

PROBLEMS OF DEVELOPMENT OF THE RUSSIAN DEFENSE INDUSTRY IN THE CONTEXT OF THE NEW GEOPOLITICAL CHALLENGES

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Abstract: Interest in the study of the problems of the Russian Military-Industrial Complex (MIC) is caused by the following reasons. Firstly, one of the key tasks of the country is to ensure national security; the role of the defense industry is to develop and produce weapons and military equipment (WME) that meet today's requirements of the army. Secondly, since Soviet times this sector of industry concentrated virtually all science-intensive civil engineering. The defense-industrial complex plays a very significant role in ensuring national security and is the most important structural component of the country's economy. Today, when the consequences of the crisis are still felt and the Western sanctions are being toughened against Russia, the significance of the defense industry is emphasized. Today, the market for military products is one of the most effective sectors of the world geopolitics and economy, and is an area of fierce competition. A number of objective circumstances explain the choice of the topic of this article. First, in recent years, the dynamics of the arms market suggests that there is a significant economic effect for the state in the form of foreign currency earnings, which should be channeled to fund targeted defense industry development programs. Secondly, Russia's place in the international arms market symbolizes the growing geopolitical significance of the country as a world power. Thirdly, the expansion of geography and the nomenclature of exports determines the scientific and technological development of the entire industry of Russia, strengthening the importance of Russia in the world geopolitics. Fourth, the WME market is an item of income for the state budget, which gives the country's economy even greater stability. At the same time, the arms market remains a very specific sector of the world economy and geopolitics requiring special international and national regulation; it has a contradictory demand structure and continues to be a potential cause for armed conflicts. The qualitative changes taking place in the world WME market and caused by the processes of globalization of the international economy and evolutionary scientific and technical achievements, require careful study and analysis.

Keywords: Military-Industrial Complex, geopolitical security, weapons and military equipment (WME), defense policy.

INTRODUCTION

The subjects of defense policy are the supreme bodies of legislative and executive power, military authorities, military-political alliances. The objects of military policy

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are all areas of the life of society, which form military potential and the military power of the state - the economy, science and technology, socio-political relations and social structures, public consciousness. In the scientific literature, the “military-industrial complex” (MIC) and the “defense-industrial complex” (DIC) are used practically as synonyms (Avdeev, 2017). However, we believe that it is better to use the second term, and then possible to differentiate between the various social systems - the Ministry of Defense and the defense industry, which only partially have common interests.

The statistical model adopted in the Russian Federation includes the defense-industrial complex as the aggregate of industrial enterprises and scientific organizations, so its definition can be reduced to the following: the Russian defense-industrial complex is the sum total of Russia’s defense enterprises and organizations that:

- (a) participate in the implementation of the current State Defense Procurement and Acquisition (SDPA) and/or in the military-technical cooperation (MTC) with other countries;
- (b) have mobilization plans and are potentially capable of a sharp increase in the manufacture of certain types of weapons and military equipment (WME) if necessary, within a designated period;
- (c) are under the jurisdiction of specific federal government bodies (for state enterprises and organizations) or for which these federal bodies implement a unified state policy (for joint-stock companies).

Depending on which of the listed characteristics of the definition of the defense-industrial complex is adopted as basis, the quantitative composition of the enterprises that form it will be significantly different. Thus, according to some estimates, the number of enterprises participating in the implementation of the SDPA varies from 4,000 to 6,000, while the number of those that have mobilization tasks (often nominal ones) is several times greater. Within our topic, it is necessary to identify an important reference point: during the 1990s, the wave of privatization did not bypass the enterprise of the Russian defense-industrial complex. Therefore, if we now analyze the structure of property of the MIC, it is easy to see that most of the enterprises are joint-stock companies. More specifically, such JSCs comprise 57% of the entire defense industry. At the same time, the state does not participate in 28.2% of such enterprises (Avdeev, 2017).

Such a situation, in our opinion, presents a challenge for the stability of political power in the country, is instrumental in all kinds of speculative policies, and may be used as a military resource to change the existing regime of power. Another challenge of this situation is the disunity of researchers working in this field. Military experts note that the new R&D initiatives that have insufficient scientific backlog on the development of high-tech products lead to an increase in the time of creating the

product by 1.9 times, which raises the development cost by an average of 40%, and the purchase price by 20% compared to the initial price (Falichev, 2017).

According to the technical similarity of the manufactured profile products and the performance of essentially identical production functions and technological connections of “adjacent” industries, the defense-industrial complex is traditionally divided into nine branches:

- aviation industry (AI);
- missile and space industry (MSI);
- conventional weapons (CW);
- ammunition and special chemicals (ASC);
- shipbuilding industry (SI);
- electronic industry (EI);
- radio industry (RI);
- communication industry (CI);
- nuclear industry (NI).

The main tasks of the development of the defense-industrial complex of Russia are set in the Military Doctrine of the Russian Federation. The main objective of the development of the defense-industrial complex is to ensure its effective functioning as a high-tech, diversified sector of the country’s economy capable of meeting the needs of the Armed Forces in modern armament, military and special equipment and ensuring the strategic presence of the Russian Federation in world markets for high-tech products and services.

In the Russian Federation, innovative modernization of the entire defense complex is undoubtedly necessary, especially in the current conditions of growing geopolitical instability, caused by the global crisis and a confrontation between Russia and the West, when military force becomes an even more important (Akhmetova et. al., 2016; Boljatko, 2001; Shadzhe et. al., 2016).

METHODS AND MATERIALS

The theoretical basis for this article are works of Russian and foreign scientists on the problems of political science, defense construction and military conversion in developed countries and countries with economies in transition.

The study of such a multidimensional phenomenon as military conversion of the Russian defense industry includes the use of a comprehensive analysis based on a combination of scientific methods: systemic, institutional, historical, comparative, structural-functional, content analysis. System analysis considers this phenomenon as a holistic, complex object, with interconnected and interdependent parts. The object of research is a complex political and socio-economic phenomenon that requires a systematic and integrated study of its various interrelated parties. The

institutional method in combination with structural and functional methods allows us to clarify the formal aspects of public policy, the fundamental role of basic structures and mechanisms in the strategy and practice of military conversion. The defense industry complex is one of the main elements of the state-political system. The strategy and practice of conversion has clearly shown the fundamental role of the state in reforming the military-industrial complex, using its scientific and industrial-technological potential in modernizing the economy and its transition to the innovative path. The historical method reveals the events and facts of conversion in connection between the past, the present and the future. The principle of historicism requires consideration of Russia's state policy in the defense industry through the stages of its formation and development.

The comparative method clarifies the transformation of the conversion process in time, compared with the different stages of conversion in Russia's public policy, as well as with foreign experience in reforming the defense-industrial complexes. The principle of historical and comparative analysis was used by the authors in the study of state policy in the defense industry of Russia in the 1990s and the first decade of the 21st century, and in the definition of essentially different stages in the conversion of the defense-industrial complex. The content analysis of documents, texts, programs relating to the conversion of the defense industry reveals an objective picture of the processes that took place at concrete historical stages of the country's development. This allows us to note the fact that in recent years the development of the defense complex has been classified as a priority task of the state policy.

The primary sources of factual material for writing this article were official documents and legislative acts of the Russian Federation, Russian and foreign analytical scientific publications, reference and special literature, materials from open media sources. Representatives of the scientist and the business community regularly discuss the specific aspects of the conversion of the military industrial complex, which is regularly reported by the information agency TS-VPK, newspaper the Military-Industrial Courier and The NG-Independent Military Review, magazine Military Parade and others.

RESULTS

Unworked conversion measures (including the neutralization of distant external threats) contributed to the reduction of the international prestige of Russia and were perceived as one of the manifestations of its weakness. The practice of domestic conversion and the development of the Russian defense industry show that the presence of political will, understanding the need to preserve and multiply competitive scientific and technological potential contribute to the strength national security and increase the country's role in world politics. For example, nanotechnology is one of the newest branches of the military industry allowing to

modernize military equipment deeply. This type of technology is being developed at the Skolkovo education center. The aircraft industry is also an important branch of the defense-industry complex. Over the past few years, this industry has developed significantly and surpassed many foreign aircraft manufacturers. For example, the brainchild of the Russian aircraft industry complex SU-27 is one of the best jet fighters in the world. Being one of the leading military world powers, Russia is strengthening its military-strategic partnership with such friendly states in Asia and Latin America, as China, the countries of the Middle East, India, Kazakhstan, Belarus, Venezuela, etc. Thus, for example, Sergei Shoigu announced that experts have prepared a road map for military cooperation between Russia and China for 2017-2020 (*"The Ministry of Defense of China..."*, 2017).

However, the main the point in military doctrine of the Russian state is not the violation of the sovereignty of other states, but the protection of the integrity of our borders and the borders friendly nations. At the same time, it is this position that prompts active opposition from the US and NATO member states (*"US and NATO planes..."*, 2017).

As the research shows, the issue of reforming the defense industry is not only a problem of increasing the efficiency of military production management, bringing the military industrial base in line with the real needs of the state, and ensuring national security, but also the problem of determining socioeconomic priorities, modernizing industry and further development of the country. Conversion does not pose a threat if it is carried out in socially responsible way. In its essence, the conversion process means a systematic and effective change in the proportions of the distribution of all types of resources between the military and non-military spheres of the national economy from the point of view of maintaining the defense capacity and the development of the civil economy; it is a set of relevant financial, economic, organizational, technical, socio-political and other actions. With a well-prepared, thoughtful and responsible approach, the conversion of the Russian defense industry can to become the core of the structural reorganization of the entire economy of the country, of its successful modernization, given the huge high-tech potential of the defense industry, which quite successfully competed with companies from the leading industrial countries of the West.

Military-technical cooperation is a range activities in the field of international relations related to the export and import of military products, as well as the development and production of military products. It is carried out on the basis of equality and mutually beneficial interests, in compliance with relevant international obligations (treaties) and the national legislation.

The need to create a special structural unit with the status of a state department in the system of state regulation and support of military-political, and later military-technical cooperation between the USSR and foreign states, arose during the

Second World War. In July-August of 1941, Britain signed two intergovernmental agreements with the USSR: "On Joint Action in the War Against Germany" and "On Trade, Credit and Clearing." As part of these agreements, arms and military equipment began to be supplied through Iran to the USSR from the USA and Britain. Later Iran organized the assembly of American cars and British military aircraft to be delivered to the USSR (Omarov, 2010). The All-Union Association "Iransovtrans" of the People's Commissariat for Foreign Affairs of the USSR was responsible for the implementation of these intergovernmental agreements in Iran. It was Iranasovtrans, which included a special department "Technoexport" that in fact became the first state intermediary to receive the authority of the government of the USSR for the practical implementation of military-technical cooperation with foreign countries.

After the Second World War, the struggle for political, military and economic influence on developing countries began. The USSR had its own characteristic style in this struggle, offering these countries close military-technical cooperation (Barabanov, 2003).

The functions of the Main Directorate included the following: to direct the activities of the Department of Chief Military Advisers, to analyze the military-political situation in the countries-allies, to assist them in the creation and development of national armed forces, to supply arms and military equipment to friendly countries, to transfer licenses and technical documentation for the production and repair of their military equipment. It also included the organization of technical assistance in the production, conduct of research and development, repair of weapons and military equipment, in the construction of military facilities (Pribylovsky, 2007).

One of the priorities for the development of the Russian defense industry is the maintenance of the security and integrity of its borders. For this purpose, many programs have been created and implemented that increased the level of the country's defense.

We see many examples of new inventions in the Navy, the Air Force, etc. In recent decades, such missile-strategic complexes as Iskander, Buk-2, Bulava, etc. have appeared on the arsenal of the country. In addition, new weapons of domestic production were made that surpass foreign analogues (AGS-30 grenade launcher), (battle tank 2T-Stalker - the world's first tank using stealth technology).

The transition to a system of a unified state procurement of weapons and military equipment for the Armed Forces, other troops and military formations of the Russian Federation in the interests of concentrating forces and means to solve the tasks of ensuring the military security of the state effectively, is conditioned by the requirements of the military reform carried out in Russia, as well as by the conditions if the market economy and limited financial resources of the state.

DISCUSSION

Drafting the arms program for 2016-2025, Russian authorities must take into account the impact of Western sanctions on the country's economy, said Deputy Prime Minister Dmitry Rogozin. According to him, "the arms program should be based on the most realistic forecast of the country's economic development" (Rogozin, 2014).

However, the delay in carrying out military reform and underestimation of the influence of the military sector on the entire economy of the country led to an aggravation of the military-economic situation (Tsymbal & Khrustalev, 2001).

At the same time, it became necessary to change the focus of military economic research, the understanding of the military economy from a scientific point of view. It turned out that the scientifically based system of views on the military economy has not yet been completed, and the existing one does not meet the current challenges and needs (Andreev, 2005). Comparison of domestic military-economic concepts with foreign concepts using relevant reference materials shows the same. This is reflected in Table 1, the left column of which contains the titles of the chapters of the training manual issued recently by the Military Financial and Economic University, and the right column contains the title of the chapters of the foreign manual on the military economy. Where the contents of the chapters of these two books correspond to each other or at least intersect, the relevant numbers are indicated. Where there is no match, a question mark is put.

In the lower left corner of the table, the name of a separately published book on the military budget was added, in the lower right corner there is a fragment from the concept of the military economy used by Western experts. It says that the military organization of the state produces such specific "commodity" as military security.

Today, the Russian Federation carries out military-technical cooperation with 81 countries of the world, which, of course, is not the limit (Zubovich, 2010). Domestically produced products were directly supplied to 65 countries (Starkin, 2006). Using the available potential, Russia intends to expand the markets for the sale of its weapons, taking every possible effort to do this, which leads to strengthening the military-political positions of the Russian Federation in various regions of the world, and also brings significant financial resources to the economy of the country.

CONCLUSION

External economic, social, military and political challenges, the changing world around Russia determine the functionality and the content of its military policy. In determining its focus and at present, the military-political authorities of the country proceeds from the following principles:

TABLE 1: COMPARISON OF DOMESTIC MILITARY-ECONOMIC CONCEPTS WITH FOREIGN CONCEPTS

	<i>Defense Economy</i>	<i>Com. -></i>	<i><- Com.</i>	<i>Handbook of Defense Economics</i>
1. Defense economy and military economy theories		1	1	1. Introduction
2. Military-economic power in the system of security		2	2	2. Defense Economics and International Security
3. Defense industry and military-technical policy		14	?	3. World Military Expenditures
4. Distribution and exchange (circulation of defense economic resources and products), market of military goods		12?	4, VGB?	4. The Demand for Military Expenditure
5. Defense end-use		?	14?	5. Military Alliances: Theory and Empirics
6. Efficiency of defense economy. Military-economic analysis		1?	?	6. Arms Races and Proliferation
7. Defense economy management		12?	?	7. Theorizing about Conflict
8. State defense order and contract system for its implementation		12?	?	8. Insurrections
9. Defense expenditure		4?	?	9. Terrorism: Theory and Applications
10. The relationship between military and civil production in the process of economic support of defense (war)		10, 11?	10?	10. Defense Expenditure and Economic Growth
11. Economic readiness of the state for defense		10?	?	11. Military Expenditure and Developing Countries
12. Economic mobilization		11?	3, 4, 7, 8?	12. Incentive Models of the Defense Procurement Process
13. Conversion of military production: military-economic aspect		?	?	13. The Economics of Military Manpower
14. International Military-Economic Relations		18?	3, 7, 10-13	14. The Defense Industrial Base
15. Economy of the Armed Forces		?	18, 8, ?	15. Economics of Defense R&D
16. Economic aspects of material and technical support of the Armed Forces		?	3?	16. Industrial Policies in the Defense Sector
17. Military-economic analysis of combat training and combat activities		?	?	17. Regional Impact of Defense Expenditure
18. Economic support of the creation of scientific and technical products for special purposes		?	14?	18. Economics of Arms Trade
19. Economics of the Armed Forces Production Sector		?	20?	19. Economics of Disarmament
20. Disposal of weapons and military equipment of the Armed Forces		19?		
21. Labor relations in the economy of the Armed Forces		?		
Evolution of military-economic thought in Russia		1?		
National Defense Budget				

- Historically, Russia, by virtue of its geopolitical position and the existing potential, along with other leading nations of the world, is responsible for maintaining global security, both globally and regionally;
- Russia aims to ensure equal participation of all interested nations to implement joint actions in solving global problems of humanity;
- Russia will work to anticipate the course events, remaining ready for any scenario of the development of the military-political situation.

On the basis of these principles, the modern military organization of the state and the system of its administration are being improved. The military organization of the Russian Federation includes the Armed Forces, other troops, military formations and bodies designed to carry out security tasks by military methods. The military organization of the state also includes a part of the defense-industrial and scientific potential that performs tasks in the interests of the country's defense.

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