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IMPORT DEPENDENCE OF RUSSIAN PHARMACEUTICAL MARKET AS THE COUNTRY'S ECONOMIC SECURITY THREAT

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Abstract

The article reveals the characteristics of the concepts of "open economy" and "economic security" amid the new coronavirus pandemic. The authors study the interdependence of external and internal threats in the framework of the national economic security of the Russian Federation. Thus, the authors conclude that the emergence and intensification of the internal threat is due to the lack of domestic production of domestic substances necessary for the creation of drugs and vaccines. The foreign trade structure of the Russian Federation, studied by the authors, testifies to the country's drug import dependence. Therefore, the coronavirus pandemic of 2020 created significant risks in the pharmaceutical industry and sharply reduced the stability of domestic drug markets. The article analyzes Russia's import in 2019, identifies strategically significant goods that are not subject to import under any circumstances. The authors concluded that the provision of Russia with medicines turned out to be unprotected from the negative impact of internal and external threats due to an improperly built mechanism for the formation of the import structure, which should not include such a significant part of the drugs needed for the country. To solve this problem, very thoughtful government intervention in the mechanism of forming the structure of an open economy will be required.

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Keywords: Open economy, economic security, import, coronavirus, drugs, pharmaceutical substances.



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1. Introduction

An important feature of the development of the world economy in recent decades has been the increase in its degree of openness (Borzenko, 2018; Fayrushina, 2018).

Without a doubt, this trend gives the national economies of individual countries a number of advantages:

- growth of labour productivity due to specialization and international cooperation;
- the possibility of using modern world technologies;
- increasing the competitiveness of domestic goods and services;
- accelerating the growth of the welfare of residents, etc.

However, one cannot fail to note the significant shortcomings of such development, first of all, the fact that the movement in the direction of increasing openness causes many complex problems. One of these complex problems, very important one, is the problem of the country's economic security, which is one of the main criteria for the effective development of the state and its economy generally. If we recall that national economic security can be defined as a situation in which the provision of goods and services in a particular country is protected from the negative effects of external and internal factors, perceived as a threat to its normal functioning, we can draw a number of conclusions:

- the threat in this context represents significant restrictions on access to the necessary economic resources, both internal and external;
- the presence of a threat is a sufficient condition for violating national economic security;
- long-term preservation of internal threats without an effective economic policy makes the system most vulnerable to external threats;
- the causes of threats, their dynamics are subject to regular investigation, as the modern world economy is developing in the face of constantly emerging new external challenges leading to new threats (Obolenskiy, 2018; Potapova & Sabyna, 2018).

Obviously, in this case, it is possible to increase national economic security only as follows:

- eliminate the source of danger;
- increase the level of protection against danger or learn how to resist it.

Unfortunately, the solution to the first problem is not possible due to the high turbulence of the modern world.

The solution to the second problem is possible with the unconditional recognition of the fact that the openness of the economy in its modern vision not only prevents the level of protection from danger, but also prevents it from resisting. What is meant by this and how to use the findings is shown in the study using a specific example.

2. Problem Statement

For a better understanding of the relevance of the declared topic, it should be noted its additional features related to the fact that the modern world economy is surrounded by many different problems, which are constant sources of destabilization, and, therefore, often lead to new external threats that can subsequently provoke an increase or even the appearance of internal ones.

The most significant problems of the world economy in the 21st century include:

- international terrorism;
- food problem;
- pandemic problem and demographic problem;
- the problem of peace and demilitarization;
- the exhaustibility of natural resources;
- environmental problem, etc.

Not only are these problems global in nature, they exist in close interconnection. It is this fact that poses the greatest danger to the global economy. For example, modern terrorism, leading to mass deaths of people, cause their increased migration, thereby violating the distribution and exchange of food products, causing hunger and epidemics, and increasing socio-political instability (Benton Heath, 2020; Splender & Orlov, 2018).

Today, the problem of the SARS-COV-2 coronavirus pandemic, which began in the Hubei province of Wuhan in China in December 2019 and was announced by the WHO on March 11, 2020, when the virus infected 118 thousand people in 114 countries of the world, is becoming fatal (WHO, 2020). This pandemic immediately created significant risks in the pharmaceutical industry, sharply reduced the stability of domestic drug markets and showed not only a low level of protection against this danger, but also an inability to confront it. As a result, the authors faced the task of identifying the reasons that oppose the stabilization of this situation, and at the same time related to the openness of the economy, since it can provoke a decrease in the country's national economic security with all the ensuing consequences.

3. Research Questions

During the study the following questions were raised:

- to analyze the total trade, export and import of Russia in 2019 compared to 2018;
- to analyze the structure of Russia's import, highlighting and describing articles of import that have the largest share in total import, as well as in the volume of import of the chemical products group;
- to highlight the main partners of Russia in importing the group of products "Pharmaceutical substances";
- to analyze the effect of imports of the commodity group "Pharmaceutical substances" on the appearance of internal and external threats.

4. Purpose of the Study

It is assumed that the answers to the research questions posed will help to identify the existence of strategically significant goods for the country that are not subject to import under any circumstances, and will contribute to the development of recommendations on the formation of Russian import structure.

5. Research Methods

5.1. Analysis of the total trade, export and import of Russia in 2019 compared with 2018

Comparison of the final indicators of foreign trade of the Russian Federation in 2018 and 2019 (Table 01) leads to the conclusion that the majority of the country's trade is exported goods, which in 2019 decreased by 6.5% compared to 2018, but imports grew by 1.86%.

Table 01. The results of foreign trade of Russia in 2019

Year	Turnover		Export		Import	
	The absolute value, bln \$	Growth in relation to 2018, %	The absolute value, bln \$	Growth in relation to 2018, %	The absolute value, bln \$	Growth in relation to 2018, %
2018	688.2	-	449.8	-	238.4	-
2019	663.2	▼ 3.6	420.4	▼ 6.5	242.8	▲ 1.86

Source: Federal Customs service (2020), Ru-stat (2020)

5.2. Analysis of the structure of Russian import

A subsequent study of the list of goods imported to Russia (Figure 01) and the main product groups as a part of import (Table 02) allows us to distinguish two product groups that occupy the 1st and 2nd places in terms of their share in import and go by a wide margin from other product groups. These are “Machines, equipment and apparatus” (30%) and “Products of the chemical industry” (13.9%).

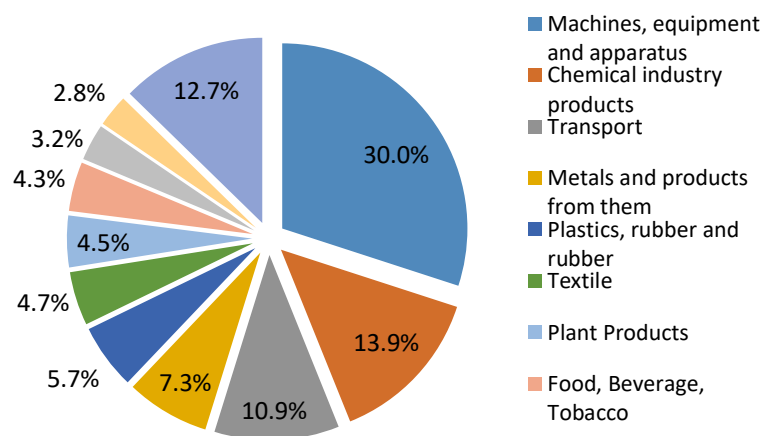


Figure 01. The main imported goods, %

Table 02. The main imported groups of goods

Name	Import, 2018, bln \$	Import, 2019, bln \$	Variation, %	Portion, %
Machines, equipment and apparatus	73.6	72.9	▼ 1	30
Chemical industry products	29.8	33.8	▲ 13	13.9
Transport, etc.	25.7	26.4	▲ 3	1.9
Total	238.4	242.8	-	-

Source: Federal Customs service (2020), Ru-stat (2020)

A comparative analysis of the list of goods within the product group “Chemical Products” (Table 03) allows us to conclude that “Pharmaceutical products” are mainly imported (35.4%), and, as the analysis shows, there are two types of medicines in its composition occupy 75.9% of the imported volume of these products.

Table 03. Indicators of imports of goods within the product group "Chemical products"

Name	Import, 2018, bln \$	Import, 2019, bln \$	Variation, %	Portion, %
Pharmaceutical products	10.6	4.42	▼ 58	35.4
Organochemical compounds	4.11	1.83	▼ 55	14
Inorganic chemistry products, etc.	3.82	1.61	▼ 58	12.8

Source: Federal Customs service (2020), Ru-stat (2020)

Thus, we can conclude that a very significant share in Russia's import is made up of drugs that play an important role in the life of the country. This role can be explained if we turn to Federal Law No. 429-FZ dated December 22, 2014 (with separate amendments of 2015). According to this law, drugs include pharmaceutical substances and drugs (Federal Law "On Amendments to the Federal Law "On the Circulation of Medicines", 2020). It should be noted that pharmaceutical substances play a leading role, since they are intended for the production of drugs, determine their effectiveness, as the active substance of drugs, and at the same time characterize the presence or absence of their own innovative developments in the field of pharmaceuticals. Therefore, the production of pharmaceutical substances is a very important component of the pharmaceutical industry.

The lack of domestic production of pharmaceutical substances in this case lowers the country's independence not only in the field of drug supply, but also in the field of science. Unfortunately, the analysis shows that it is pharmaceutical products and, in particular, pharmaceutical substances that are a significant import item to Russia. Table 04 shows the growth rates of pharmaceutical substances import to Russia in 2019.

Table 04. Total imports of pharmaceutical substances in 2019

Name	Import, 2019, thousand tons	Growth in relation to 2018, %	Import, 2019, bln \$	Growth in relation to 2018, %	Number of pharmaceutical substances	
					2018	2019
Pharmaceutical substances	13.2	▲ 10.2	132	▲ 36.6	778	808

Source: RNC Pharma (2020)

5.3. The main partners of Russia in importing the group of products “Pharmaceutical substances”

In total, 59 countries participate in the import of substances into Russia, but, as the analysis of the data in Table 05 shows, the largest share of imported goods (calculation in kg) falls on China, and India takes the second place (Kalinina, 2019).

Table 05. Top 5 countries of origin of substances

Rating	Country of origin	Portion, %		Growth in 2018 compared to 2017, %	
		calculation in \$	calculation in kg	calculation in RUB	calculation in kg
1	China	18.80	59.80	▲ 20	▼ 12
2	France	15.80	7.60	▲ 6	▲ 40
3	Slovenia	12.00	1.50	▼ 61	▼ 41
4	Germany	11.20	2.70	▲ 118	▲ 11
5	India	9.60	1.,00	▼ 10	▲ 4

Source: Clifar (2020)

In 2019, Russia imported from China, according to various sources, from 299 to 400 types of pharmaceutical substances, 90 of which are produced only in China, and 234 types of pharmaceutical substances, 58 of which are unique, from India. It should be clarified that up to 70% of the raw materials needed for pharmaceutical production, India purchases from China. In addition, from 60% to 80% of medicines in different countries according to the results of 2018, is produced using Chinese pharmaceutical substances (RNC Pharma, 2020). All this leads to Russia's strong dependence on the Chinese pharmaceutical market and reduces the stability of the domestic drug market, lowering the state's level of protection from various dangers and depriving it of the ability to confront them.

5.4. Analysis of the effect of import of the commodity group “Pharmaceutical substances” on the appearance of internal and external threats

The previous crisis is confirmed by the global crisis caused by coronavirus and hit the global pharmaceutical market, destroying the usual mechanism of the division of labor. Transport links, all supply chains, production were affected.

The pandemic that began in China, as a result of quarantine measures, led to the closure of a number of pharmaceutical enterprises in this country and, as a result, to a disruption in the supply of medicines to Russia, India and other countries.

According to (RNC Pharma, 2020), in February 2020, import of pharmaceutical substances from China fell by 34% in physical terms and 41% in monetary terms compared with the same period last year. The consequence of this was that India was also forced to suspend the export of 26 drugs.

All this led to significant risks for Russian pharmacology and public health, especially in the context of the spread of the SARS-COV-2 coronavirus, when pharmaceutical substances for creating a vaccine against the virus and drugs to combat its consequences became especially important.

6. Findings

Obviously, the supply of drugs to Russia turned out to be unprotected from the negative impact of internal and external threats due to an improperly built mechanism for the formation of the import structure, which should not include such a significant part of the necessary drugs for the country.

As the studies showed, the formation of the pharmaceutical market in Russia is more dependent on the import of pharmaceutical products than on its own production. For example, according to the agency (RNC Pharma, 2020), more than 80% of the supply of pharmaceutical substances falls on foreign partners of Russia and only less than 20% - on Russian production (51.7% - China; 26% - India; 22.3% - Europe and Russia) This structure of foreign trade in pharmaceuticals indicates the import of drug dependence of the country. The same conclusion was made by (Ovod, 2020; Reprintseva, 2020).

Without a doubt, on the one hand, imports have their advantages, ensuring the receipt of innovative developments in the pharmaceutical field and being one of the sources of funds to budgets of various levels, providing them with tax and customs fees. However, on the other hand, the lack of imported raw materials threatens to stop the production of antibiotics, antipyretics and drugs from the list of vital medicines for any reason, which immediately increases the risks in the pharmaceutical and healthcare sectors, especially during pandemics.

7. Conclusion

Russia felt the effects of its dependence on import in the pharmaceutical industry right after the outbreak of the new SARS-COV-2 coronavirus epidemic in Wuhan, China, which was declared a pandemic on March 11, 2020. As a leader in the supply of pharmaceutical substances to Russia in 2019, China already in February 2020 reduced its supply by 34% in physical terms and by 41% in monetary terms due to the closure of a number of pharmaceutical enterprises. Other suppliers, primarily India, were also forced to reduce their supplies due to the use of Chinese raw materials in their production.

As a result, the external threat of the spread of the pandemic across Russia has clashed and strengthened the internal threat associated with the lack of domestic production of pharmaceutical substances necessary for the creation of drugs and vaccines. Thus, the long-term preservation of large volumes of drugs as part of Russian imports significantly reduced Russia's level of protection against viral danger and hindered the way out of the pandemic, showing that strategically important goods exist. Under no circumstances should these goods be included in the country's imports or, at least, make up such a significant part of it. To solve this problem, very thoughtful government intervention in the mechanism of forming the structure of an open economy will be required.

References

- RNC Pharma (2020). <https://rncph.ru/>
- Benton Heath, J. (2020). The national security challenge to the economic order. *Yale Law Journal*, 129(4), 1020-1098.
- Borzenko, P. V. (2018). Forming an open economy. *Fundamental and applied research: from theory to practice*. B.i.
- Clifar (2020). Database. Import-export of drugs/ FS. <http://cliphar.ru/products/cliphar-import-export>
- Fayrushina, T. A. (2018). Influence of economic openness on national security. In *Topical issues in science and practice* (pp 46-50). Limited Liability Company Dendra.
- Federal Law "On Amendments to the Federal Law "On the Circulation of Medicines" (2020). N 429-FZ (2020). Retrived from: http://www.consultant.ru/document/cons_doc_LAW_172505/
- Federal Customs Service (2020). <http://customs.ru/>
- Kalinina, N. (2019). Import of pharmaceutical substances at year-end 2018. *Remedium*, 7-8, 33-36.
- Obolenskiy, V. P. (2018). Foreign trade policy in the process of opening economy. *Russian foreign economic newsletter*, 1, 78-90.
- Ovod, A. I. (2020). On the development of the pharmaceutical market of the Russian Federation under the conditions of sanctions. *The azimuth of scientific researches: econome and management*, 1(30), 252-255.
- Potapova, A. I., & Sabyna, E. N. (2018). Open and closed economies: issues of restricting access to the Russian economy. *Topical issues of functioning of the economy of Altai region*, 10, 8-15.
- Reprintseva, E. V. (2020). Import dependence of the pharmaceutical market of the Russian Federation as a hreat to drug security. *The azimuth of scientific researches: econome and management*, 1(30), 292-294.
- Reprintseva, E. V. (2020). On the trends of the pharmaceutical market development of the Russian Federation. *Regional newsletter*, 1(40), 73-75.
- Reprintseva, E. V. (2020). On the influence of sanctions on the pharmaceutical market of Russia. *Regional newsletter*, 2(41), 94-95.
- Splender, V. A., & Orlov, A. V. (2018). Key indicators of economic security of Russia. In *Innovative approaches to solving modern problems of social, humanitarian and economic sphere* (pp. 83-92). LLC Publishing House Sputnik +.
- Ru-stat (2020). The results of foreign trade of Russia. Analytics for 2019. <https://ru-stat.com/analytics/6556>
- WHO (2020). <https://www.who.int/ru>