TRANSPORT ECOSYSTEM: SOCIETY, STATE, AND GLOBAL CHALLENGES ЭКОСИСТЕМА ТРАНСПОРТА: ОБЩЕСТВО, ГОСУДАРСТВО И ГЛОБАЛЬНЫЕ ВЫЗОВЫ

Original article
UDC 656.13
doi:10.46684/2022.1.6

Foreign trade as a factor influencing the development of transnational transport and logistics systems

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ABSTRACT BRICS, an international association of countries with the greatest potential for economic growth is an example of a promising international alliance capable of effectively integrating economic interests and processes to provide a serious alternative to the developed countries in terms of the international trade scale and efficiency. At the same time, the existing format for discussing intentions and statements requires the targeted institutionalization of economic interactions and the creation of international economic, primarily transport and logistics, systems. These systems should be capable of using advanced transport and logistics concepts in terms of full consumer value chains to ensure effective support for international trade commodity flows based on real-time requests and existing import-export specialization of the participating countries.

The article provides statistical data characterizing the volumes of Russia's foreign trade with key international partners in non-CIS countries including the BRICS countries. The Federal State Statistics Service of the Russian Federation provided the statistical information in the field of foreign trade and its main aspects.

The analysis of existing international commodity flows unequivocally demonstrates a possibility of increasing international trade through the creation of transnational transport and logistics systems capable of ensuring the functioning of international value chains and efficient international exchange.

KEYWORDS: BRICS; import-export specialization of countries; international partnership; international trade

For citation: Voronov A.A., Xu Bian. Foreign trade as a factor influencing the development of transnational transport and logistics systems. *BRICS transport*. 2022;1(1):6. https://doi.org/10.46684/2022.1.6

Научная статья

Внешняя торговля как фактор развития транснациональных транспортно-логистических систем

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АННОТАЦИЯ Международное объединение стран с наибольшим потенциалом экономического роста БРИКС является образцом перспективного внешнеполитического союза, способного при эффективной интеграции экономических интересов и процессов обеспечить серьезную альтернативу развитым странам в части масштабов и эффективности международной торговли. В то же время существующий формат обсуждения намерений и заявлений требует целенаправленной институционализации перспективных экономических взаимодействий, создания международных экономических, в первую очередь транспортно-логистических систем, способных на основе перспективных и прогрессивных транспортных и логистических концепций в контуре полных цепочек создания потребительской ценности, обеспечить эффективное сопровождение товарных потоков международной торговли на основе актуальных запросов и сложившейся импортно-экспортной специализации стран-участников.

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Приведены статистические данные, характеризующие объемы внешней торговли РФ с ключевыми международными партнерами дальнего зарубежья, в том числе странами БРИКС. Данными для расчетов послужили сведения Федеральной службы государственной статистики Российской Федерации в части внешней торговли и ее основных направлений.

Проведенный анализ сложившихся товарных потоков международной торговли однозначно указывает на возможность роста их масштабов на основе формирования перспективных транснациональных транспортно-логистических систем, способных обеспечить функционирование международных цепочек создания ценности и эффективный международный обмен.

КЛЮЧЕВЫЕ СЛОВА: БРИКС; импортно-экспортная специализация стран; международное партнерство; внешняя торговля

Для цитирования: Воронов А.А., Сюй Бянь. Внешняя торговля как фактор развития транспациональных транспортнологистических систем // Транспорт БРИКС. 2022. Т. 1. Вып. 1. Ст. 6. https://doi.org/10.46684/2022.1.6

INTRODUCTION

The new geopolitical reality that emerged in 2022 requires updating of theoretical and applied approaches to the creation, operation and modernization of transnational transport and logistics systems that will ensure the most effective implementation of the international division of labor, specialization and competitive advantages of the countries ready to implement active competitive strategies in international markets. One of the main aspects of such systems is handling of foreign trade commodity flows between countries-members of international economic alliances and associations including the BRICS group that represents the countries with the highest economic growth rates within the global economy.

MATERIALS AND METHODS

As an objective justification for the necessity of effective transnational transport and logistics systems, the Customs statistics data reflecting the structure of export and import flows between the Russian Federation and the key international partners including BRICS countries have been used. In conditions of global geopolitical transformations, the creation of reliable transport and logistics corridors based on effective infrastructure capacities will ensure regular, fair and efficient international trade. It will help to overcome unjustified discriminatory restrictions of certain international entities and to promote the international competitiveness of Russian goods.

RESEARCH RESULTS

Statistical data characterizing the volume of Russia's trade with the key international partners in non-CIS countries including BRICS countries are presented in *Table 1*, analyzed and summarized in *Table 2*, and visualized in *Fig. 1*, *2*. The statistical information in the field of foreign trade and its main aspects was provided by the Federal State Statistics Service of the Russian Federation.

The dynamics and structure of Russia's foreign trade with non-CIS countries in 2010–2018 are shown in *Table 1*¹.

The official Rosstat website has not been publishing the statistical data for 2019–2022 in the public currently. Nevertheless, the presented data analysis shows the main trends in the development of Russia's international trade with non-CIS countries.

Looking at the Russian Federation export business in 2010–2018, Russia's main trading partners were non-CIS European countries. The Russian-European partnership has been steadily declining, whereas the Russian-Chinese export operations have been steadily increasing. Over the period of 2010–2018, the export volumes to Europe fell from 61.1 to 48.5 %, while similar export trade indicators concerning China increased from 6.0 to 14.2 %. These tendencies took place against the background of growing export cooperation with India (as of 2010, 1.9 % and as of 2018, 2.0 % of total Russian exports) and Brazil (as of 2010, 0.53 %, and as of 2018, 0.65 %). South Africa was not one of Russia's key foreign trade partners in terms of exports in 2010–2018.

Russia's import volumes with Asian countries saw a rapid growth over the period of 2010–2018 as compared to the falling import volumes from Europe and steady import commodity flows from America. In 2010, the import volume from Europe exceeded 48.3 % and by late 2018, it had dropped to 41.8 % in specific terms. Alternatively, import volumes from Asia amounted to 35.3 % of the total import operations in 2010 and exceeded 40.7 % in 2018. The tendency was likely to have continued in 2021, and Asian countries have become the main trading partners — importers to the Russian Federation.

¹ The main indicators of the Russian Federation foreign trade. URL: ttps://rosstat.gov.ru/folder/11193



Table 1

Dynamics and structure of Russia's foreign trade with non-CIS countries in 2010—2018, USD, mln. (according to Rosstat¹)

Combinatoria /C					Years				
Continents/Countries	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	2	3	4	5	6	7	8	9	10
				Export					
Total	336 959,0	437 282,8	447 276,5	452 902,1	433 172,9	298 419,8	247 686,6	309 687,5	394 675,0
Europe	205 749,1	258 327,4	266 538,1	264145,7	236105,1	152 629,4	120 861,6	149 910,1	191 320,0
as % of the total	61,1	59,1	59,6	58,3	54,5	51,1	48,8	48,4	48,5
Asia	69 600,6	92 285,1	97 602,1	97 594,5	89 723,5	59 867,5	61 953,4	79 121,0	86 279,5
as % of the total	20,7	21,1	21,8	21,5	20,7	20,1	25,0	25,5	21,9
Including India	6392,6	6079,8	7915,6	6885,6	6343,2	5575,2	5311,7	6455,5	7752,0
as % of the total	1,9	1,4	1,8	1,5	1,5	1,9	2,1	2,1	2,0
Including China	20 324,6	35 030,1	35 727,2	35 630,5	37 492,3	28 600,9	28 011,9	38 918,6	56 019,0
as % of the total	6,0	8,0	8,0	7,9	8,7	9,6	11,3	12,6	14,2
Africa	3903,9	6395,2	7498,8	5216,0	7098,3	6500,3	8852,5	12 119,4	13 607,0
as % of the total	1,2	1,5	1,7	1,2	1,6	2,2	3,6	3,9	3,4
America	16 082,3	20 760,4	16 609,0	15 123,9	15 391,4	13 156,3	12 873,6	15 308,8	18 454,6
as % of the total	4,8	4,7	3,7	3,3	3,6	4,4	5,2	4,9	4,7
Including Brazil	1794,1	2124,9	2304,5	1984,9	2365,6	1923,7	1786,0	2031,5	2584,0
as % of the total	0,5	0,5	0,5	0,4	0,5	0,6	0,7	0,7	0,7
Australia and Oceania	131,9	71,1	115,4	403,7	550,1	505,7	142,0	203,6	168,1
as % of the total	0,0	0,0	0,0	0,1	0,1	0,2	0,1	0,1	0,0
				Import					
Total	197 439,0	260 919,9	272 507,7	276 496,2	242 044,4	161 692,7	162 657,9	202 608,2	212 026,0
Europe	95 310,9	127 331,1	132 326,7	133 393,1	116 866,5	69 702,2	69 265,4	85 665,1	88 612,0
as % of the total	48,3	48,8	48,6	48,2	48,3	43,1	42,6	42,3	41,8
Asia	69 600,6	92 285,1	97 602,1	97 594,5	89 723,5	59 867,5	61 953,4	79 121,0	86 279,5
as % of the total	35,3	35,4	35,8	35,3	37,1	37,0	38,1	39,1	40,7
Including India	2142,5	2786,5	3041,5	3091,1	3172,3	2257,9	2402,5	2902,9	3225,0
as % of the total	1,1	1,1	1,1	1,1	1,3	1,4	1,5	1,4	1,5
Including China	39 036,1	48 201,8	51 843,9	53 211,5	50 773,4	34 948,0	38 021,9	48 055,9	52 225,0
as % of the total	19,8	18,5	19,0	19,2	21,0	21,6	23,4	23,7	24,6
Africa	676,5	1018,4	912,8	1043,7	1175,0	908,6	964,0	1127,9	1118,7
as % of the total	0,3	0,4	0,3	0,4	0,5	0,6	0,6	0,6	0,5
America	18 156,6	22 766,8	23 553,6	24 970,0	25 928,9	16 680,8	15 294,8	18 426,1	17 548,2
as % of the total	9,2	8,7	8,6	9,0	10,7	10,3	9,4	9,1	8,3
Including Brazil	4080,4	4389,0	3358,8	3493,1	3969,4	2915,2	2523,2	3199,1	2471,0
as % of the total	2,1	1,7	1,2	1,3	1,6	1,8	1,6	1,6	1,2
Australia and Oceania	919,9	1231,8	1111,1	1053,3	913,1	693,1	619,3	727,0	807,0
as % of the total	0,5	0,5	0,4	0,4	0,4	0,4	0,4	0,4	0,4

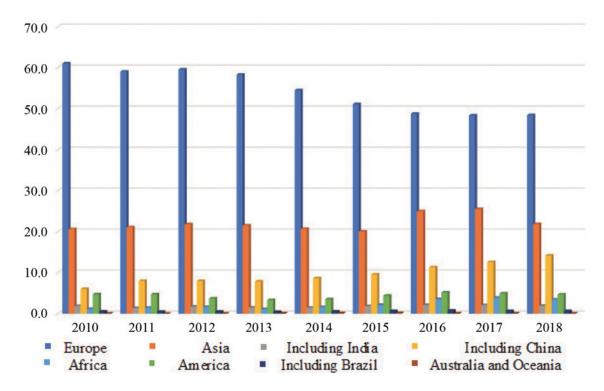


Fig. 1. Dynamics and structure of Russia's export flows to the main continents and BRICS countries (author's visualization)

Table 2
Structure of Russia's foreign trade with non-CIS countries including BRICS countries, 2010—2018, %

(calculations are based on Rosstat data¹)

Continents/Countries	Years											
	2010	2011	2012	2013	2014	2015	2016	2017	2018			
Export												
Europe	61,1	59,1	59,6	58,3	54,5	51,1	48,8	48,4	48,5			
Asia	20,7	21,1	21,8	21,5	20,7	20,1	25,0	25,5	21,9			
Including India	1,9	1,4	1,8	1,5	1,5	1,9	2,1	2,1	2,0			
Including China	6,0	8,0	8,0	7,9	8,7	9,6	11,3	12,6	14,2			
Africa	1,2	1,5	1,7	1,2	1,6	2,2	3,6	3,9	3,4			
America	4,8	4,7	3,7	3,3	3,6	4,4	5,2	4,9	4,7			
Including Brazil	0,53	0,49	0,52	0,44	0,55	0,64	0,72	0,66	0,65			
Australia and Oceania	0,04	0,02	0,03	0,09	0,13	0,17	0,06	0,07	0,04			
Import												
Europe	48,3	48,8	48,6	48,2	48,3	43,1	42,6	42,3	41,8			
Asia	35,3	35,4	35,8	35,3	37,1	37,0	38,1	39,1	40,7			
Including India	1,1	1,1	1,1	1,1	1,3	1,4	1,5	1,4	1,5			
Including China	19,8	18,5	19,0	19,2	21,0	21,6	23,4	23,7	24,6			
Africa	0,3	0,4	0,3	0,4	0,5	0,6	0,6	0,6	0,5			
America	9,2	8,7	8,6	9,0	10,7	10,3	9,4	9,1	8,3			
Including Brazil	2,07	1,68	1,23	1,26	1,64	1,80	1,55	1,58	1,17			
Australia and Oceania	0,47	0,47	0,41	0,38	0,38	0,43	0,38	0,36	0,38			

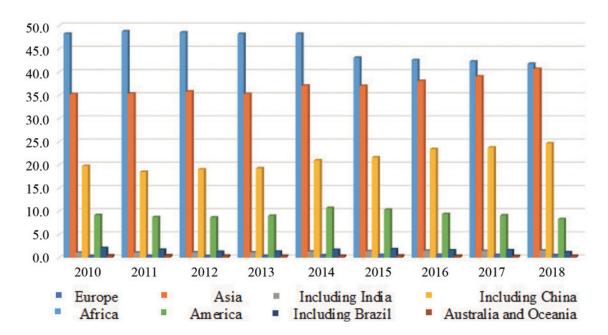


Fig. 2. Dynamics and structure of import flows to the Russian Federation from the main continents and BRICS countries (author's visualization)

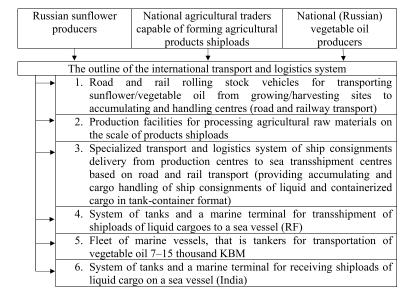


Fig. 3. The outline of the international transport and logistics system for sunflower oil shipments between Russia and India (proposed by the authors)

Import volumes from China amounted to 19.8 % of Russia's total import trade goods in 2010 and grew as high as 24.6 % in 2018. The Chinese import flows are envisaged to reach 30–35 % in 2022–2023.

Import volumes from India increased almost 1.5 times in 2010–2018, but accounted for 1.5 % only of the total import goods at the end of 2018. Nevertheless, it shows that there is a potential for international trade growth between our countries and requires the development of transnational transport and logistics systems that can improve the interaction efficiency on certain types of goods, among other things.

Russia's import volumes from Brazil decreased from 2.07 to 1.17 % in specific terms in 2010–2018. This was because of raw-material orientation and the lack of raw-material movement between our countries in the absence of large internationally competitive manufacturing centers.

The analysis of existing international commodity flows expressly demonstrates that their growth potential lies in the creation of promising transnational transport and logistics systems ensuring international value chains and efficient international exchange. Let us explain the above on the example of Russian-Indian



cooperation prospects in terms of export/import of vital food industry products.

India is the world's largest player in the vegetable oil market: at the end of the 2020–2021 season, the import volume of this important industrial product amounted to more than \$15.71 billion, an increase of 63 % compared with the previous year, while the natural volume of imports (i.e., driven by rising prices) remained unchanged². The share of sunflower oil import was more than 14.04 %, or 1.9 million tons, with a 25 % drop in natural volume compared with the previous year. It happened due to a sharp increase in the oil export price in the Russian Federation and Ukraine and other countries.

A model of an effective transnational transport and logistics system capable of ensuring vegetable oil products movement is shown below (*Fig. 3*).

The system described above may serve as a model for the development and implementation of specialized transport and logistics systems, or international trade "bridges" in the BRICS architecture, ensuring infrastructure support of international commodity flows with high indicators of reliability and trans-

parency of goods movement. It may be a good way of introducing modern container technologies allowing the transportation of liquid cargo in tankcontainers.

CONCLUSION

According to the results of the BRICS 2022 Summit in Beijing, China, it is worth noting that this foreign economic union is a platform for discussion and statements of intentions rather than a real foreign economic alliance with integrated transport and logistics systems capable of implementing the international competitive advantages of member-countries. At the same time, the emergence and functioning of the New Development Bank, as well as the positive interaction experience between Russian Railways Company and this international financial structure on the infrastructure projects implementation indicate a positive dynamics in institutionalization of international economic intentions of the BRICS countries and the prospects of their functional support.

Bionotes

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Contribution of the authors: the authors contributed equally to this article. The authors declare no conflicts of interests.

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The article was submitted 14.07.2022; approved after reviewing 23.09.2022; accepted for publication 30.09.2022.

² India increased vegetable oil import expenses by more than 60% in 2020/21. URL: https://www.oilworld.ru/analytics/worldmarket/325361