

# DEVELOPMENT PROSPECTS OF THE RUSSIAN PHARMACEUTICAL INDUSTRY IN THE MODERN CONTEXT

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## Abstract

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This article focuses on the prospects for the development of the Russian pharmaceutical industry in the modern economic and geopolitical context. The authors analyze the pharmaceutical market of the Russian Federation in the context of the importance of this industry for ensuring national security in the field of healthcare in times of crises brought about by various reasons. The objective of the present paper was to determine the vector of development of the Russian pharmaceutical market based on the identified structural characteristics and trends in the development of the industry in a rapidly changing geopolitical situation. As demonstrated by the analysis, the Russian pharmaceutical industry is critically dependent on the import of finished dosage forms and substances and is characterized by a consistently high share of non-innovative drugs, which in fact determines the main directions of development of the industry in the medium and long term. The article is based on the following methods: analyzing the results of monitoring the pharmaceutical market of the Russian Federation, analyzing statistical data and expert assessments of development trends in the global and national pharmaceutical industry. The authors come to the conclusion that it is necessary to promptly revise the structure and scope of government investment in the transition of the pharmaceutical industry to an innovative production model, which will allow Russian manufacturers both to meet the needs of Russian healthcare and support the fast-growing segment of the national economy and to become an exporter in the international pharmaceutical market.

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## Keywords

Pharmaceutical sector, pharmaceutical industry, drugs, medicines, pharmaceutical market, healthcare system, social and economic policy.

## INTRODUCTION

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The relevance of research in the pharmaceutical market of the Russian Federation is determined by both the high ROI of the pharmaceutical industry and its social significance as one of the key and vital sectors of the economy. The novel coronavirus infection pandemic (COVID-19) and the range of sanctions imposed on the Russian economy have once again demonstrated the importance of reorganizing the national pharmaceutical industry to ensure national security in the healthcare sector in the context of crises brought about by various reasons.

The high dependence of the national pharmaceutical industry on the import of pharmaceutical substances and finished pharmaceutical products, a pronounced market imbalance on the side of generic drugs and a low share of innovative medicines, a drop in real incomes of the population and a significant increase in budget allocations to the public procurement segment within the framework of national healthcare projects form certain structural features of the Russian pharmaceutical industry, prioritizing the directions of its development in the modern context.

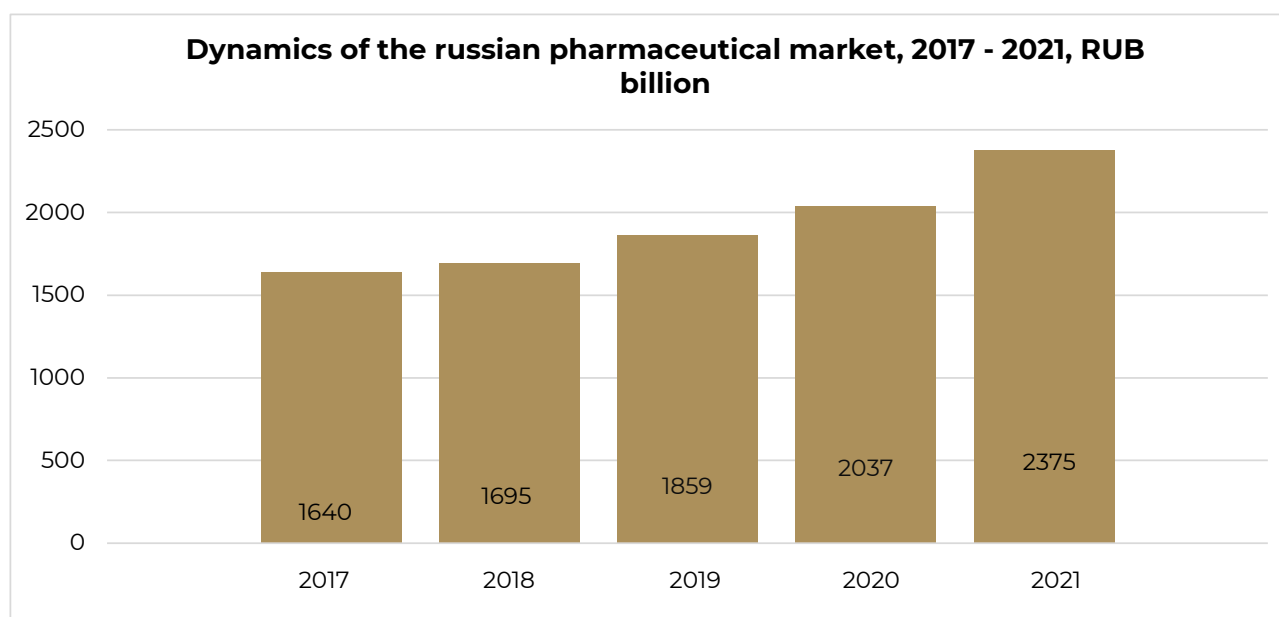
### **THE PHARMACEUTICAL INDUSTRY IS ONE OF THE KEY AND VITAL SECTORS OF THE RUSSIAN ECONOMY**

In 2020–2021, the world community closely followed the spread of the COVID-19 novel coronavirus infection: the number of infected and hospitalized, the death toll, treatment methods, the scope of restrictive measures and their impact on the global economy, the development of vaccines and their practical effectiveness, the growth rate of the vaccinated population, the impact of vaccination on the speed of the COVID-19 spreading, etc. The keen interest in the pharmaceutical industry is determined by the scale of the COVID-19 spreading throughout the world, the high mortality rate, and the impact of the pandemic on all spheres of society. The novel coronavirus infection pandemic has become a growth driver for the global pharmaceutical market in general and the Russian pharmaceutical market in particular.

According to the National Credit Ratings agency (NCR), the size of Russia's pharmaceutical market in relation to its GDP (1.62%) in the pre-COVID years was almost three times higher than the global average (0.61%) and, according to the International Monetary Fund (IMF), it is comparable to that of Japan (1.53%), Germany (1.18%), Italy (1.61%), Brazil (1.36%), Spain (1.66%), and Canada (1.29%) [1]. Over the five pre-COVID years from 2013 to 2019, the Russian pharmaceutical market grew by 85% in Russian ruble terms [2]. During this period, the Russian pharmaceutical market grew by 20.75% (1.1 billion packages) in physical terms [3].

The main factor exercising pressure on the rapid growth of the Russian pharmaceutical market in the pre-COVID years was the stagnation of real incomes of the population, which determined the commercial segment of the pharmaceutical market that had the largest volume and the highest growth rate.

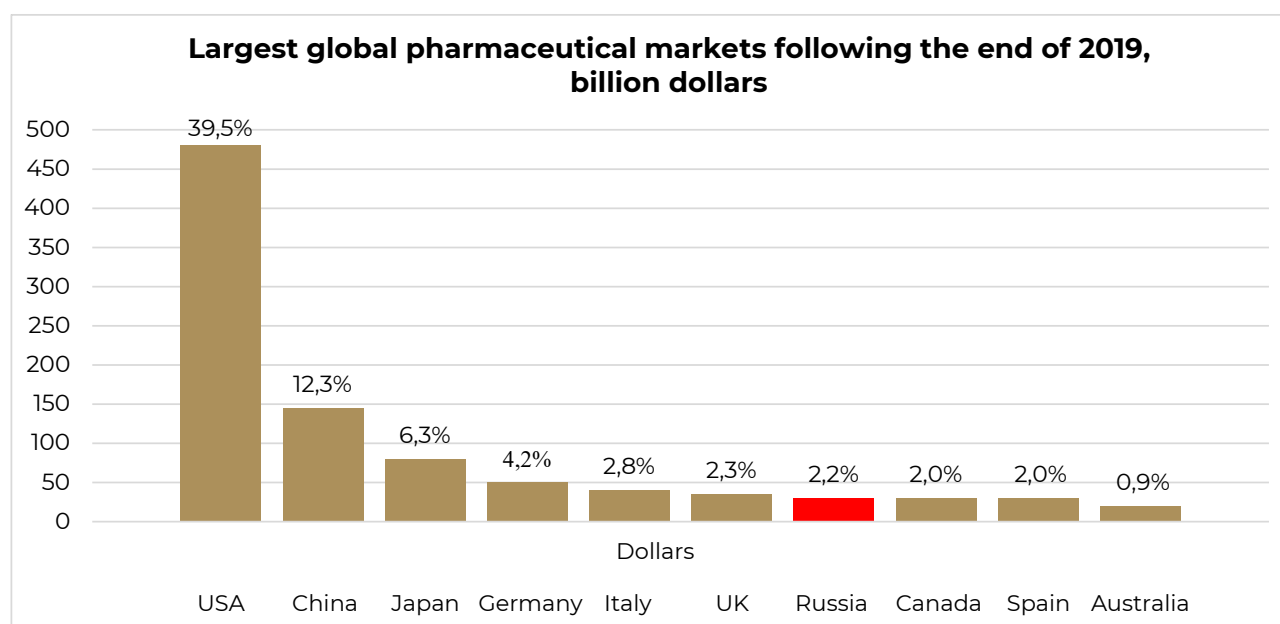
During the 2020–2021 COVID pandemic, the Russian pharmaceutical market grew faster than predicted (at 5–6% annually) with the sales growth in monetary terms amounting to 9.6% in 2020 and 16.6% in 2021 [4]. The market volume in monetary terms reached RUB 2,375 billion versus RUB 2,037 billion in the previous year and RUB 1,859 billion in 2019, and the sales profits doubled [5].



**Fig. 1. Dynamics of the Russian pharmaceutical market, 2017–2021, RUB billion.**

Source: compiled by the author based on: Russia's Pharmaceutical Market 2021. Annual report // DSM Group. Analytical reports. URL: [https://dsm.ru/docs/presentations/Фармрынок\\_2021\\_Итоги\\_12месяцев.pdf](https://dsm.ru/docs/presentations/Фармрынок_2021_Итоги_12месяцев.pdf) (Accessed 28 August 2023).

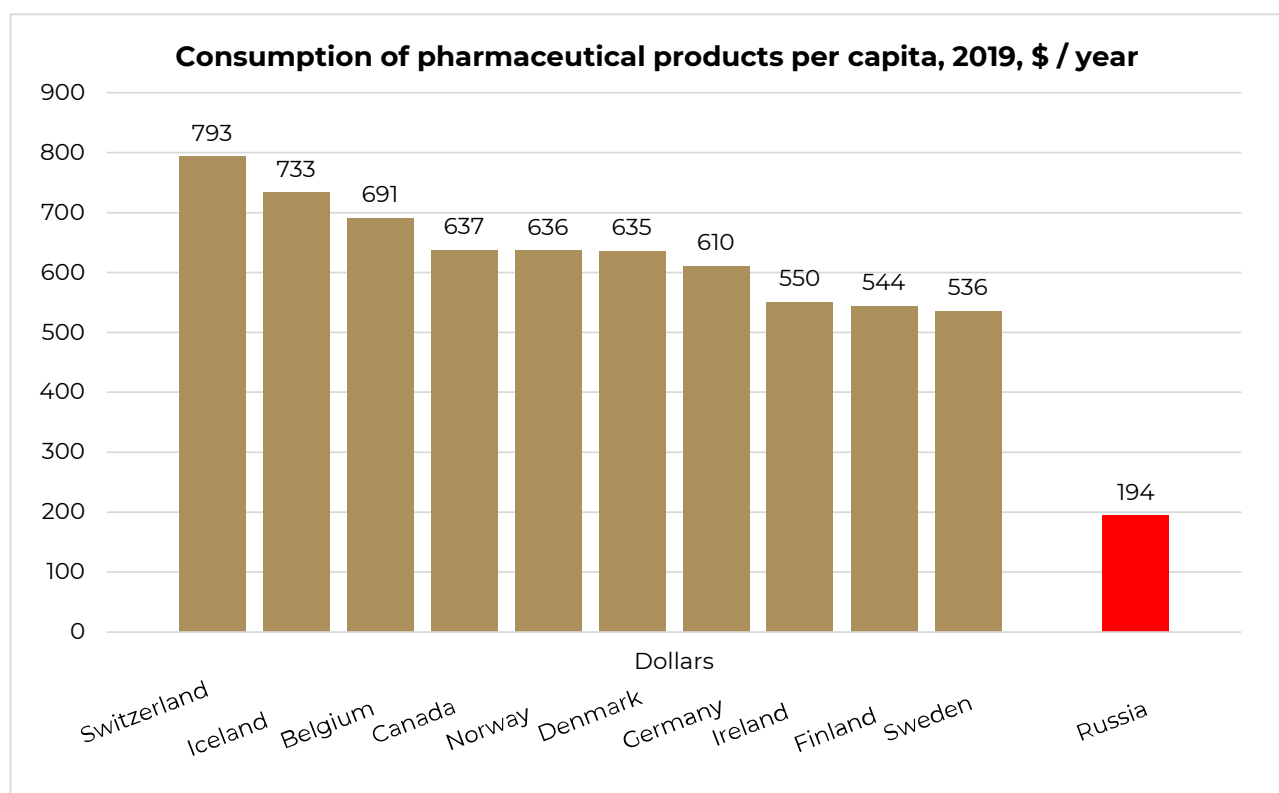
According to National Credit Ratings (NCR), in the pre-COVID period, Russia was among the ten largest pharmaceutical markets [6].



**Fig. 2. Largest global pharmaceutical markets following the end of 2019, billion dollars.**

Source: compiled by the author based on: Pharmaceutical Market of the Russian Federation — Will the State Help Us? // National Credit Ratings (NCR). Analytical review. 2020. URL: <https://www.ra-national.ru/ru/node/63747> (Accessed 26 August 2023).

At the same time, in terms of medicine use per capita, Russia ranks at the bottom of the Top 30 countries. Following the end of 2019, the sales of medicines per capita amounted to \$194, compared to \$462 on average in the Top 30 foreign markets and \$793 in Switzerland [7].



**Fig. 3. Consumption of pharmaceutical products per capita, 2019. \$ / year.**

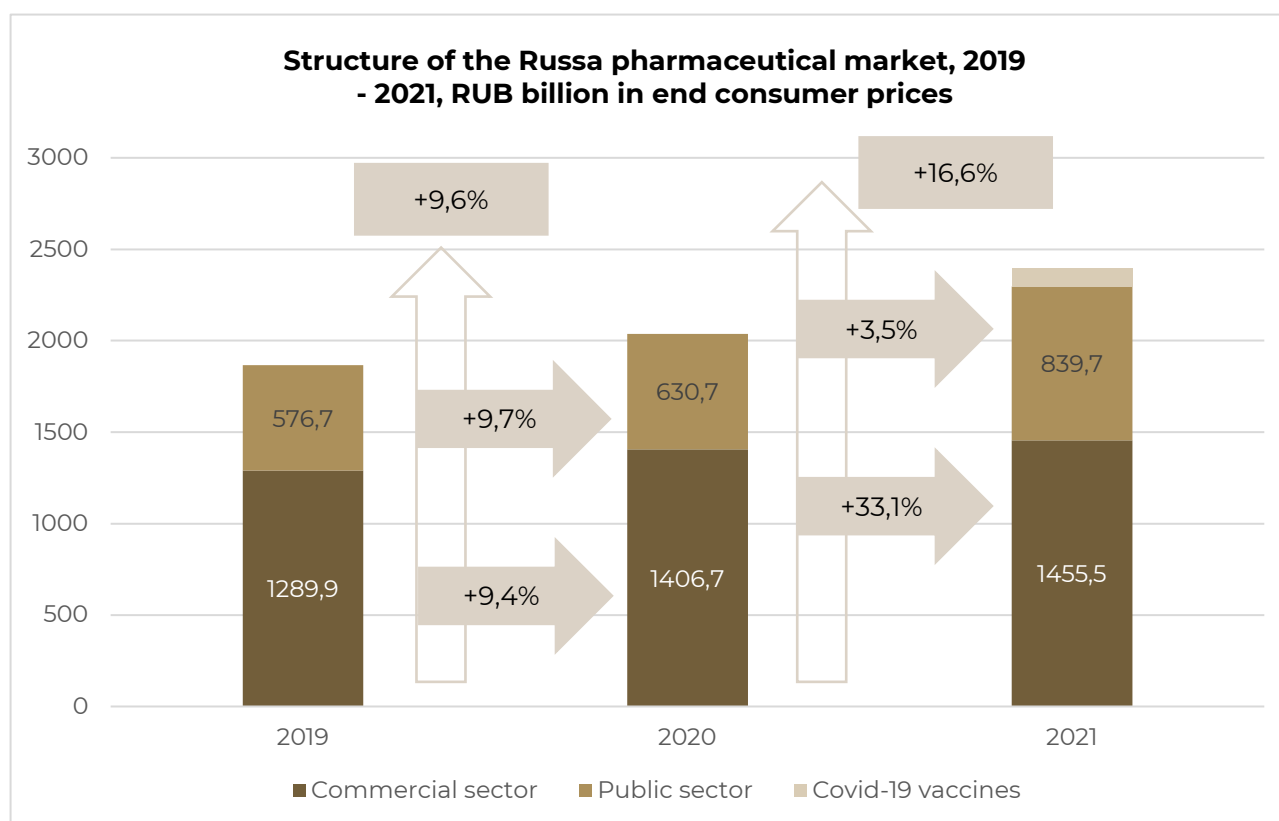
**Source:** compiled by the author based on: Pharmaceutical Market of the Russian Federation — Will the State Help Us? // National Credit Ratings (NCR). Analytical review. 2020. URL: <https://www.ra-national.ru/ru/node/63747> (Accessed 27 August 2023).

The growth potential of the Russian market, primarily through government investment in healthcare, makes it attractive for pharmaceutical companies.

### **STRUCTURAL FEATURES OF THE PRESENT-DAY PHARMACEUTICAL MARKET IN RUSSIA**

The structure of the Russian pharmaceutical market consists of two segments: the commercial segment (the commercial sector of medicines plus the sector of parapharmaceuticals distributed in pharmacies) and the public procurement segment. In line with the world practice, the growth of the Russian market was achieved primarily through increased sales volumes and profitability in the commercial sector, which over the years has maintained a consistently high share and positive dynamics. Thus, the commercial sector of medicine sales grew in monetary terms by 9.7% in 2020 and by 3.5% in 2021. The decline in growth rates is chiefly due to the shrinking real incomes of the population. As of the end of 2021, the share of the commercial sector is 61.3% [8].

Despite constant regulatory changes, the public procurement sector remains the main driver of growth in the Russian pharmaceutical market. It consists of hospital procurement, subsidized pharmaceutical provision (hereinafter referred to as EDC, Essential Drug Coverage), a program of territorial state guarantees and procurement of COVID-19 vaccines. The public procurement segment grew by 9.4% in 2020 and by 33.1% in 2021 (excluding the public procurement of COVID-19 vaccines) due to both objective reasons caused by the pandemic and additional financing of the 'Healthcare' national project with a share of 35.4% following the end of the year [9].



**Fig. 4. Structure of the Russian pharmaceutical market, 2019 – 2021, RUB billion in end consumer prices.**

**Source:** compiled by the author based on: Russia's Pharmaceutical Market 2021. Annual report // DSM Group. Analytical reports. URL: [https://dsm.ru/docs/presentations/Фармрынок\\_2021\\_Итоги\\_12месяцев.pdf](https://dsm.ru/docs/presentations/Фармрынок_2021_Итоги_12месяцев.pdf) (Accessed 01 September 2023).

Another important feature of the Russian pharmaceutical industry is its high dependence on imported substances, which determines one of the key directions for further development of the industry in the medium term. The pharmaceutical market of the Russian Federation began to take shape at the turn of the millennium. In the command economy of the USSR, there was no room for competition between manufacturers in the production of medicines. Russia's transition to a market economy in the 1990s came with a deep crisis in the pharmaceutical industry. As the Russian market opened to foreign manufacturers, uncompetitive products of national pharmaceutical companies quickly disappeared from the commercial segment, partially remaining in the government procurement segment due to their low cost.

As a consequence, the production volumes of Russian-made substances came almost down to zero. In terms of securing its supplies of pharmaceutical substances, Russia followed the global practice, as no country in the world is self-sufficient. For example, the USA and a number of European countries (the UK, Germany, France) do not produce pharmaceutical substances for generic drugs, and in the USA they are produced exclusively for innovative drugs in the domestic market.

Italy and Spain have historically been the leaders of the pharmaceutical chemical industry and supply pharmaceutical substances only to EU countries. Israel, distinguished by its innovative pharmaceutical industry, meets the domestic demand with its own full-cycle production of drugs by 40%. The Russian pharmaceutical industry is critically dependent on foreign supplies of pharmaceutical substances, the main suppliers of which are China, India, and France.

## TOP-10 countries of origin of pharmaceutical substances in 2020

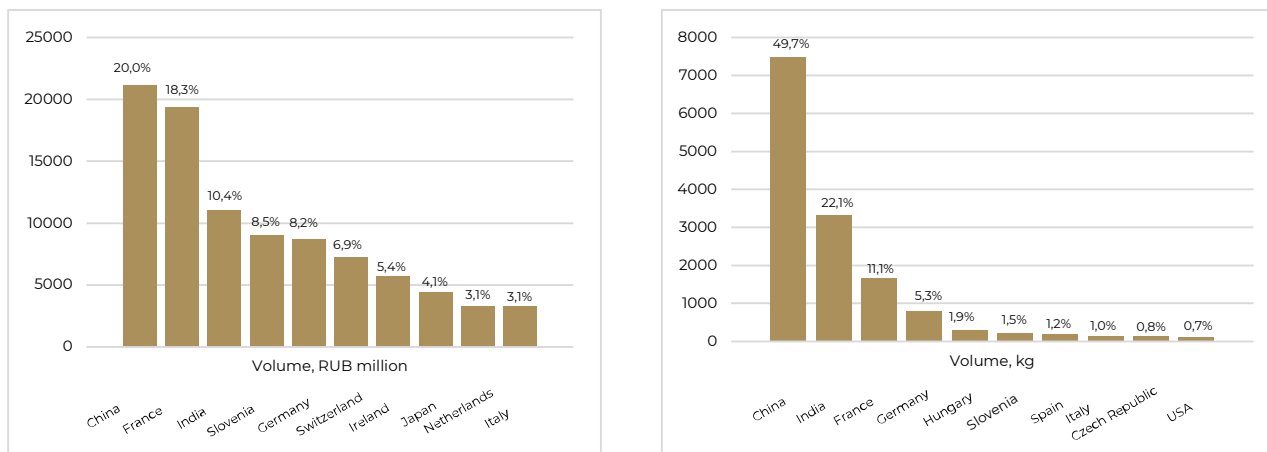


Fig. 5. Top-10 countries of origin of pharmaceutical substances in 2020.

Source: compiled by the author based on: Imports of Pharmaceutical Substances to Russia // Remedium. 2020. № 1-3. URL: [https://remedium.ru/state/Import\\_farmatsevticheskikh\\_substantsiy\\_v\\_Rossiyu/](https://remedium.ru/state/Import_farmatsevticheskikh_substantsiy_v_Rossiyu/) (Accessed 01 September 2023).

The way to ensure stability of the domestic market and one of the key factors of national security in terms of drug supply is full-cycle production, which includes the production of pharmaceutical substances, in particular those for innovative drugs, which ultimately also determines the competitiveness of the manufacturer.

At the beginning of the 2000s, a number of Russian pharmaceutical companies, having gained access to technology, began producing generic drugs that were in the highest demand in the commercial segment of the market. These drugs were low-cost, unbranded (produced under international nonproprietary names (hereinafter referred to as INN)) and, as a rule, belonged to the most popular categories: drugs for the treatment of cardiovascular and gastrointestinal diseases, antibiotics, antifungals, vitamins, etc.

In 2011, in order to solve the problem of the predominance of foreign-made drugs in the Russian pharmaceutical market and the small share of original innovative drugs in medical prescriptions, Russia adopted a federal state program for the development strategy of the pharmaceutical and medical industry until 2020 (Pharma – 2020) with the main objective to establish a full-cycle production cycle of drugs in Russia, increase the local content of foreign-made drugs, and incentivize the development of innovative technologies in the pharmaceutical industry [10].

The Pharma – 2020 state program gave a significant impetus to the growth of the national pharmaceutical industry with the following direct consequences: increased local content of products of the largest foreign pharmaceutical companies in Russia, a significant growth of the production of drugs by Russian pharmaceutical manufacturers, and the development of pharmaceutical clusters in a number of regions (the Yaroslavl, Kaluga, Nizhny Novgorod, Sverdlovsk, Moscow regions).

By the beginning of the COVID-19 pandemic, which had a certain impact on the development and structure of the global pharmaceutical market, the market share of drugs with a high local content increased from 24% (2012) to 32% (2018), and the share of imports in the list of vital and of essential drugs (hereinafter referred to as VED) decreased from 28% (2015) to 16% (2018). In 2021, the share of drugs with a high local content was 43.7% in monetary terms and 68.6% in physical terms [11].

The Pharma – 2020 state program, along with the import substitution policy, envisaged the transition of the national pharmaceutical industry to an

innovative development model and was aimed at technological revamping of the Russian pharmaceutical industry and making its products competitive in world markets. These objectives were never achieved in full as planned.

### Market structure in various sections, 2021

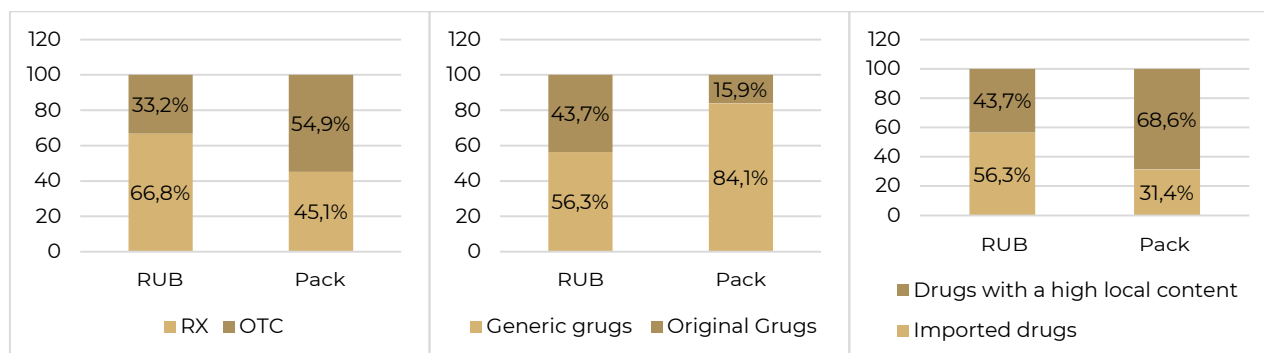


Fig. 6. Market structure in various sections, 2021.

Source: compiled by the author based on: Russia's Pharmaceutical Market 2021. Annual report // DSM Group. Analytical reports. URL: [https://dsm.ru/docs/presentations/Фармрынок\\_2021\\_Итоги\\_12месяцев.pdf](https://dsm.ru/docs/presentations/Фармрынок_2021_Итоги_12месяцев.pdf) (Accessed 02 September 2023).

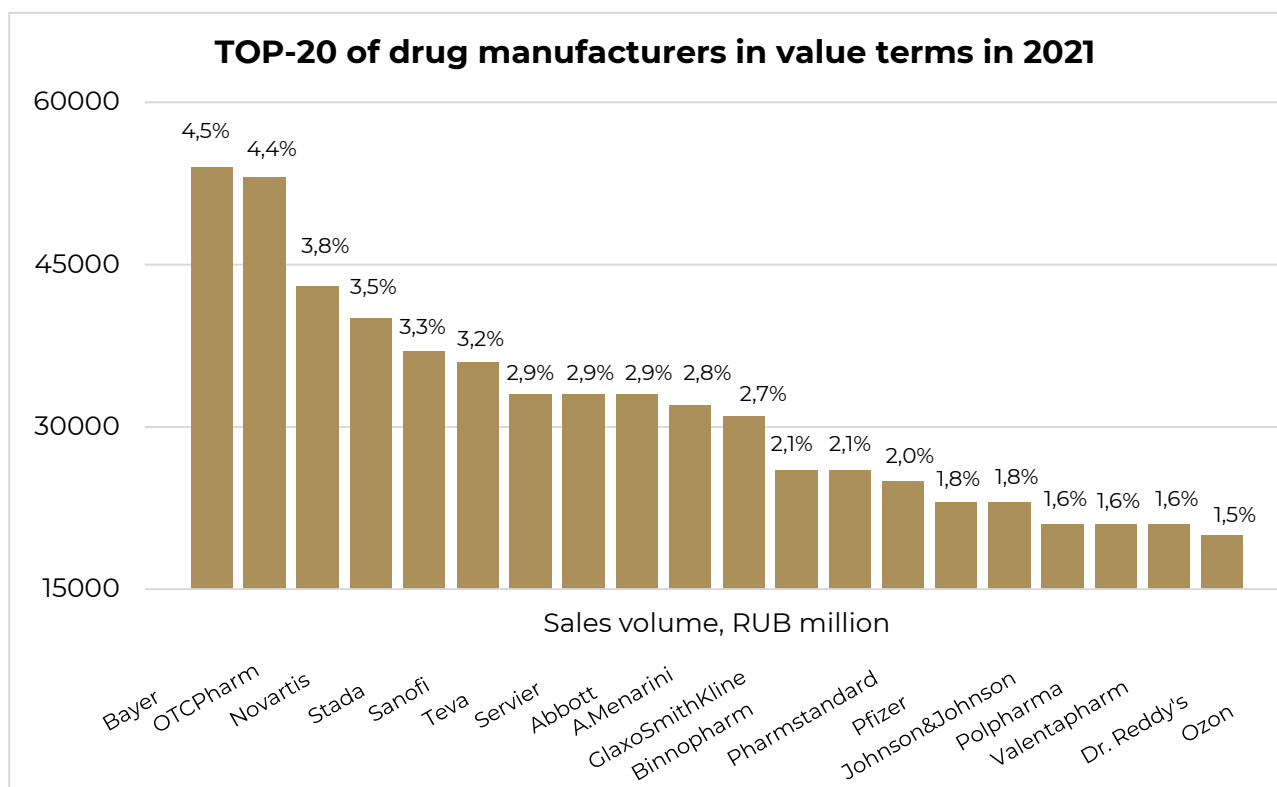
Thus, following the end of 2021, the share of foreign-made drugs in monetary terms is 56.3% (31.4% in physical terms). At the same time, the increase in sales of packages of drugs produced in Russia amounted to only +1.9%, and the increase in imported drugs in physical terms amounted to +10.0%. Both categories of drugs show positive dynamics in monetary terms: for locally produced drugs, the sales volume increased by 12.2%, for foreign-made drugs, by 16.6% [12]. Over the year, the weighted average cost of a package of locally produced drugs increased by 10.2% amounting to an average of RUB 191.4 per pack. At the same time, the price of imported drugs increased by 6.0% up to RUB 395.3 per pack [13]. Thus, the ratio between locally produced and imported drugs in monetary terms is in favor of foreign-made drugs.

Despite the fact that the pharmaceutical industry is among the leaders in terms of innovation development in the world economy, the Russia pharmaceutical market is characterized by a consistently high share of generic drugs. The growth of the share of generic drugs is due to both a decrease in real incomes of the population and public procurement regulations, which determine the winning bid in tenders based on the lowest price per product unit (initial maximum contract price) and a number of legislative initiatives regulating medical prescriptions of drugs based on INN, which leads consumers to choose the most affordable generic drug at the pharmacy level [14]. Generic drugs—analogs of reference drugs produced by competitors after the expiration of the patent—are popular primarily due to their lower cost compared to reference drugs. This trend is caused by the high costs associated with the development and promotion of innovative drugs. For example, according to the Pharmaceutical Research and Manufacturers of America, the average cost of developing an innovative drug from the invention stage to delivery to pharmacies ranges from \$600 million to \$2.7 billion, while for a generic drug it takes on average \$5–25 million [15].

In Russia, the market share of generic drugs in recent years has ranged from 84 to 90% in packages and from 55 to 64% in value terms. These figures are among the highest in Europe [16].

Taking into account the specifics of consumer demand and the prioritization of tasks according to the algorithms of the public procurement system, foreign multinational corporations ranked as leaders in the Top 20 of manufacturers in 2021 (with a combined market share of about 53% in value

terms): Bayer AG (Germany), Novartis International AG (Switzerland), Sanofi (France), Stada Arzneimittel AG (Germany), Teva Pharmaceutical Industries Ltd (Israel), Les Laboratoires Servier (France), Abbott Laboratories (USA), KRKA (Slovenia), GlaxoSmithKline (UK), Menarini Group (Germany), etc. There are five Russian manufacturers with a combined market share of 11.6%: OTCPharm, Pharmstandard, Binnopharm Group, Valenta Pharm, and Ozon Pharmaceutical Company [17].



**Fig. 7. TOP-20 of drug manufacturers in value terms in 2021.**

**Source:** compiled by the author based on: Russia's Pharmaceutical Market 2021. Annual report // DSM Group. Analytical reports. URL: [https://dsm.ru/docs/presentations/Фармрынок\\_2021\\_Итоги\\_12месяцев.pdf](https://dsm.ru/docs/presentations/Фармрынок_2021_Итоги_12месяцев.pdf) (Accessed 07 September 2023).

Another feature of the Russian pharmaceutical market that determines the sales volume of pharmaceuticals is the type of drug dispensing. Due to the current specifics of the healthcare system and the inclination of the Russian population to independently choose medicines without consulting the doctor first, over-the-counter drugs (OTC drugs) prevail. The share of OTC drugs in physical terms is consistently growing due to their lower price, which in 2020 amounted to 54.9% (33.2% in monetary terms) [18]. The growing share of OTC drugs is also supported by the passed legislation that allows remote sale of drugs, which primarily applies to OTC drugs. 97% of OTC drugs are sold through pharmacies [19]. Prescription drugs (hereinafter referred to as Rx drugs) lead in public procurement of drugs with a share of 90% in monetary terms [20].

Thus, at the moment, the key features of the Russian pharmaceutical market are as follows:

- dependence on imports of pharmaceutical substances;
- predominance of generics in the structure of the pharmaceutical market and a low share of innovative, original medicines;
- predominance of foreign-made drugs (when assessing the segment in monetary terms);
- a significant share of OTC drugs in the structure of drug sales.

## **THE IMPACT OF SANCTIONS POLICY ON THE PHARMACEUTICAL MARKET OF THE RUSSIAN FEDERATION**

In March 2022, against the backdrop of a changed geopolitical situation and the sanctions policy pursued by the Western nations, the largest foreign pharmaceutical companies (Big Pharma) made statements about changes in their operations in Russia despite the partial localization of their production in Russia.

Thus, the pharmaceutical companies Bayer AG (Germany), Pfizer (USA), Takeda Pharmaceutical Company (Japan), Astellas Pharma (Japan), and a number of other innovative multinational corporations suspended investments in Russia, maintaining the volume of supplies of non-innovative drugs for ethical reasons. Eli Lilly and Company (USA) has restricted its supplies of drugs not included in the list of vital and essential drugs to Russia. Johnson & Johnson (USA) and Reckitt Benckiser Group Plc. (UK) have suspended their supplies of care and personal hygiene products for patients with mobility impairments. Certain restrictions on supplies of several drugs were introduced by Roche Group (Switzerland), Sanofi (France), AstraZeneca plc (UK, Sweden), Boehringer Ingelheim

(Germany), Novartis International AG (Switzerland), and a number of others [21]. A distinctive feature of the above mentioned manufacturers is that they belong to a group of innovative pharmaceutical companies that invest significant shares of their budgets in the development of original innovative drugs.

Unlike these corporations, generic pharmaceutical companies from Eastern Europe, for example, Gedeon Richter (Hungary), KRKA (Slovenia), Polpharma (Poland), Menarini Group (which includes Berlin-Chemie, Germany, which is better known in Russia), with localized production in Russia have not wound down their operations and have been providing an uninterrupted supply of medicines despite the anti-Russian public rhetoric of their national authorities.

Thus, the COVID-19 pandemic and the trends of the sanctions policy pursued against Russia have once again drawn the attention of the legislative and executive authorities, the medical community, and citizens to the vulnerability of national security in the field of drug supply to the population and the relevance of the ongoing import substitution policy for a number of areas, including one of the key ones—developing and establishing a full production cycle of Russian innovative drugs and vaccines.

Taken together, the above factors once again raise the question of key strategies for the development of the national pharmaceutical industry, its competitiveness in the current social, economic, and geopolitical conditions, and the competence of management taking tactical decisions both in the production sector and in the segment of promotion of manufactured drugs.

Since the Russian pharmaceutical market has been highly profitable for the third decade in a row (the average gross margin of the Top 20 pharmaceutical companies by revenue has remained in the range from 50 to 54% for more than 10 years) [22], it remains attractive for both foreign pharmaceutical companies and Russian manufacturers. Investment projects and clinical trials of innovative drugs wound down by the leading multinational corporations in 2022 provide an opportunity to significantly increase the share of Russian-made pharmaceutical products and allow previously underrepresented drug manufacturers from Turkey, Italy, Cyprus, Macedonia, Croatia, and China to enter the market. The decreasing purchasing power of the population will also have an effect on the market share growth of the Russian pharmaceutical industry. This highlights the relevance of the key vectors for the development of the Russian pharmaceutical industry in the short and medium term.

## **PROSPECTS FOR THE DEVELOPMENT OF THE RUSSIAN PHARMACEUTICAL INDUSTRY IN THE NEW ECONOMIC AND GEOPOLITICAL CONTEXT**

When assessing the prospects for the development of the Russian pharmaceutical industry, it is necessary to consider that it is highly competitive: 80% of the market in value terms is held by more than 100 pharmaceutical manufacturers, most of which are foreign ones, while the share of the market leader in monetary terms has not exceeded 5% for decades [23]. In addition, Russian pharmaceutical manufacturers have been under the influence of constantly changing and mutually reinforcing crises brought about by various reasons for decades: the economic crisis of 2008 developed into the first stage of geopolitical confrontation in 2014 intensified by the social and economic consequences of the pandemic and at present is experiencing a significant sanctions pressure from the leaders of the pharmaceutical industry.

The depreciation of the ruble, the decrease in consumption and economic growth rates, restrictions in the information and technological spheres, disruption of established supply chains, the withdrawal of research programs of Big Pharma companies from Russia, etc., on the one hand, give an impetus to the import substitution policy, giving an advantage to Russian and foreign manufacturers with a high local content, and, on the other hand, significantly hinder the modernization of the Russian pharmaceutical industry.

The prospects for the development of the industry were extensively discussed in March 2022 within the framework of a research and practice conference organized by the Kommersant publishing house [24]. The Government of the Russian Federation presented a state project for potential areas of development of the Russian pharmaceutical industry—‘Pharma — 2022: Launching the Strategy for the Development of the Pharmaceutical Industry until 2030’ (‘Pharma – 2030’) focusing on the prospects for the Russian drug market in the new social, economic, and geopolitical context [25].

This document provides a comprehensive analysis of the market situation with a number of key conclusions, in particular stating the following fact: the major drawback in the technological modernization of the Russian pharmaceutical industry is the limited resources of pharmaceutical companies as releasing innovative products requires a significant increase in investment in development, scientific research, and modernization of production. Investments from the federal budget allocated under the Pharma – 2020 state program were targeted at a moderately optimistic scenario for the development of the Russian economy. Therefore, even though the pharmaceutical industry is one of the fastest growing sectors of the economy, strengthening the competitiveness of Russian manufacturers by putting them on the path of innovative development is hampered by insufficient government support. According to the Pharma – 2030 strategy, an opportunity to partially solve this problem lies in innovative pharmaceutical clusters (IPCs) provided for by the Pharma – 2020 state program that are already developing in Russia.

IPCs are a form of collaboration of research centers, drug manufacturers, equipment suppliers, logistics systems, and specialized universities that enhance the competitive advantages of individual companies and the cluster as a whole. The case of foreign innovative companies sounds convincing as clustering is an effective approach for innovative development of the national pharmaceutical industry [26] and a significant factor in increasing the competitiveness of drug manufacturers.

Biotechmed, the largest forum of the Russian medical and pharmaceutical industry held on 19–20 September 2022, provided an opportunity to take stock of the intermediate results of the Pharma – 2030 strategy. The key conclusion made at the forum is the chosen path for the

development of the industry aimed at providing significant state support to national pharmaceutical manufacturers, which, according to the Deputy Chairman of the Government of the Russian Federation, Minister of Industry and Trade of the Russian Federation Denis Manturov, will secure supplies for the Russian national healthcare system of both generic and innovative drugs and enable Russia to move away from parallel imports of pharmaceutical products in the short term [27].

One of the ways to promptly respond to a number of indirect restrictions imposed on the pharmaceutical and medical industries was 'Products on the Shelf', a new mechanism of state support for the pharmaceutical industry subsidizing the development and registration of medicines under patent protection [28]. This program is a way to reduce the risks associated with drastic decisions of unfriendly countries, which are unfavorable for Russia, and maintain high levels of drug supply to the Russian healthcare system, as the uninterrupted supply of medicines remains a key strategic priority for the development of the Russian pharmaceutical industry. Through the state support program and changes in regulation in the cluster, the share of Russian manufacturers in the total number of issued drug registration certificates over nine months of the current year (still running) reached 80%, which in physical terms amounts to over 740 drugs of various dosage forms.

Another vector of development of the Russian pharmaceutical industry based on the specifics of the Russian industry that emerged after the breakup of the USSR was the path towards independence of the pharmaceutical industry from imported substances, which also entails the need for major investments in the development of biotechnology [29] — these competencies are currently insufficient to reach the objectives of the Russian pharmaceutical industry.

Another important factor determining the competitiveness of the Russian pharmaceutical industry is the ability of manufacturers to quickly respond to changing market conditions by adapting their portfolio of drugs. This requires developing the science and technology infrastructure, production sites; increasing the efficiency of promotion, sales, marketing departments; optimizing supply chains; and, of course, loyal opinion leaders supporting domestic products, which

collectively will enable Russia to quickly market both innovative and generic drugs.

Of course, against the backdrop of supply chain disruptions caused by restrictive measures during the COVID-19 pandemic and unprecedented sanctions pressure on the Russian economy, companies with a full drug production cycle have significant competitive advantages, which is another factor contributing to the competitiveness of the Russian national pharmaceutical industry.

To make the picture complete, we should mention another vector of development of the Russian pharmaceutical sector. Since public procurement of drugs in the near future will remain the main driver for the Russian pharmaceutical market, a real competitive advantage will be achieved by companies that have in their portfolio drugs used within the framework of the 'Healthcare' national project. In the first place, these are drugs for the treatment of oncological and cardiovascular diseases. A high growth potential is expected for drugs used in the treatment of rare (orphan) diseases and the 'Seven Nosologies' program with significant budget allocations.

## CONCLUSIONS

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The objective of the study was to determine the key directions for the development of the Russian pharmaceutical industry in the context of the

current social, economic, and geopolitical situation and its further development trends. Achieving this objective required several tasks to be set. As a result, the following conclusions were made.

1. The Russian pharmaceutical market keeps growing fast, remains profitable with a high return on investment with a share of the national GDP that is three times higher than the world average, making this segment of the national economy highly competitive.

2. The Russian pharmaceutical sector is characterized by its significant dependence on the import of finished dosage forms and substances, a consistently high share of non-innovative drugs, and a market imbalance on the side of over-the-counter drugs.

3. Five Russian manufacturers rank in the Top 20 of drug manufacturers in value terms with a combined market share of less than 12%. The largest market share (4.4% in value terms) in the Russian pharmaceutical industry is held by a company promoting a range of over-the-counter drugs.

4. The key driver of the Russian pharmaceutical industry in the coming years will be public procurement, while the commercial segment of the market, due to decreasing purchasing power of the population, will lean towards unbranded generic drugs.

5. Government investment in the transition of the pharmaceutical industry to an innovative production model remains a key factor in ensuring its success.

6. Potential vectors for the development of the Russian pharmaceutical industry correlate with the key features of the Russian pharmaceutical industry that have emerged over the thirty years of its existence.

Being an integral part of the unified healthcare system and covering a certain area of national security, the pharmaceutical industry is among the priority areas of development, which a priori should envisage a large-scale investment program to ensure the transition of the Russian pharmaceutical industry to an innovative paradigm.

Key directions for the development of the Russian pharmaceutical industry are set out in the Pharma – 2030 state program and generally reflect the vectors for increasing the competitiveness of pharmaceutical manufacturers with the following focus areas:

- greater importance of companies with a full drug production cycle in Russia;
- maximum import substitution, primarily in the segment of the most popular drugs;
- transition of the industry to an innovative development model;
- prospects for entry of Russian pharmaceutical products into world markets as exporters.

Unfortunately, taking into account the evolving geopolitical crisis and the significant sanctions pressure on Russia, which led to a number of problems in the supply of equipment, technology, software, and logistics of substances, greater presence of Russian pharmaceutical manufacturers in the global pharmaceutical market envisaged in the Pharma – 2030 state program becomes hardly feasible.

On the other hand, the withdrawal of several foreign-made drugs from the Russian pharmaceutical market by a number of international manufacturers; logistical problems in the supply of substances and finished products from European countries and the United States; a trend towards liberalization of industry-specific legislative initiatives; increased funding for both the industry and public procurement within the framework of national healthcare programs; and a reduction, to some extent, in competitive pressure on Russian pharmaceutical manufacturers collectively provide a unique opportunity for such manufacturers to significantly improve their position.

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