ASSESSING THE EFFECTS OF TRADE LIBERALIZATION WITH THIRD COUNTRIES: THE CASE OF THE EURASIAN ECONOMIC UNION

Simon Sngryan[1*]

[1]Armenian State University of Economics - Yerevan, Armenia https://orcid.org/0000-0003-3738-4899 ✉ simon.sngryan.81@mail.ru

Abstract: *The processes of objectively conditioned integration in the economic, political, legal, and institutional spheres of the Eurasian Economic Union (EEU) Member States took place step by step, starting from preferential trade agreements, passing to the customs union, the common market and other stages of integration. This process is accompanied by the gradual deepening of trade liberalization with potential partners. The selection of potential partners should be carried out through a comprehensive and detailed analysis of the structure and volumes of foreign trade of the EEU Member States (Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia) with third parties, their markets structure, existing customs regulation, trade barriers, and possible export potential. The research evaluated the EEU's possible enlargement effects on the Member States' economic indicators. The research aimed to assess the possible consequences of EEU expansion and signing free trade agreements, considering Pakistan, Korea, and Malaysia as potential trade partners. Modeling the effect of an FTA assumes horizontal zeroing of tariffs between partners. Then, using the GTAP model, a new state of general equilibrium was calculated corresponding to the changed parameters of customs and tariff regulation. In this case, most variables, such as change in GDP, production output, and export-import volumes, were estimated, manifesting the economic effect of trade liberalization.*

Keywords: *Liberalization; Openness; Integration; Third Countries; EEU; Member States*

INTRODUCTION

The modern trade liberalization processes are accompanied by the simplification of trade procedures and the gradual elimination of tariff and non-tariff barriers to diversify reciprocal trade flows and then promote the expansion of foreign trade. In these conditions, the increase in economic openness deepens the economic ties between the partner countries, which are the basis for further integration. Trade liberalization is taking place gradually due to the expansion of cooperation at the integrating countries' economic, legal, and institutional levels. The Eurasian Economic Union (EEU) explores the possibility of signing new free trade agreements (FTA). These agreements promote trade and other economic relations between the integrating countries. The ongoing liberalization of trade in the context of EEU membership and choosing a suitable partner for concluding a trade agreement strives to ensure a mutually beneficial trade balance. The free movement of goods creates favorable opportunities for the EEU Member

States, which are manifested as follows: intensification of mutual trade (an increase of EEU market capacity, increase of mutual trade volumes, strengthening of negotiating positions in trade policy).

There are also certain contradictions, which are conditioned by different levels of economic development of the Member States, Russia's predominant position, increasing costs of harmonization and unification of economic policy, and many systemic-structural contradictions. Although most of the EEU Member States have a high degree of economic openness, the mutual openness of the EEU Member States does not allow them to receive multifaceted benefits from the rapprochement of economic processes.

One of the main challenges of integration is the accession of the new members, which needs to determine the level of liberalization of foreign economic activity as the national economies are becoming more sensitive to the external economic environment and the processes taking place there.

The research objective is to assess the possible consequences of EEU expansion and signing free trade agreements considering Pakistan, Korea, and Malaysia as potential trade partners. For this purpose, the effect of an FTA is modeled by the horizontal zeroing of tariffs between Member States (Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia) and Pakistan, Korea, and Malaysia. Then, using the Global Trade Analysis Project (GTAP) model, the possible changes in several socio-economic indicators, such as Gross Domestic Product (GDP), production, and export-import volumes.

In this context, the research highlights that the Member States become more sensitive to the external economic environment, faced with many open economy formation issues related to the degree of liberalization and choice of integration schemes with other countries. This means that further enlargement of the EEU could create opportunities and threats to the economic development of the Member States. The results of identifying potential countries would be expedient for the EEU to conclude free trade agreements.

LITERATURE REVIEW

The impact of openness on national economic development is an exciting area for international institutions and scientists. In recent years, regional and multilateral trade agreements have increased. World Trade Organization (WTO) commitments include non-discrimination, while regional trade agreements provide preferential terms for the Member States. The number of trade agreements, like the share of preferential trade, is growing. The increase in trade agreements is because it is possible to obtain economic benefits for states and establish a more liberal trade regime.

Proponents of trade and investment liberalization view economic openness as one of the critical drivers of economic growth. Policies that make an economy open to trade and investment with the rest of the world are needed for sustained economic growth (IMF 2001). Studies showed that countries that liberalized their trade regimes experienced average annual growth rates about 1.5 percentage points higher than before liberalization (World Bank 2008).

Reducing tariff and non-tariff barriers on imports showed that eliminating trade policy distortions has a powerful and positive impact on import growth (Amelia 2002). Lipsey and

Lancaster (1956) consider that a slight reduction of tariffs leads to increased members' welfare, and complete liberalization of tariffs leads to uncertain results. In the case of a gradual reduction in import duties, the welfare of foreign members will increase and then decrease.

The countries of the Eurasian Economic Union make great efforts to develop the export of goods and to become part of regional and global production chains. Free-trade agreements are the most effective tool which enables the expansion and simplification of access to foreign markets for domestic producers (Vorontsova 2015).

In practice, within the framework of integration, the regional opening has a specific economic efficiency, particularly the liberalization of trade flows, the growth of the gross GDP of the integrating countries, and the improvement of the macroeconomic indicators of the Member States. In this context, it can be emphasized not only the emergence of static but also the emergence of dynamic effects, such as increased competition, which, in its denial, stimulates the introduction and development of new technologies. At the same time, we must take into account that such agreements can have both positive and negative effects on the economy, as well as on a particular sector of the economy, in connection with the emergence of different results, such as growth or slowdown in GDP, investment inflow or outflow, increase or decrease in foreign and mutual trade (Glazatova 2021). The liberalization is not a guarantee of sustainable economic growth. It is an opportunity to access the national markets for goods, services, and capital, and it is an additional impetus for the development of international trade and transnational investments. So, the EEU strategy for forming the FTA framework should consider the possible impact on the national economies of Member States by comparing potential benefits and risks.

METHODOLOGY

In the context of EEU membership, the openness of the Member States' economies and the continued liberalization of trade are of great interest. When choosing a suitable partner for concluding a trade agreement, the EEU Member States strive to ensure a mutually beneficial trade balance, ensuring the most favorable positions in foreign markets. At the beginning of 2021, the Eurasian Economic Commission signed 14 Memoranda of Understanding with the Governments of Third Countries and 9 Memoranda of Understanding with Regional Integration Groups. Moldova, Uzbekistan, and Cuba received observer status, and trade agreements of various depths were signed with Vietnam, Iran, China, Singapore, and Serbia. The EEU is an open integration union, and further enlargements are possible. The liberalization of the economy opens new possibilities for its development; on the other hand, it is not an unconditional benefit. Therefore, within the research framework, we will evaluate the possible impacts of EEU expansion and creating a free trade zone, considering Pakistan, Korea, and Malaysia as potential partners.

The modeling is based on the GTAP general equilibrium model, developed in 2019, which includes the socio-economic development indicators used in the model and customs and tax regulation measures of the countries. In order to clarify the results of economic and mathematical modeling, the GTAP model for EEU has adjusted the customs protection standards for 2020. In the case of Pakistan, Korea, and Malaysia, use the most recent data in the World

Bank, Intracen, and WTO databases. The analysis also includes all the possible areas in the model (rice: seed, paddy (not husked), wheat, other grains, and others, a total of 65 sectors). The current model evaluates the relative (percentage) changes in the foreign trade volume between the EEU Member States and potential prospective partners such as Pakistan, Malaysia, and Korea. Using mate tables between GTAP model sector nomenclature and harmonized commodity description and coding systems of EEU based on actual recorded trade statistics, the absolute changes in trade volumes by sectors of the GTAP model will be estimated.

CONDUCTING RESEARCH AND RESULTS

Modeling the effect of creating a free trade area with a country or another presupposes horizontal zeroing of tariffs by the EEU Member States and zeroing of tariffs by partner countries. After that, the software calculated a new equilibrium state corresponding to the new customs regulation standards. A specific change of variables occurs, which is the economic result of liberalization.

The quantitative part of the research focused on data collection that characterizes trade relations and policy development parameters. Quantitative indicators on foreign trade statistics, such as export-import volume, mutual trade volume between the EEU Member States and third countries, foreign trade commodity and geographical structure, were analyzed.

GTAP model makes it possible to estimate the relative changes in several indicators of socio-economic development, including changes in GDP and other indicators. The possible results of the model as a result of customs liberalization with Korea, Malaysia, and Pakistan are as follows: change in GDP (%), change in output volumes of model sectors (%), change in the possible impact on the labor market (%), change in the volume of imports from a partner country to EEU Member States (%), change in the volume of exports to a partner country (%).
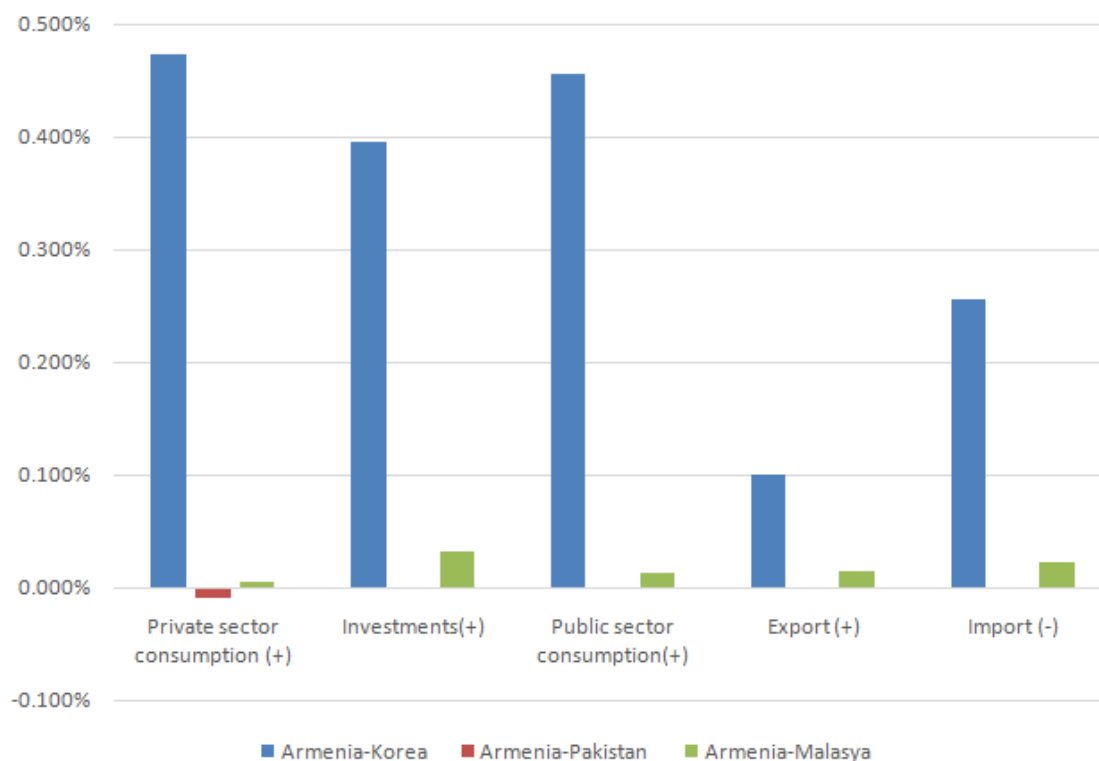
Application of GTAP Model Analysis

The calculations made in the GTAP model show that as a result of trade liberalization, there will be a relative change in GDP in the EEU Member States; in particular, relative GDP growth for all EEU Member States will take place in case of trade liberalization with Korea. From the obtained results, the relevant results were singled out in Table 1.

Table 1: Relative Volume Change of GDP in the EEU Member States, % (Source: Own compilation)

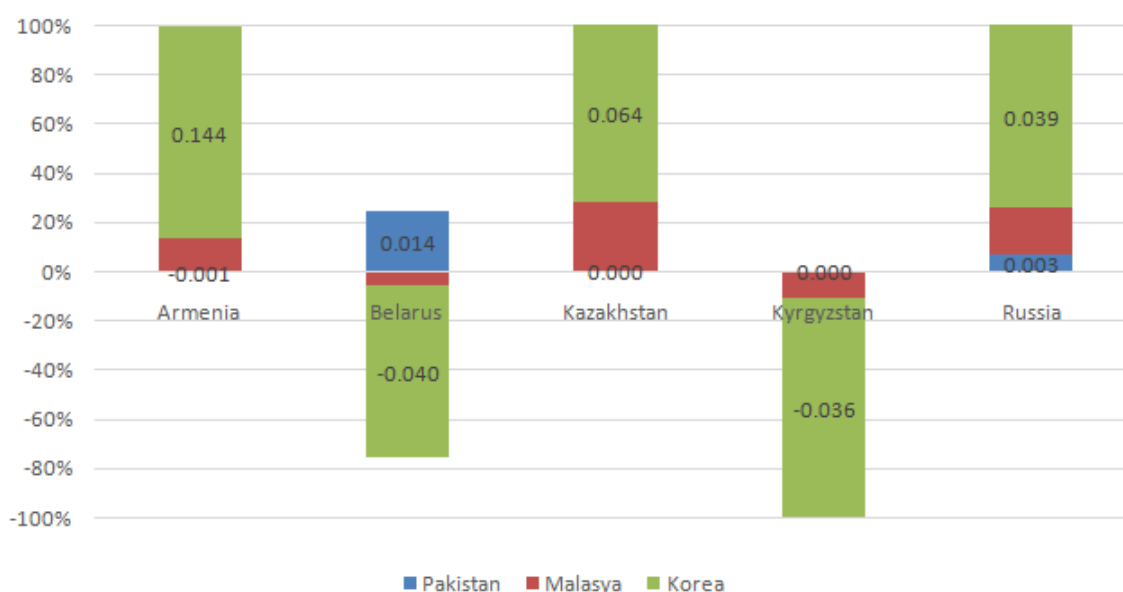| Countries	Pakistan	Malaysia	Korea
Armenia	-0.000142	0.000145	0.037906
Belarus	0.006138	-0.000851	-0.018985
Kazakhstan	0.000096	-0.000053	-0.001822
Kyrgyzstan	0.000454	-0.000591	-0.030080
Russia	-0.000386	0.000765	0.011310

In the case of Armenia, GDP growth in value terms will occur in Korea (0.460%) and Malaysia (0.006%). In both cases, all components of GDP, except imports, will change in a positive direction. A comparison of means by variables is shown in Graph 1.

Graph 1: GDP Change in Value Terms, % (Armenia) (Source: Own compilation)

In the case of Belarus, GDP growth (in value terms) will be 0.039% (potential partner Korea) due to increased public-private sector consumption, while other components of GDP are changing in a negative direction. Trade liberalization with potential trading partners can lead to GDP growth in Kazakhstan, with all components of GDP changing positively. This figure is higher for Korea (0.023%), followed by Malaysia (0.021%) and Pakistan (0.003%). In contrast to Kazakhstan, the results for Kyrgyzstan recorded a decline in GDP, especially in the case of Korea (-0.325%) and Malaysia (-0.016%), with almost all components of GDP changing negatively, except for exports. The liberalization of trade relations with Russia positively impacts GDP growth because of positive changes in all components of GDP.

The change in the volume of GDP will also lead to a change in the volume of production in the Member States. Graph 2 shows the change in production volume in the Member States.

Graph 2: Possible Change in Production Volumes in the EEU Member States, %
(Source: Own compilation)

In the case of trade liberalization with Pakistan, production volumes will increase by 0.014% in Belarus and by 0.003% in Russia. Liberalization of trade relations with Korea will increase production in Armenia (0.144%), Kazakhstan (0.064%), and Russia (0.039), while in Belarus and Kyrgyzstan, production will decline by -0.04% և -0.036%, respectively.

In the case of Malaysia, the production volume change will be as follows: Armenia - 0.022%, Belarus –(-0.003%), Kazakhstan - 0.024%, Kyrgyzstan –(-0.005%), and Russia - 0.01%.

In 55% of the product groups included in the study in the studied countries, there is a negative impact on the production level in Armenia.

The GTAP model calculates the impact of trade liberalization on imports and exports of the EEU Member States. This model assumes zero tariffs by partner countries, which could significantly impact foreign trade.

Table 2: Relative Changes in the Volume of Imports in the EEU Member States, % (partner country Pakistan)
(Source: Own compilation)

GTAP Model Sectors	Armenia	Belarus	Kazakhstan	Kyrgyzstan	Russia
Rice: seed, paddy (not husked)	140.553	141.089	140.181	140.538	140.015
Wool: wool, silk, and other raw animal materials used in textile	68.653	68.983	68.6	68.627	68.426
Gas	138.066	138.06	138.076	138.105	138.121
Other meat	811.684	813.915	811.9	154.357	812.286

Milk: dairy products	119.784	120.188	119.905	119.817	120.092
Sugar	178.29	1,123.52	178.413	178.393	178.35
Other food	74.772	45.831	47.242	35.457	67.169
Manufacture of textiles	100.667	98.057	109.904	104.705	103.525
Manufacture of wearing apparel	105.005	107.407	103.841	111.624	107.079

Table 2 shows the GTAP model sectors, which registered relatively significant growth. These calculations also applied to Malaysia and Korea. Based on these calculations, it is possible to compare highly sensitive products between different manufacturers of the EEU Member States. From the point of view of industrial cooperation of the EEU Member States, Sensitive products from the point of view of industrial cooperation are machine-building products, light industry products, metallurgical products, production of machinery, equipment for forestry, and production of construction materials. The Eurasian Economic Commission has also approved many sensitive, including agricultural and industrial goods, the production and trade of which in the EEU have a significant economic impact on the development of Member States. In addition, the Eurasian Economic Commission approves a list of sensitive goods that may be subject to changes in import duties. Sensitive agricultural commodities are milk, dairy products, meat and meat products, vegetables, fruits, rice, sugar, oilseeds, and their processing products, tobacco, and cotton.

Based on the list of sensitive products of industrial cooperation of the EEU Member States and the study of import volumes in case of trade liberalization with the countries that are potential trade partners, we will present the main product groups with high sensitivity of imports from those countries. The relevant results were singled out in Table 3.

Table 3: List of Sensitive Products (partner Pakistan) (Source: Own data)

Armenia	Belarus	Kazakhstan	Kyrgyzstan	Russia
Other meat	Sugar	Other meat	Sugar	Other meat
Sugar	Other meat	Sugar	Other meat	Sugar
Manufacture of fabricated metal products	Manufacture of electrical equipment	Rice: seed, paddy (not husked)	Manufacture of electrical equipment	Rice: seed, paddy (not husked)
Rice: seed, paddy (not husked)	Rice: seed, paddy (not husked)	Cattle meat	Rice: seed, paddy (not husked)	Cattle meat
Gas	Cattle meat	Gas	Cattle meat	Gas
Manufacture of electrical equipment	Gas	Milk: dairy products	Gas	Manufacture of fabricated metal products

Milk: dairy products	Milk: dairy products	Manufacture of other transport equipment	Milk: dairy products	Manufacture of electrical equipment
Non-ferrous metals	Manufacture of wearing apparel	Manufacture of fabricated metal products	Non-ferrous metals	Milk: dairy products
Manufacture of wearing apparel	Manufacture of textiles	Manufacture of textiles	Manufacture of fabricated metal products	Manufacture of wearing apparel

Among these products sensitive to imports from Pakistan, metallurgical products, other metals, clothing, textiles, and transport-engineering products are sensitive from the point of view of EEU industrial cooperation. In addition, the lists for sensitive products are formed for Malaysia and Korea.

In the case of Malaysia, the products of the food industry and gas have high sensitivity. Other products of transport engineering, clothing, and metal products are sensitive from the point of view of the EEU industrial cooperation. In the case of Korea, meat, sugar, and rice are again highly sensitive, and the most sensitive products in terms of EEU industrial cooperation are transport machinery and metallurgy.

The modeling results show that trade liberalization may increase exports from the EEU Member States to partner countries. However, it should be noted that some product groups in the model show high growth potential. However, it is impossible to export these products to potential trade partner countries depending on the country's specialization. To this end, we have studied the current trade turnover with these countries and assessed the export potential of these products. The calculations show that in terms of the products included in the model, automobile products have a 493.96% export potential from Armenia to Pakistan, other meat products 397.31%, dairy products278.7%, tobacco and beverages 173.86%. Exports of tobacco, beverages (416.49%), rubber-plastic products (112.68%), woodworking products (79.88%), and mineral products (46.22) will increase from Armenia to Malaysia. Armenia can increase exports of dairy products, oilseeds, and food industry products (765.14%) to Korea.

The results show that Belarus may have up to a 554% increase in exports of certain products, and in the case of Belarus, this increase is in line with Belarus' specialization. Exports from Belarus to Pakistan may increase for the following products: electrical equipment (484.06%), automotive products (415.15%), metalworking products (291.1%), and dairy products (276.93%). Belarus currently exports mainly to Malaysia's food industry and chemical industry products, which may increase by 21.72% and 0.6%, respectively. A significant percentage increase may be due to rubber, plastics, automotive products, metals, etc. Exports of other meat products, clothing, electrical equipment, pharmaceuticals, minerals, and wood from Belarus to Korea will increase.

Kazakhstan has export opportunities to Pakistan in the field of electrical equipment (902.7%), rubber-plastic products (200.88), metalworking products (187.82%), and metals (132.7%). Exports of tobacco, beverages (28508.65%), minerals (124.68%), and oil (43.81%) have significant growth potential for exports from Kazakhstan to Malaysia.

Kazakhstan currently exports oil to Korea (growth will be 29.37%), crude oil (11.99%), and other metals (22.91%). However, dairy products, oilseeds, fruits, and vegetables have export potential.

In the case of Kyrgyzstan, there is an increase in exports of many product groups to Pakistan. However, in this case, there are specific asymmetries in the specialization. Kyrgyzstan has not had significant exports to Malaysia in recent years; however, exports of textiles may increase by 93.42%, and vegetables and fruits by 16.76%. Because of trade liberalization, Kyrgyzstan may increase exports of livestock (2334.23%), food industry (149.67%), textiles (86.74%), and crop products (80.1%).

The market of Pakistan is attractive for Russia in terms of exports of other meat products (397.27%), metal products (288.26%), automotive products (251.07%), electrical equipment, and minerals. At the same time, exports of these products to Pakistan have increased in recent years. The Malaysian market is quite promising for Russia, especially the products that are currently exported to Malaysia, in particular tobacco, beverages (416.49%), automotive products (166.80%), and rubber-plastic products (112.68%), and metals have growth potential. For Russia, commodity groups with potential for export growth largely coincide with the current structure of exports. In particular, the export of oil with the highest share in value will increase by 28.07%, while coal - by 0.2% and gas - by 115.48%. Oilseed crops, other grains, and other meat products have a great potential for export from Russia to Malaysia.

The model allowed calculating the relative change in the demand for diverse workforces. With the liberalization of trade with Pakistan, the number of employed or unskilled workers in the agricultural sector in Armenia will be reduced by (-0.003%) and (-0.029%), respectively. In the case of Malaysia and Korea, employment will increase in almost all qualifications. The results show that Belarus will have a relative reduction in the number of professionals with different qualifications in all three-partner countries. Only Pakistan will show a relative increase in the number of employees in the service sector. Liberalization of trade relations with all prospective countries will lead to a relative increase in the labor force in Kazakhstan, while in Kyrgyzstan - the opposite. As for Russia, there will be a relative increase in the labor force of almost all partner countries with different qualifications (except for the 'Korea-Agriculture' column).

The analysis of the studied indicators for concluding the free trade agreement with Pakistan, Malaysia, and Korea showed contradictory results at the level of the Member States and individual indicators. It is relatively beneficial for the EEU Member States to sign a free trade agreement with Korea.

There are also other factors and other countries which have not been examined in this paper. Still, the presented results clearly show that the GTAP model allows us to evaluate the impact of trade liberalization on several indicators of EEU Member States.

CONCLUSION

The research found that using analysis tools and approaches based on the GTAP model allows to perform complete and detailed analysis and get results of a possible change of GDP, production, and import-export volumes of the Member States in case of possible enlargement of the EEU with Malaysia, Korea, and Pakistan. The research also found that the difference in the

EEU Member States' specialization and their different level of involvement in foreign trade influence the possible unequal nature of the results. The research results show that trade liberalization with Korea, Pakistan, and Malaysia is multivalued and can affect Member States' GDP, production volumes, import-export volumes, and structure. The research allowed finding out the sensitivity to import products in the EEU Member States. The used methodology identifies potential countries in expanding the participation of the EEU in free trade agreements, including the choice of partners and its justification.

COMPLIANCE WITH ETHICAL STANDARDS

Statement of human rights:
This article does not contain any studies with human participants performed by any authors.

Statement on the welfare of animals:
This article does not contain any studies with animals performed by any authors.

Informed consent:
Not applicable.

REFERENCES

1. Glazatova M., Hachkverdyan D., et al. 2021. "Assessment of the integration processes in EEU in the field of trade". National Research University, Higher School of economics. ISBN 978-5-7598-2274-5 (e-book).
2. Hertel, T. 1997. "Structure of GTAP. Global Trade Analysis: Modeling and Applications". Cambridge University Press.
3. IMF. 2001. Global Trade Liberalization and the Developing Countries. https://www.imf.org/external/np/exr/ib/2001/110801.htm
4. Lipsey R., Lancaster K. 1956."The Review of Economic Studies". Volume 24, Issue 1, p. 11–32.
5. Santos-Paulino, A. 2002. "The Effects of Trade Liberalization on Imports in Selected developing Countries". *World Development*, Volume 30, Issue 6, p.959-974.
6. Vorontsova, N.A. 2015. "Trade Liberalization within the Eurasian Economic Union (the Case of the EAEU-Vietnam Agreement)". *Moscow Journal of International Law* (4), (in Russ.), p.103-115.
7. Wacziarg, R., Welch, K. 2008. "Trade Liberalization and Growth: New Evidence". *The World Bank Economic Review*, 22(2), p.187–231.
8. Zuev V., Ostrovskaya E., Skryabina V., Kalachyhin, H. 2021. "Features of the EAEU Strategy for the Formation of an FTA Network". *HSE Economic Journal, National Research University Higher School of Economics*, vol. 25(1), p.42-64.