CAN	0.01	0.01	0.02	0.01	0	0.02
	ROA	0.02	0.01	0.03	0.03	0	0.03
Europe	DEU	-0.02	-0.02	-0.05	-0.04	-0.06	-0.11
	SWZ	-0.01	-0.01	-0.02	-0.01	-0.03	-0.05
	ENG	-0.01	-0.01	-0.02	-0.02	-0.03	-0.06
	FRA	-0.01	-0.01	-0.03	-0.02	-0.03	-0.06
	ROE	-0.01	-0.02	-0.03	-0.03	-0.04	-0.08
Oceania	AUS	0.02	-0.01	0.01	0	-0.04	-0.04
	ROO	0.01	0	0.01	-0.01	-0.01	-0.02
Latin America & Caribbean regions	CHL	0.02	0	0.03	0.01	-0.02	0
	BRA	0.01	-0.03	-0.02	0.01	-0.03	-0.02
	ROL	0.02	0.01	0.03	0.02	0	0.02
Africa	SOA	0.05	-0.05	0.01	0.02	-0.1	-0.08
	NOA	0.06	0.06	0.13	0.04	0.01	0.06

Information resource: RunGTAP simulation result.

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Table 9

Changes of resident consumption in countries and regions, %

		Traditional unilateralism			Reciprocal negotiation		
		Scheme 1	Scheme 2	Scheme 3	Scheme 4	Scheme 5	Scheme 6
	China	-0.19	0.88	0.59	0.19	1.39	1.65
BRI countries	41 countries in Asia:						
	MYS	0.52	1.12	1.79	0.6	2.16	2.92
	SGP	0.62	1.28	2.13	0.33	2.75	3.21
	VNM	0.59	0.76	1.6	0.22	3.49	3.77
	IDN	0.19	0.27	0.53	0.08	0.68	0.79
	PHL	0.11	0.65	0.75	-0.03	1.6	1.47
	THA	1.12	1.38	2.89	0.88	2.51	3.81
	AU4	-0.04	0.02	-0.02	-0.49	1.23	0.54
	IRN	0.1	0.24	0.38	0.14	0.51	0.64
	IND	0.02	0.05	0.09	-0.16	0.13	-0.09
	A29	0.24	0.32	0.64	0.18	0.81	1.04
	CIS countries:						
	RUS	0.1	0.12	0.25	0.19	0.32	0.55
	CIS6	0.01	-0.04	-0.02	-0.22	0.21	-0.09
CEE16	0.01	-0.01	0	0.02	0.2	0.23	
Asia	JPN	-0.03	-0.06	-0.1	-0.06	-0.11	-0.2
	KOR	-0.14	-0.23	-0.4	-0.22	-0.33	-0.61
	TWN	-0.21	-0.33	-0.58	-0.27	-0.4	-0.74
America	USA	-0.01	-0.01	-0.03	-0.03	-0.04	-0.07
	CAN	0.01	0	0	0.01	-0.01	0
	ROA	0.01	0.01	0.03	0.02	0.01	0.03
Europe	DEU	-0.03	-0.05	-0.09	-0.06	-0.1	-0.18
	SWZ	-0.01	-0.03	-0.04	-0.03	-0.07	-0.11
	ENG	-0.01	-0.02	-0.03	-0.03	-0.06	-0.1
	FRA	-0.02	-0.03	-0.06	-0.04	-0.06	-0.12
	ROE	-0.02	-0.03	-0.06	-0.05	-0.08	-0.14
Oceania	AUS	0.01	-0.03	0	-0.03	-0.08	-0.13
	ROO	0	-0.01	-0.01	-0.04	-0.03	-0.07
Latin America & Caribbean regions	CHL	0.01	-0.03	-0.01	-0.01	-0.06	-0.07
	BRA	-0.01	-0.02	-0.03	-0.02	-0.02	-0.05
	ROL	0.01	0	0.01	-0.01	-0.02	-0.03
Africa	SOA	0.03	-0.07	-0.03	0	-0.13	-0.15
	NOA	0.04	0.04	0.1	0.02	-0.02	0

Information resource: RunGTAP simulation result.

order to dismantle trade barriers and realize trade liberalization. When choosing how to reduce barriers, non-tariff barriers should be considered first, followed by a reduction in tariffs. If the reciprocal negotiations to reduce trade barriers develop slowly, China could choose unilateral liberalization to extend trade

and promote the growth of each country's economic development.

One of the shortcomings of this study is that it does not consider the investment facilitation between China and the BRI countries. This would be an important focus of future studies.

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ЭФФЕКТЫ ВЗАИМНЫХ ТОРГОВЫХ ПЕРЕГОВОРОВ И РЕАЛИЗАЦИИ ИНИЦИАТИВЫ КИТАЯ «ОДИН ПОЯС – ОДИН ПУТЬ»

Аннотация. С начала XXI века, в условиях обострения конкуренции в международной торговле и вялого развития экономики, последовал постепенный рост торгового протекционизма. Китай, преисполненный решимости содействовать свободной торговле, предложил наладить торговые связи с так называемыми странами шелкового пути в рамках инициативы «Один пояс – один путь». Для изучения различных эффектов свободной торговли Китая со странами, входящими в программу «Один пояс – один путь», в данной работе используется новейшая модель ГТАР 9.0 и проводится шесть симуляций различных подходов к либерализации торговли, а именно снижение технологического барьера (односторонний и двусторонний), снижение тарифов (односторонний и двусторонний) и снижение как технологического барьера, так и тарифов (односторонний и двусторонний). Оказалось, что взаимные переговоры по снижению торговых барьеров максимизируют выгоды, связанные с экономическими аспектами и торговлей для обеих сторон. Положительные последствия снижения нетарифных барьеров были более значительными, чем само использование тарифных ограничений. Кроме того, это исследование показало, что страны, расположенные вблизи Китая, включая Таиланд, Малайзию, Индонезию и Сингапур, могут достигнуть гораздо большей выгоды. Экономика, а конкретно рост ВВП и социальное обеспечение, в странах, не входящих в программу «Один пояс – один путь», а особенно в азиатских странах, пострадают больше всего при снижении торговых барьеров между Китаем и странами, входящими в программу «Один пояс – один путь». Второе по величине отрицательное воздействие будет оказано на страны Европейского союза. Кратковременное устранение барьеров в торговле способствует росту экономического развития и объема торговли.

Ключевые слова: инициатива «Один пояс – один путь»; ГТАР 9.0; нетарифные барьеры; тариф; либерализация торговли; эффекты.

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