

## **CAN THE MILITARY INDUSTRY COMPLEX TURN INTO A LOCOMOTIVE OF GROWTH IN ARMENIA'S ECONOMY**

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### ***Introduction***

Military industry has a strategic importance in the development of the economy of any country. It is especially important for the Republic of Armenia in the conditions of an unfinished war.

Moreover, in our opinion, it is meant to become the engine of economic development as it is in many developed countries of the world. In the near past, Armenia's economic growth was also based on information technologies and innovations initially utilized in military-industrial complex.

Current government of Armenia has clearly formulated and defined its priorities for economic development. The first is the development of information and high technologies in Armenia. This part of the national economy is developing dynamically. It is also planned to strengthen the military-industrial complex of Armenia, because it can become a locomotive for the entire economy of the country. Another field of growth is the development of tourism. And the third is agriculture<sup>1</sup>.

### ***Methodology***

Among various methods our research is conducted on the basis of the major approaches adopted by the state due to the fact that government continuously discusses the mentioned issue in the regularly convened sessions of the military-industrial committee, referring especially to the establishment of a modern military industrial complex. In addition, statistic data is widely used to examine the dynamics of reforms related to the military-industrial complex along with the figures from the state budget, particularly, the military expenditures and the expenses related to the innovations in mentioned field. Methods of comparative analysis and statistic lines help to study the best practices both internally and internationally, including the success stories of strategic partners and other developed nations. In addition, international reports and scholarly articles were studied to learn more about current developments and trends in the region and worldwide.

### ***Literature review***

There are numerous scholarly articles and papers related to the military-industrial complex. Some authors concentrate on cooperation between the state and the private sector in

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<sup>1</sup> [www.primeminister.am/ru/interviews-and-press-conferences/item/2018/05/30/Deutsche-Welle/](http://www.primeminister.am/ru/interviews-and-press-conferences/item/2018/05/30/Deutsche-Welle/)

improving the competitiveness of the military production [Bender, 2010, 26] and low level of efficiency of government procurement [Cowen et al., 1992, 219–227], while the others pay more attention to the issues how to utilize the intellectual potential for the defense needs [Coyne, 2015, 371-396] both during the war and the peace time [Coyne & Goodman, 2020, 279-292]. Some experts discuss the political and economic relations of security problems [Coyne et al., 2019, 1-11], particularly focusing on the so-called manufacturing militarism with the government propaganda in the war on terror [Stanford, 2021, 11]. The state of economic mobilization of resources was thoroughly discussed by R. Smith [Smith, 1991]. It is also worthy to consider the study of T. Duncan and C Coyne analyzing the origins of the permanent war economy [Duncan et al., 2013, 219-240], as well as the role of cable news and information technologies in mentioned field [Grim et al., 2021, 19]. The political economy of war and peace were also studied by R. Higgs and others [Higgs, 2006], [Hossein-Zadeh, 2006], [Schweizer, 2013]. In case of Armenia, issues of special interest are closely related to the strategic partners, member countries of Eurasian Economic Union, as well as the BRICS nations. These issues are of continuous interests of E. Arapova, L. Zelin and others [Zevin, 2019, 40; Arapova, 2018, 87–101; Karlik et al., 2017, 384–395]. Finally, O. Bahlova, N. Ivanova and V. Ivanter consider the relations between the military-industrial complex and the economy as a part of foreign economic and political relations among CIS countries [Bahlova, 2019, 482–511; Ivanova, 2013, 20; Ivanter, 2017, 3–16].

### ***Scientific novelty***

Issues related to the military-industrial complex are usually discussed isolated from the objectives set for the economy. This article attempts to tie the economic growth of Armenia with the priorities of improving the defense after the aggression of neighboring Azerbaijan and occupation of territories in sovereign country of Armenia after the 44-day war and occupation of independent, unrecognized state of Artsakh.

The main topic in this article is related to the innovations and high tech achievements in Armenia that may serve as a basis to improve the level of competitiveness of the national economy and turn the military-industrial complex into a locomotive of economic growth.

### ***Analysis***

In general, the military industry is one of the most discussed topics of the country, particularly, after the adoption of the law on the "Military Industrial Complex" in Armenia in 2015. But, in fact, the results we have today are not at all satisfactory, because, unfortunately, it was not possible to achieve the formation of such systems and the military-industrial complex is not well established in the Republic of Armenia. due to the new situation after the 44-day war, and later in 2020 and the following years, perhaps it should be summarized what happened in the previous period, the gaps in the previous period, and understand what realistic plans we can have in the field of military industry,

so that the first, that complex can contribute to the economy of our country and to become the driving force behind the industry and, on the other hand, be able to meet the security needs in line with modern challenges<sup>1</sup>. It should be noted that the RA Ministry of High-tech Industry, formed for this very purpose, is also taking certain steps to bring the works performed by the military-industrial complex to the level of indicators provided by the RA Government's activity and sector development program<sup>2</sup>.

Today there is a vital need to pay special attention to the directions of development and the clear tasks to be done in the coming years in the conditions of the post-war realities. In particular, it is necessary to give a new, more dynamic approach to the issues related to the technological development of the military-industrial complex, equipping it with relevant specialists, encouraging technological education, and creating an effective link between science-economy-military-industry.

Reforms of the secondary professional and higher education system and work on replenishing the demand for specialists necessary for the military-industrial complex are no less important among the priorities.

It should be noted that the list of special research and experimental construction works developed and approved by the mentioned ministry also needs to be updated.

It should also be noted that in this direction, during the years of independence, various concepts and programs were developed, which were not fully implemented [Khanbabayan, 2017, 3]. Global experience proves that defense industry enterprises are the basis for the innovative development of the national economy, because in this case the following characteristic features of innovation are organically combined:

- high competitiveness of manufactured products and export potential based on the development and implementation of advanced technologies;
- availability of "breakthrough" technologies and scientific and technical resources, which determine the possibility of forming new markets for high-tech products and developing new industries (information technologies, nano and bio-industry);
- availability of highly qualified human resources.

The innovative activities of military industry enterprises are carried out on the basis of technological requirements of promising models of military equipment, as well as innovative research and development activities.

Therefore, the main directions of innovative activity in the military-industrial complex should be a clear direction: the purposeful development of the scientific, technical and production technological potential of the defense industry, the basis of which is the crea-

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<sup>1</sup> <https://armeniatoday.news/hy/politics/205187/>

<sup>2</sup> [www.gov.am](http://www.gov.am)

tion of high-tech samples of military and civilian products, as well as dual-purpose products. In addition, the increase in demand for high-tech (innovative) products of the domestic defense industry is highlighted. At the same time, it is necessary to introduce a dispersed model of innovative activity of defense enterprises (transfer of technologies from the civil to the military sphere and vice versa), for which it is necessary to create an effective scientific and technological market in the country. Finally, it is important to change the paradigm of the relationship between the system of ordering military equipment and the defense industry so that they are mutually interested in the creation of innovative models of military equipment.

In terms of the formation of a real locomotive of the economy, special attention need to be paid to the production of dual purpose goods, as well as the exclusive role of the state in developing it.

It is also important to analyze and find out how the proposed policy of promoting "dual technologies" threatens the Armenia's technological security. At the current level of individual defense institutions involved in international projects, one can single out the lack of funding of the scientific research material base and the scientific-technological potential of the institution, the reduction, the increase in the prices of complementary and complementary materials, as well as the increase in infrastructure services (electricity, transport, gas and water tariffs, the low domestic demand for scientific products and the insufficient level of state patronage in terms of support for the export of high-tech products. For the most efficient solution of the mentioned problems, it is advisable, for example, compensation of production costs at each stage of the technological chain for the successful development of a new technology, at the expense of the next customer a certain crisis of the payment system in the whole economy, the chances of compensated implementation of technological innovations in the domestic market should be estimated as minimal. While having limited potential of selling their own developments in large volumes in the domestic market, defense institutes are looking for opportunities to sell technologies, "know-how" in foreign markets. Technological scientific corporations start exporting technology abroad only after mastering the domestic production of new products for the implementation of new technologies. For this reason, by promoting the development of "dual technologies" within the framework of the corresponding program, the state supports the development of new technologies up to the stage of applied and experimental production. Overseas manufacturers of science-based products with R&D expenditures [Snyder et al., 1998; Varian, 1992, 17-24]. Buying the latest technologies from the domestic "defense", which are used in the production of intermediate products, foreign companies then export finished products to world markets. The opportunities provided to Armenia in the context of EAEU membership should not be neglected.

So far, the official documents related to the economic and technological security of the country do not state the need to create stable internal relations between producers and consumers of scientific technologies and certain independence in important directions of technological progress. It is also essential to find out at what expense the necessary support can be realized. It is obvious that in this matter it is also important to take as a basis Armenia's national security strategy and economic security priorities [Bellais, 2013, 59-78]. Taking into account the developments taking place in the global economy and the region, it can be noted that the increase in the competitiveness of Armenia's economy is primarily due to the level of development of information technologies in the country<sup>1</sup>. For comparison, it should be noted that specialists in this field, not only in developing countries, but also in developed countries, are among the qualified workforce that will never become unemployed in the 21st century [Manasserian, 2006, 5-12]. In other words, the intellectual capacity of the country must be used for the effective solution of the employment problem [OECD, 2017]. Of course, competition in this arena does not allow to outlining only optimistic scenarios. In terms of competitiveness, Armenia should take into account the benchmarks of India, China, Israel and others and try to learn lessons to be ready for today's and tomorrow's challenges [Anderson, 2001, 6]. It becomes clear that neither the state financing nor the targeted policy that exists today gives grounds for much enthusiasm. Therefore, the solution of the problems of financing the production and export of dual-use products should be considered in a systematic manner, in the development of the sector's development plan and in the framework of its implementation. On the one hand, such an ambitious program requires, in our estimation, financial resources of almost half of the state budget of the Republic of Armenia, so it may cause skepticism in terms of realism. On the other hand, considering the importance of such a program and the relations to other branches of the economy, we are sure that the involvement of management structures of almost all sectors, including material and intellectual resources, can save a significant part of the costs. With the participation of the state and the private sector with the funds of the high-tech fund, as well as with the help of the tenders organized by the RA State Science Committee in order to establish production in each sub-sector, by issuing state securities that will be distributed in Armenia and abroad.

The role of the information technology sector becomes more important when we consider it as one of the important export directions of the country and as a key factor in ensuring the country's information security.

The devalued dram has caused some damage to the country's export-oriented industries and led to the fact that the import volumes in the country's trade balance are almost three

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<sup>1</sup> Strategy for National Security of Armenia, 20 July 2020, [https://www.primeminister.am/u\\_files/file/Different/AA-Razmavarutyun-Final.pdf](https://www.primeminister.am/u_files/file/Different/AA-Razmavarutyun-Final.pdf)

times higher than the export volumes: the dram should be allowed to really return to its natural value, which can be attributed to the policy of managed floating exchange rates, which is most acceptable in the created situation.

Despite the liberal system of the economy, the state also plays an important role in establishing favorable conditions for the production of dual purpose goods and technologies through innovations. Starting with the demand for them in domestic and foreign markets, the presence of non-market pricing factors, ending with the need to maintain certain confidentiality, state control and certain participation in the stages of their introduction, development, maturity and decline becomes imperative. Moreover, the whole period and its individual stages acquire characteristics that can be somewhat different from the scientific foundations that were fixed in the teaching of the same name by Raymond Vernon and developed in other economic theories [Anderson, 1994, 32-40].

Furthermore, tax incentives should be given to companies willing to apply domestically produced information technologies and tax exemptions to those who are willing to donate computers and other related devices to the public in different regions of the country. It is worthy to consider the era of Ronald Reagan, one of the former US presidents, when large companies started donating computers to educational and scientific institutions, thereby contributing to the rapid development of information technologies in their own country not only to learn from the past and from other countries, but also to make the right use of the opportunities given to us [Vernon, 1966, 190–207; Ayal, 1981; Shapiro & Varian, 1998, 32-34].

### ***Conclusion***

Armenia's military-industrial complex is developing day by day, but there is a serious problem of concentration of forces. "Azatazen" has created a serious production of anti-aircraft missiles, ballistic plates, and body armor in Armenia. Despite the positive trends, there is a need for pan-Armenian unity. There are serious specialists, engineers, technologists in the diaspora. It is necessary to put aside the competition on the micro level and consider the key interests of the state. There is an obvious need for unity, which can be the key to real progress on this issue.

It should be noted that at the DigiTech 2023, 2024 exhibitions, various types of weapons were presented, the production of which uses technological developments, attributes, including distance and speed measuring thermometers, night vision devices.

After the 44-day Artsakh war, the Armenian government announced the decision to make the military-industrial complex one of the locomotives of the country's economy. During the last 5-6 years, the financing of the sector has increased 4 times. According to the 2024 state budget, 6.8 billion drams were allocated for the development of the military-industrial complex.

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**Nairi SARGSYAN**

**Can the military industry complex turn into a locomotive of growth in Armenia's economy**

*Key words: military industry complex, locomotive, economic growth, competitiveness, technological development*

This study examines the possibility of turning the military-industrial complex into a locomotive of the economy. The government tries to get orders from other countries, in particular, from EAEU member states. Here, the active role of the Diaspora cannot be overlooked. In addition to the ambitious projects of technopolises today more than ever they can also be real in the sense that new technologies can be imported from abroad at more favorable prices from some developed countries. Finally, the government should review the import duties for technologies to promote their entry and use in Armenia. In particular, the tax policy should be established for the development of information technologies new, state-of-the-art free technology zones, which are exempt from basic taxes.