

Problems of Foreign Trade Development Between the Russian Federation and the Republic of Tajikistan in Modern Realities

Natalya A. Budarina^{1a}✉, Kholmurodi K. Yunuszoda^{2b}✉

¹ Diplomatic Academy of the Ministry of Foreign Affairs of the Russian Federation, Moscow, Russia

² Institute of Economics and Demography of the National Academy of Sciences of Tajikistan, Dushanbe, Republic of Tajikistan

^a natala5555@rambler.ru, <https://orcid.org/0000-0003-1412-5165>

^b yunuszoda.91@yandex.ru, <https://orcid.org/0009-0009-6263-7529>

Abstract. The article examines the main directions of foreign trade of the Republic of Tajikistan and specifies trade relations with the Russian Federation. Based on the analysis of the geographical and commodity structure of foreign trade of the two countries, problems were identified, the solution of which will increase the volume of mutually beneficial trade cooperation.

Keywords: international trade, export operations, import operations, structure of trade turnover, foreign trade cooperation

Acknowledgments: The article was prepared thanks to the International Academic Mobility Program, organized by the National Research Institute for the Communications Development for young scientists from foreign countries. Scientific supervisor - Natalya Aleksandrovna Budarina, DSc (Econ.), The Diplomatic Academy of the Ministry of Foreign Affairs of the Russian Federation

For citation: Budarina N.A., Yunuszoda Kh.K. Problems of Foreign Trade Development Between the Russian Federation and the Republic of Tajikistan in Modern Realities. *Russia & World: Scientific Dialogue*. 2023; 4(10): 50-68, [https://doi.org/10.53658/RW2023-3-4\(10\)-50-68](https://doi.org/10.53658/RW2023-3-4(10)-50-68)

Introduction

Foreign trade is the main form of foreign economic interaction and the most important factor in the development of the national and world economy. The National Development Strategy of the Republic of Tajikistan until 2030 notes the great importance of foreign trade and emphasizes the need to create conditions for the development of export-oriented production.

Therefore, this issue is studied in the works of many scientists. Many works by domestic and foreign scientists have examined the role of foreign trade in the national economy. The construction of a country's foreign trade strategy is based on the classical theories of international trade: Adam Smith's theory of absolute advantage, David Ricardo's theory of comparative advantage, Heckscher-Ohlin theory, Leontief paradox, product life cycle theory, Michael Porter's theory, Rybczynski's theorem and Stolper-Samuelson theorem. Russian and Tajik scientists analyzed the influence of various factors on the development of foreign trade, the influence of world trade on the growth of the national and world economy within the framework of globalization: L.Abalkin, V.Abramov, E.Avdokushkin, I.Balabanov, Y.Vinslav, E.Dracheva, M.Karimova, A.Kireev, N.Kuznetsova, R.Mirboboev, V.Nazarov, I.Nikolaeva, V.Oreshkin, L.Saidmuradov, B.Safarov, K.Semenov, Y.Sergienko, E.Sidorov, B.Smitienko, V.Smirnov, M.Sodikov, A.Solekhzoda, I.Faminsky, N.Khudoiev, V.Cherenkov, etc.

The purpose of the article is to identify factors influencing foreign trade of the Russian Federation and the Republic of Tajikistan, which will help identify prospects for the development of trade between these countries.

Materials and methods

Statistical data from the Statistics Agency of the Republic of Tajikistan, the Trend Economy website, as well as target indicators of the National Development Strategy of the Republic of Tajikistan for the period till 2030 were used.

The study used methods of analysis and synthesis, comparative assessment, mathematical modeling and forecasting. When using the modeling method, the E-views program was used, with the help of which the table "Estimated equation coefficients" was built; the table reflects the coefficients of influence of each selected factor on the dependent variable and the calculation results.

Results

The commodity structure of foreign trade flows and their volume determine not only the economic, but also the political status of the state. In the context of increasing geopolitical pressure, Russian foreign trade entered a period of decline. A record number of

economic sanctions have been introduced against Russia over the past ten years, which are diversified depending on the spheres of economic impact, and the number of countries that have introduced restrictions on trade with Russia has also increased. In these conditions of functioning of the Russian economy, it is necessary to understand how to adapt to new realities in foreign trade activities and how to support the development of foreign trade [1].

Research conducted by international organizations shows that foreign trade contributes to economic growth in a country. Analyzing the dynamics of world trade, we come to the conclusion that the leaders are China, the USA, Germany and Japan. They account for almost 40% of exports and imports (Table 1).

Table 1. Export and import of goods for 2022

States	All goods			
	Import		Export	
	World share %	\$Billion	World share %	\$Billion
China	12,54	2715,9	17,86	3593,6
USA	15,58	3372,9	10,24	2062,1
Germany	7,28	1577,6	8,27	1665,6
Japan	4,15	898,6	3,71	746,6

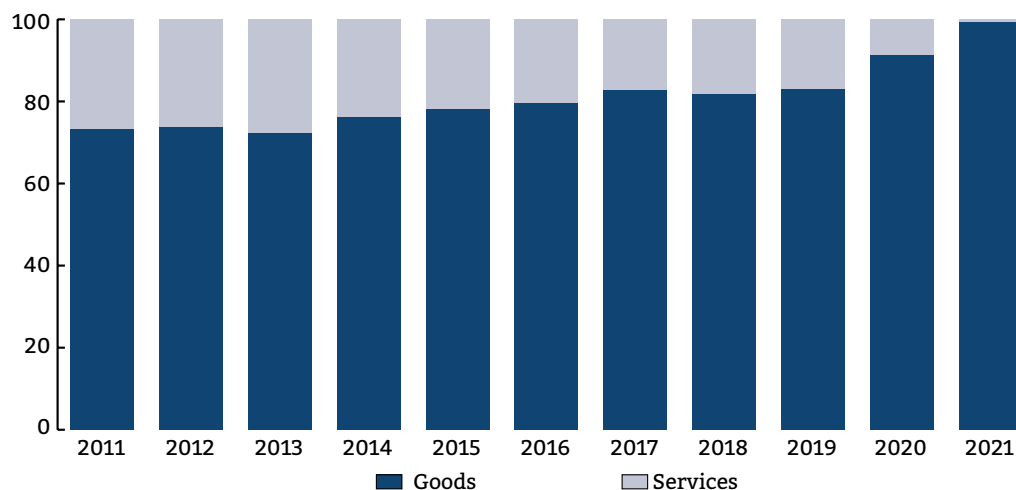
Source: Trend Economy. World export and import of goods. Electronic resource. Available from: https://trendeconomy.ru/data/commodity_h2/TOTAL

The leaders in world trade are economically developed countries. Leadership in both economic development and foreign trade indicates that these indicators are closely interrelated: with an increase in one of the indicators, you can see an increase in the other.

The total volume of foreign trade turnover of the Republic of Tajikistan in 2021 amounted to \$6359.1 million, including exports – \$2149.6 million and imports – \$4209.5 million. The main partner of the Republic of Tajikistan in foreign trade is the Russian Federation with a share of 20–22% of total trade turnover. The Republic of Tajikistan exports dried fruits, cotton fiber and cotton yarn to the Russian Federation. From Russia it mainly imports oil, prepared foods, petroleum products, wood products, metal products and so on.

To determine the influencing factors on the growth of trade turnover between the Republic of Tajikistan and the Russian Federation, it is necessary to analyze the structure of exports and imports of Tajikistan. The analysis will make it possible to determine those factors that directly affect the growth of trade turnover (Figure 1).

According to the diagram presented in Figure 1, goods constitute a significant part of the country's exports and their share is increasing every year. If in 2011 the share of goods accounted for 73% of total exports, then in 2020 this percentage increased to 91%, and in 2021 it already reached 99%. 2020 was special due to the COVID-19 pandemic, which led to a sharp decline in services exports. However, when considering the dynamics of exports of past years, one can notice that in general there is a steady trend towards a decrease in the volume of exports of services. The majority of exported services in the Republic of Tajikistan are air transport services for the transportation of passengers.

Figure 1. Dynamics of exports of goods and services of Tajikistan in 2011-2021 (in %)

Source: compiled by the authors based on the statistical collections "Foreign economic activity of the Republic of Tajikistan" and "Statistical Yearbook of the Republic of Tajikistan". Statistics Agency under the President of the Republic of Tajikistan for the relevant years. Electronic resource. Available from: <https://www.stat.tj>

To be able to assess the commodity structure of exports of the Republic of Tajikistan, let's present its dynamics in Figure 2.

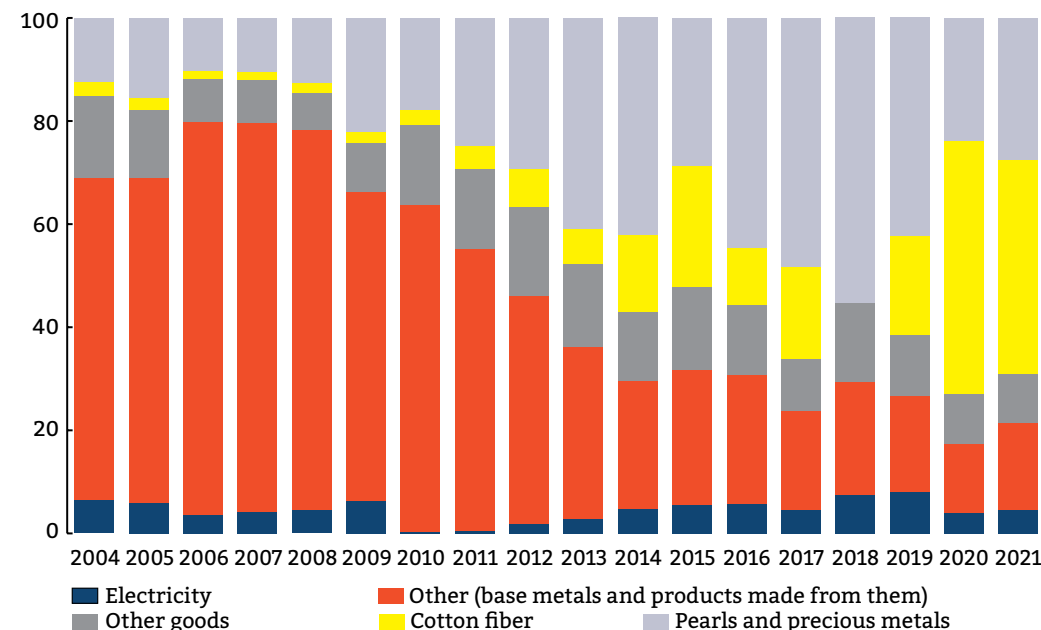
As can be seen in Figure 2, the increase in the share of exports of such goods as "cotton fiber", "electricity" and "pearls and precious metals" has become noticeable in recent years. A country's exports are determined by these goods.

Thus, the rise in world gold prices and the increase in investment in the extraction of precious metals and rare metal ores may be some of the factors influencing the growth of the country's exports.

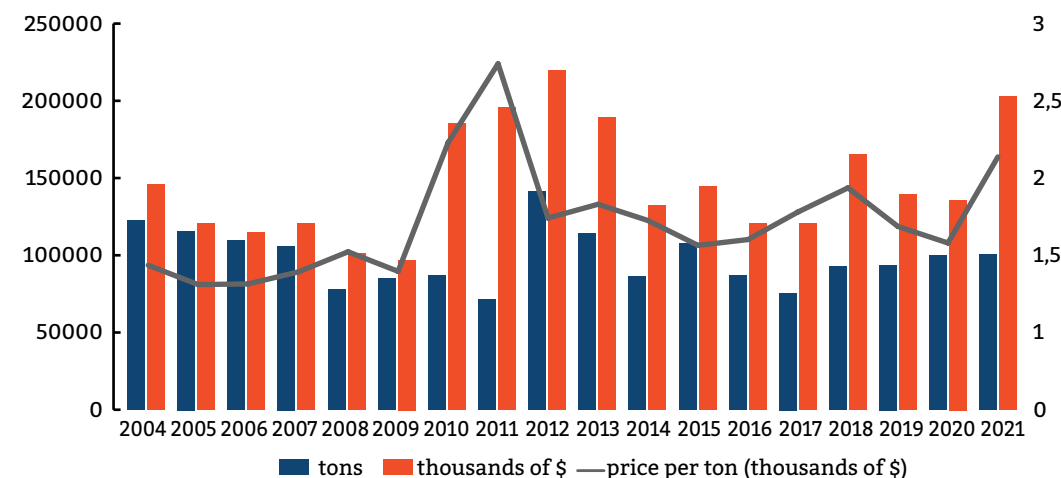
The commodity group "cotton fiber" is another significant export product of the country, since during the study period its share is approximately 12.8% of the country's total exports. A chart was constructed (Figure 3) that displays the volume, value and amount of cotton fiber exports to determine its relationship with growth.

Analysis of Figure 3 shows the relative independence of the growth of the amount of income from the volume of exports, which proves the direct influence of world prices on the growth of cotton exports. In order to be able to draw a conclusion about the impact of cotton production on the country's export volumes, it is necessary to analyze cotton production (Figure 4).

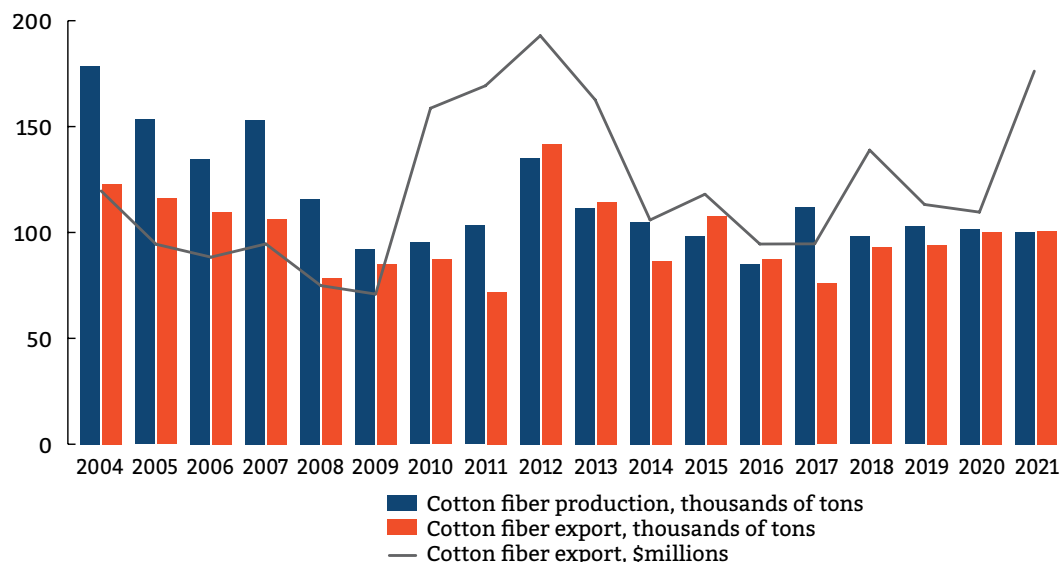
According to the diagram presented in Figure 4, the increase in cotton fiber production in 2017 did not lead to an increase in exports; on the contrary, exports decreased. In 2017, the Republic of Tajikistan received the same amount from cotton exports as in 2016, although the volume of exports in 2016 was higher than in 2017. The situation was similar in 2018, 2019 and 2020. World cotton prices influence the increase in cotton fiber exports.

Figure 2. Commodity structure of exports of the Republic of Tajikistan in 2004-2021

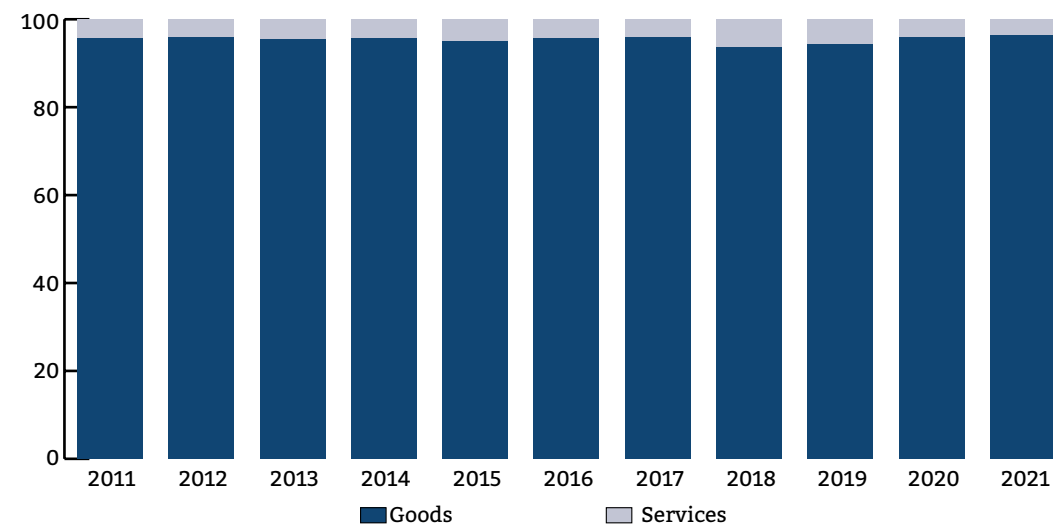
Source: compiled by the authors based on the statistical collections "Foreign economic activity of the Republic of Tajikistan" and "Statistical Yearbook of the Republic of Tajikistan". Agency for Statistics under the President of the Republic of Tajikistan for the relevant years. Electronic resource. Available from: <https://www.stat.tj>

Figure 3. Export of cotton fiber from the Republic of Tajikistan in 2004-2021.

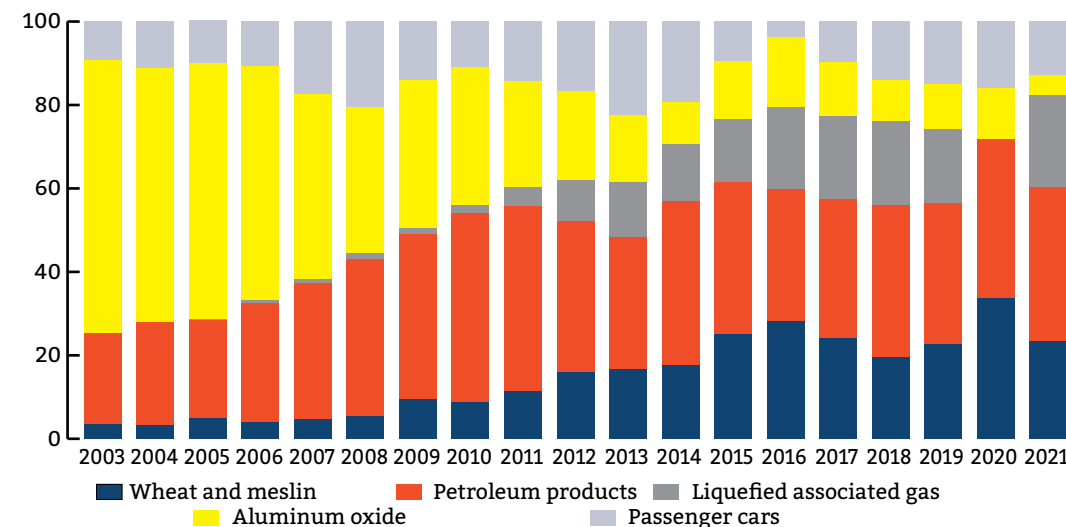
Source: compiled by the authors based on the statistical collections "Foreign economic activity of the Republic of Tajikistan" and "Statistical Yearbook of the Republic of Tajikistan". Agency for Statistics under the President of the Republic of Tajikistan for the relevant years. Electronic resource. Available from: <https://www.stat.tj>

Figure 4. Production and export of cotton fiber in the Republic of Tajikistan in 2004-2021.

Source: compiled by the authors based on the statistical collections "Foreign economic activity of the Republic of Tajikistan" and "Statistical Yearbook of the Republic of Tajikistan". Agency for Statistics under the President of the Republic of Tajikistan for the relevant years. Electronic resource. Available from: <https://www.stat.tj>

Figure 5. Dynamics of imports of goods and services of the Republic of Tajikistan in 2011-2021. (in %)

Source: compiled by the authors based on the statistical collections "Foreign economic activity of the Republic of Tajikistan" and "Statistical Yearbook of the Republic of Tajikistan". Agency for Statistics under the President of the Republic of Tajikistan for the relevant years. Electronic resource. Available from: <https://www.stat.tj>

Figure 6. Share of main goods in the country's imports for 2003-2021.

Source: compiled by the authors based on the statistical collections "Foreign economic activity of the Republic of Tajikistan" and "Statistical Yearbook of the Republic of Tajikistan". Agency for Statistics under the President of the Republic of Tajikistan for the relevant years. Electronic resource. Available from: <https://www.stat.tj>

One of the important aspects when modeling trade turnover in the Republic of Tajikistan is the consideration of imports of goods and services. The share of imports of goods and services should be analyzed to determine which ones have a greater impact on a country's imports (Figure 5).

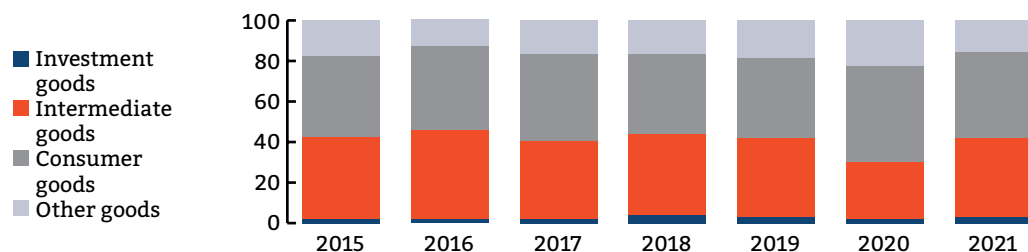
Figure 5 shows changes in the volume of imports of goods and services. Goods constitute the bulk of imports throughout the study period, averaging 95.3%.

Based on this, we will highlight the factors that significantly affect imports. A study of the structure of commodity imports in Tajikistan (Figure 6) showed that every year there is an increase in imports of petroleum products, wheat and meslin, as well as liquefied petroleum gases. Let's divide all imported goods into the following groups:

- goods that are used as intermediate;
- investment goods;
- goods purchased by consumers;
- other goods.

Analysis of the diagram (Figure 6) shows that the Republic of Tajikistan mainly imports petroleum products, liquefied petroleum gases, wheat and meslin. Their share in the country's imports is high, on average 50–60%.

To analyze the country's import structure, we divide all imported goods into groups. This approach will make it possible to identify which products are imported into the country: investment or consumer goods. This division will also help to find a factor that directly affects the country's imports.

Figure 7. Share of imported goods of the Republic of Tajikistan by groups in 2015–2021.

Source: compiled by the authors based on the statistical collections "Foreign economic activity of the Republic of Tajikistan" and "Statistical Yearbook of the Republic of Tajikistan". Agency for Statistics under the President of the Republic of Tajikistan for the relevant years. Electronic resource. Available from: <https://www.stat.tj>

Dividing imported goods into groups, it was found that consumer goods accounted for 47.19% of total imports in 2021. The share of investment goods was only 3.5%. Intermediate goods also make up a significant share (38.8%), which indicates the development of production and processing in this country. If we consider the entire period under study, we can see that imported goods are mainly represented by consumer and intermediate goods.

Cash income of the population is one of the main factors influencing the country's imports. This is confirmed by the fact that most of the imported goods consist of consumer goods.

To identify other factors influencing imports, a graph was used that reflected the volume and amount of imports of two main groups of goods, a significant share of which constitutes a significant part of the country's imports (Figure 8).

Imports of liquefied petroleum gas depend on the volume of products offered, so the influence of world prices on gas imports is not so significant. Imports of petroleum products are influenced by world oil prices.

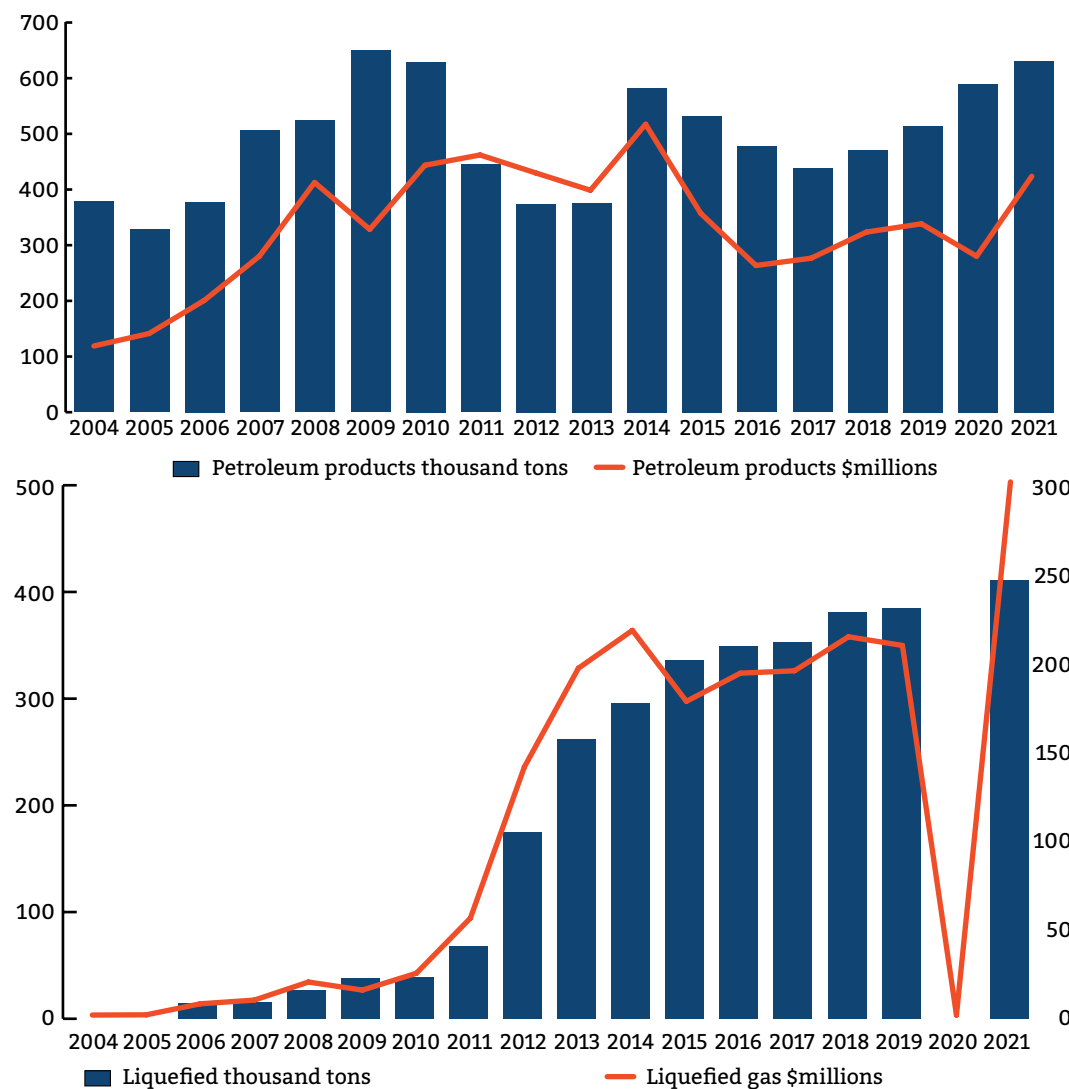
In 2009, the amount of imports of petroleum products decreased, despite an increase in the volume of imports. However, from 2010 to 2013, a decrease in import volumes led to an increase in the amount of imports of petroleum products. This indicates that the amount of imported petroleum products depends on world oil prices.

So, the foreign trade of the Republic of Tajikistan depends on such factors as: cash income of the population, world oil prices, as well as production volume and world prices for cotton.

To assess the geographical structure of foreign trade of the Republic of Tajikistan, it is necessary to analyze the main partners in foreign trade turnover.

Since the main partner in foreign trade of the Republic of Tajikistan is the Russian Federation, it is necessary to analyze the influence of the above factors on the trade turnover of the two countries.

It is necessary to analyze the structure of exports and imports of goods with the Russian Federation (see Figure 9 and Figure 10).

Figure 8. Imports of goods that occupy a significant share in the total volume of imports of the Republic of Tajikistan

Source: compiled by the authors based on the statistical collections "Foreign economic activity of the Republic of Tajikistan" and "Statistical Yearbook of the Republic of Tajikistan". Agency for Statistics under the President of the Republic of Tajikistan for the relevant years. Electronic resource. Available from: <https://www.stat.tj>

Of the total share of goods exported to Russia, 90% are textile materials and textile products. Products of plant origin are also exported (almost 9%). This section also includes fruits and dried fruits. Note that foreign trade between Russia and Tajikistan is influenced, first of all, by world prices for cotton and goods made from it.

Table 2. Foreign trade turnover by main trading partners for 2020-2021.

Partner countries	\$Millions		%		Place	
	2020	2021	2020	2021	2020	2021
Russia Turkey	1952.9	973,6	21.3	21,4	1	1
Kazakhstan	1778.6	909,7	18.5	20,0	2	2
China	839.3	472,7	13.2	10,4	3	3
Uzbekistan	447.8	333,7	7.0	7,3	4	4
Kazakhstan	390.5	322,6	6.1	7,1	5	5

Source: compiled by the authors on "Foreign economic activity of the Republic of Tajikistan". Agency for Statistics under the President of the Republic of Tajikistan, for the relevant years. <https://www.stat.tj>

A large number of goods are imported from the Russian Federation to the Republic of Tajikistan. Let's analyze the structure of imports (Figure 10).

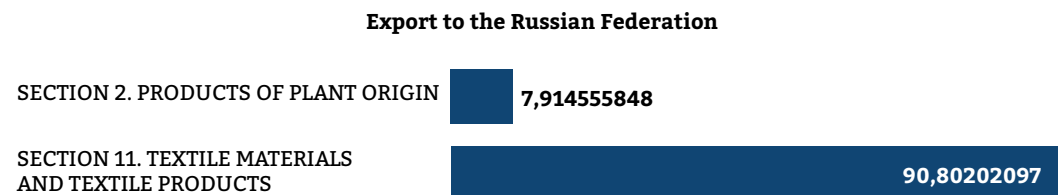
From Figure 10 it can be seen that Tajikistan imports from Russia products included in the fifth product group, that is, petroleum products and liquefied petroleum gases, as well as consumer goods. Thus, the foreign trade turnover of Tajikistan and Russia is influenced by world oil prices and cash incomes of the population.

During these years, one could observe a complete change in the share of goods from other groups of Russian imports. In 2014-2015, the share of supplies of goods from Tajikistan of the second product group fell four times compared to 2013 from 18.6% to 4.5%, and after 2019 a recovery began to 17.7% in 2021.

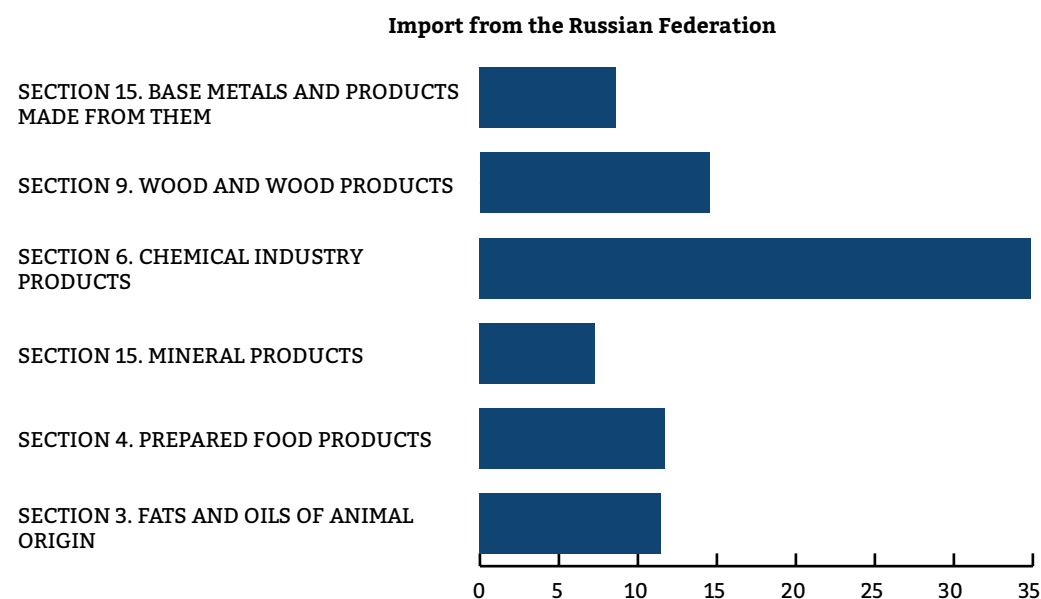
The Russian Federation is the main partner of the Republic of Tajikistan; Russia's share in Tajikistan's international trade during the period under review never fell below 21%. For Tajikistan, the Russian Federation remains in first place among foreign trade partners. Tajikistan imports two main groups of goods: oil and gas, which are offered by the Russian Federation. More than a third of all imported goods into Tajikistan come from Russia. The main product groups of Russian exports to the Republic of Tajikistan include food products and agricultural raw materials, chemical products, mineral products, wood and pulp and paper products, rubber, machinery, equipment and vehicles, as well as metals and metal products.

Russia is on the list of the main countries for Tajikistan's exports, but Tajikistan's share in the total volume of Russia's foreign trade turnover is an insignificant percentage. Traditionally, the main categories of goods that make up Russian imports from the Republic of Tajikistan are food products and agricultural raw materials; textiles, textile products and footwear; chemical products such as rubber; machinery, equipment and vehicles; as well as mineral products.

Each of these groups includes many different subgroups of goods, and within them there are many tens and hundreds of different goods.

Figure 9. Main exported goods of the Republic of Tajikistan to the Russian Federation for 2021

Source: compiled by the authors based on the statistical collections "Foreign economic activity of the Republic of Tajikistan" and "Statistical Yearbook of the Republic of Tajikistan". Agency for Statistics under the President of the Republic of Tajikistan for the relevant years. Electronic resource. Available from: <https://www.stat.tj>

Figure 10. Main imported goods of the Republic of Tajikistan from the Russian Federation for 2021

Source: compiled by the authors based on the statistical collections "Foreign economic activity of the Republic of Tajikistan" and "Statistical Yearbook of the Republic of Tajikistan". Agency for Statistics under the President of the Republic of Tajikistan for the relevant years. Electronic resource. Available from: <https://www.stat.tj>

Factors identified during the analysis directly affect foreign trade of the Republic of Tajikistan and the Russian Federation. Based on a regression model that contributes to the forecast of trade turnover of the Republic of Tajikistan, the dependence of the foreign trade of the two countries on these factors was identified (Table 3).

Table 3. Estimated equation coefficients

Dependent Variable: WT

Method: ARMA Conditional Least Squares (Gauss-Newton/ Marquardt steps)

Sample (adjusted): 2008 2021

Included observations: 12 after adjustments

Convergence achieved after 7 iterations

Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.723255	0.372189	-1.943246	0.0931
Cash income of the population (-1)	1.266765	0.311824	4.062440	0.0048
World oil prices	0.349340	0.238226	1.466423	0.1860
World cotton prices	0.068609	0.375721	0.182607	0.8603
AR(2)	-0.214097	0.090362	-2.369328	0.0497
R-squared	0.836930	Mean dependent var		1.094396
Adjusted R-squared	0.743747	S.D. dependent var		0.293571
S.E. of regression	0.148610	Akaike info criterion		-0.680646
Sum squared resid	0.154594	Schwarz criterion		-0.478602
Log likelihood	9.083877	Hannan-Quinn criter.		-0.755450
F-statistic	8.981574	Durbin-Watson stat.		3.265087
Prob (F-statistic)	0.006881			
Inverted AR roots	-.00+.46i	-.00-.46i		

Source: compiled by the authors based on testing results

As you can see, the coefficient $R^2 = 0.84$, which shows the effectiveness of the constructed equation with the specified factors. In this equation, the C indicator is small, which means that the selected factors are correct. Probability indicators (Prob(F-statistic)) are also below 5% (>0.05).

Thus, the equation takes the following form:

$$BT = -0.723255101031 + 1.2667651288 * X_1 + 0.349339551933 * X_2 + 0.0686090941412 * X_3 + [AR(2) = -0.214097481115]$$

where X_1 is the monetary income of the population; X_2 – world oil prices; X_3 – world prices for cotton.

Conclusion

As a result of the study of foreign trade of the Republic of Tajikistan, the following conclusions were made:

1. foreign trade of the Republic of Tajikistan is influenced mainly by external factors, such as world prices for oil and cotton;

2. the exports of the Republic of Tajikistan mainly consist of raw materials;

3. The republic's imports are mainly consumer goods.

To solve problems you need:

1. reduce the influence of external factors, in particular world prices for cotton. To do this, cotton must be processed and exported as finished products. This will increase export income. Measures have already been taken in this direction by the Government of the Republic of Tajikistan in the form of tax incentives and state support for producers of finished cotton products.

2. the share of intermediate and investment goods in the total volume of imports should be increased and thereby reduce the share of consumer goods by increasing domestic production of consumer goods through the import of investment and intermediate goods.

3. strengthen efforts to simplify customs procedures for import and export. Thus, after the creation of the Trade Portal of Tajikistan (in 2019), the republic's foreign trade turnover increased.

4. increase the range and volume of exported goods, especially fruits and dried fruits. On the part of Russia, the demand for these products is great, and Tajikistan is not able to fully satisfy the demand, therefore land is being allocated for orchards and factories are being built for drying fruits.

There are problems in the trade turnover of countries:

1. In order to diversify mutual supplies of goods, it is necessary to expand the range of products; the current range of goods is limited.

2. there is a negative trade balance in trade between the Republic of Tajikistan and the Russian Federation.

3 Tajikistan plays a small role in the total volume of Russia's foreign trade turnover, although Russia itself is Tajikistan's main trading partner.

Increasing the export of goods from Tajikistan and continuing to develop trade relations with Russia will have a positive impact on the economies of both countries. Trade between countries in the region in high-tech products is a promising area. To develop mutual trade between states, we will need both appropriate structures (infrastructure for trade and logistics, wholesale distribution centers and logistics services), as well as the financial sector and other factors. Political factors will play a major role, which should ensure improvement of tariff and non-tariff conditions, strengthening of interaction between customs and tax authorities.

References

1. Budarina N.A., Nenadyshina T.S. Foreign trade of Russia: trends and development prospects. Russian Foreign Economic Bulletin. 2022; 6:7–24 [In Russian].
2. Budarina N.A., Gorokhova M.K. Dynamics of exports and imports of Russia in the situation of localization and changes in the directions of global commodity flows. Economics and business: theory and practice. 2023; 6–1(100):60–64 [In Russian]. DOI 10.24412/2411-0450-2023-6-1-60-64.

3. Budarina N.A., Gorokhova M.K. Trends in the development of foreign trade in modern situation. *International Journal of Humanities and Natural Sciences*. 2023; 6–1(81):160–164 [In Russian].
4. Volchkova N. New theory of international trade and new economic geography. *Questions of Economics*. 2009; 1:68–83 [In Russian].
5. Ilyashenko V.V. Foreign economic relations and economic development. *News of Ural State Economic University*. 2012; 2(40):83–86 [In Russian].
6. Kireev A.P. Theories of international trade of the XXI century. *Economic school. Almanac*. 2011; Vol.7:7–30 [In Russian].
7. Saidmurodov L.Kh. Strategic goals of the Republic of Tajikistan and sustainable development of the country's regions. *Bulletin of the University. Russian-Tajik (Slavic) University*. 2016; 3(54):149–156 [In Russian].
8. Yunuszoda H.K. Factors influencing net exports from the point of view of modeling the GDP of the Republic of Tajikistan. *Economy of Tajikistan*. 2023; 2:66–75 [In Russian].
9. Yunuszoda, Kh.K. Theory and practice of the influence of factors on the growth of exports of the Republic of Tajikistan. *Economy of Tajikistan*. 2022; 4–1:173–179 [In Russian].
10. Houthakker H.S., Magee S.P. Income and Price Elasticities in World Trade. *Review of Economics and Statistics*, 1969; 51(2):111–125 [In English].
11. Krugman P. Import Protection as Export Protection: Internal Competition in the Presence of Oligopolies and Economies of Scale. In: Kierkowski H. (ed.) *Monopolistic Competition and International Trade*. Oxford: Oxford University Press, 1984 [In English].
12. Linder S.B. *An Essay on Trade and Transformation*. Stockholm: Almqvist&Wiksell, 1961 [In English].
13. Porter M. *The Competitive Advantage of Nations*. New York: Free Press, 1990 (Russian translation: Porter M. *International Competition: Competitive Advantages of Countries*. Moscow: International Relations, 1993) [In English].
14. Posner M. *International Trade and Technical Change*. *Oxford Economic Papers*, Vol. 13(3), 1961 [In English].

About the authors

Natalya A. BUDARINA. DSc (Econ.), Associate Professor. Professor of the Department of World Economy, Diplomatic Academy of the Ministry of Foreign Affairs of the Russian Federation, <https://orcid.org/0000-0003-1412-5165>. Address: Page 1, 53/2, Ostozhenka, Moscow, 119021, Russian Federation, natala5555@rambler.ru

Kholmurodi K. YUNUSZODA. CandSc (Econ.) Leading researcher at the Institute of Economics and Demography of the National Academy of Sciences of Tajikistan, <https://orcid.org/0009-0009-6263-7529>. Address: apt. 26, building 10, P/Sulaimoni, Sino, Dushanbe, 734064, Republic of Tajikistan, yunuszoda.91@yandex.ru

Contribution of the authors

The authors declare no conflicts of interests.

Article info

Received: November 1, 2023. Approved after peer review: November 8, 2023. Accepted for publication: November 15, 2023. Published: December 15, 2023.

The authors have read and approved the final manuscript.

Peer review info

«Russia & World: Scientific Dialogue» thanks the anonymous reviewer(s) for their contribution to the peer review of this work.