
EXPORT POTENTIAL OF THE DEFENCE INDUSTRY OF SERBIA AND THE PERSPECTIVE OF FURTHER AND SUSTAINABLE DEVELOPMENT

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Abstract: The economic and security stability of Serbia is closely related to the state and development potentials of the Serbian defense industry. Accelerated development and integration into the flows of the national and international economy of this sector of the economy, through the procurement of new technologies, and the growing export potential in recent years has been recognized as an essential element of the national security policy of the Republic of Serbia.

The Defense Industry of Serbia today is a guarantor of the security of vital defense interests and significantly influences economic activity. Competitive advantages distinguished by the defense industry of Serbia are the professional competence of the employees, the volume of production capacities, the recognition and competitiveness of certain segments of the production program in the foreign market, the scientific research community and the experience in research, development of certain products and the production itself. A steady development of the entire economy must to provide preconditions for increasing the budget aimed at defending the country. That would be one the parties allowed to increase production in factories of the Serbian defense industry, and with others would influence the easier placement of individuals combat systems, weapons and military equipment in foreign markets. The paper analyzes systematically the export potential of this industrial branch, as well as its impact on the overall economy of Serbia and the economic activity of the country.

The results of the survey also show adequate measures that the Government, through its line ministries of defence, should take to ensure continuity in production and ensure further sustainable development of the industry.

Keywords: defense, Serbia, analysis, industry, finance

INTRODUCTION

In the region of the Western Balkans for the export of weapons and military equipment, the Republic of Serbia is leading. Therefore, the area of defence industry, its further development, with a focus on the sustainability and growth of the country, as well as the strengthening of the defence capabilities of the country, is of paramount importance for the European Union and its members, as it also strengthens the common security of the European Union (Nikčević, 2009). The dedicated industry in Serbia is made up of a large number of companies engaged in the production and trade of weapons and military equipment. These companies are both state-owned and privately owned. The Ministry of Defence of the Republic of Serbia has significant powers when it comes to companies that are in the majority state ownership because it manages and supervises their work, in accordance with the Law on Defence ("Official Gazette of the Republic of Serbia", No. 116/2007, 88/2009, 88/2009 - other law, 104/2009 - other law, 10/2015 and 36/2018). The defence industry of Serbia in the narrow sense consists of the following state-owned companies: HK «Krušik» a.d, «Milan Blagojević-namenska» a.d, «Prva Iskra» a.d. Barič, "Prvi partizan" a.d. Uzice, Sloboda a.d. Cacak, "Zastava oruzje" a.d. Kragujevac and "Jugoimport" SDPR. In addition to these companies, there are another 216 companies that have a license for the production and trade of weapons and military equipment, which closely cooperate with the dedicated defence industry, as well as numerous other entities involved as subcontractors, among which are numerous institutes and faculties with professional and the academic community. This group of companies is heterogeneous in terms of ownership structure, core business and size - these are predominantly small enterprises and, to a lesser extent, medium-sized enterprises, in majority private ownership, and collectively employ around 8000 persons. This second segment of the Serbian defence industry, companies primarily belonging to the metal complex, electrocomplex and chemical complex, constitute significant organizational units and have production programs of the defense industry (Radić et al, 2006). Together with the aforementioned seven basic factories, they represent a strong industrial base of defense capacities. The third part consists of the Military Technical Institute, the Technical Expertise Center and three technical repair

institutes within the defense system, that is, the Ministry of Defence and the Army of Serbia, and which primarily serve to improve the current situation and further development of funds.

From an economic point of view, the defence industry employs a large number of people, which directly affects employment in locations where the enterprises are stationed, affects economic development and provides a sustainable development of this sector of the economy, which directly stimulates economic activity; it affects social cohesion and balance of payments through strengthening export potential. It is important to point out that, as noted above, it generates scientific and technological and industrial development, and strengthens the global political and military position of the Republic of Serbia both in the region, in the region, among the countries of the Western Balkans, as well as in the world (Radić et al, 2006).

The defence industry of the Republic of Serbia is a respectable national capacity whose development role is twofold: permanent increase in exports and securing the necessary national self-sufficiency for the defence system. In the last two or three decades, the defence industry of Serbia has gone through periods of great temptations, but has shown exceptional vitality and survived in changed conditions, both on the domestic and the world market. In addition, this branch of industry has the potential to develop a high growth rate, based on decades of tradition and experience in the production of weapons and military equipment (Radić & Radić, 2018), high quality products, price competitiveness, specific knowledge and great interest of foreign customers. The export strategy is based on recognizable production, successfully implemented export projects and arrangements around the world, as well as the establishment of broken links with customers. According to the achieved positive export results, which are improving since 2012, the position and state of the defense industry in Serbia is changing (Ilić, et al 2015). In this regard, the Government of the Republic of Serbia, in agreement with the ministries of defence, economy and finance, approved investments in the amount of more than EUR 150 million for the reconstruction, modernization and expansion of existing capacities and the purchase of necessary machinery and equipment by 2020. This will contribute to hiring new workers, increasing production volumes and achieving the vision of exports of weapons and equipment in the amount of one billion euros.

In the European Union there is no single regulation in the field of export controls of arms and military equipment - each country regulates this matter by national regulations within the EU common foreign and security policy, as an expression of political will, so that the regulations in Serbia are harmonized fully with European Union regulations, specifically referring to the Common list of Military Equipment; The Joint Statement of the Council 2008/944 / CFSP- / 944 / CFSP - EU Code of Conduct on Arms Export and with the EU Common Position on Arms Brokering, Goods located on the National Control List of Arms and Military Equipment that include new and semi-military weapons and military equipment, that is, goods that are designed or modified for military use. The National Checklist for Arms and Military Equipment, as well as the EU Military List, includes a list of goods for international control regimes in the area of weapons and military equipment, such as Wassenaar Arrangement-WA, Missile Technology Control Regime-MTCR, Nuclear Suppliers Group-NSG, The Australia Group -AG and Chemical Weapons Convention-CWC (Ministry of Trade, Tourism and Telecommunication).

ANALYSIS OF EXPORT POTENTIAL

According to the originator capital of the persons enrolled in the Register of Authorized Persons for performing the operations of export and import of weapons and military equipment, as at 31 December 2016, domestic capital prevails with about 92.06% (174 persons), while the share of foreigners is about 3.7% (7 persons), or mixed capital of about 1.58% (3 persons). Starting from the criteria established by the Law on Accounting and Auditing (Official Gazette of the Republic of Serbia, Nos. 46/06, 111/09, 99/11 and 62/13), the number of registered and re-registered in 2016 was 37.56% and 71 micro of businesses, 47.61% and 90 small ones, 7.4% and 14 medium-sized ones, 5.82%, respectively 11 large companies and 1.58% and 3 entrepreneurs. In the current year 2019, the structure and number of economic entities that have a license for the production and trade of weapons and military equipment and which are registered at the same time have changed significantly in its scope (Perić & Lijaković, 2012).

For the export of weapons and military equipment in 2016, 378 permits were issued, in the total value of about 911 million USD. Compared to 2015, the total number of licenses issued decreased by around 18%, while the total value of licenses issued increased by around USD 104 million (by around 13%).

Licenses were issued for the export of arms and military equipment to customers in 62 countries, which in relation to 2015 means that the market is narrowed down to six countries. In addition, export licenses were issued to end users in 71 countries. In the foreign trade of arms exports and military equipment for 40 countries of the final destination, agents from 23 countries participated. According to the number of issued permits, the most attractive

are the following destinations: Republic of Bulgaria (50), United States (28), Republic of Cyprus (20), Romania (20), United Arab Emirates (18), Montenegro (17) and Nevis (15), Bosnia and Herzegovina (14), Republic of Azerbaijan (13). 195 permits were issued for these 9 destinations in 2016, accounting for 52% of the total number of licenses issued for the export of weapons and military equipment (Ministry of trade, tourism and telecommunication, 2017).

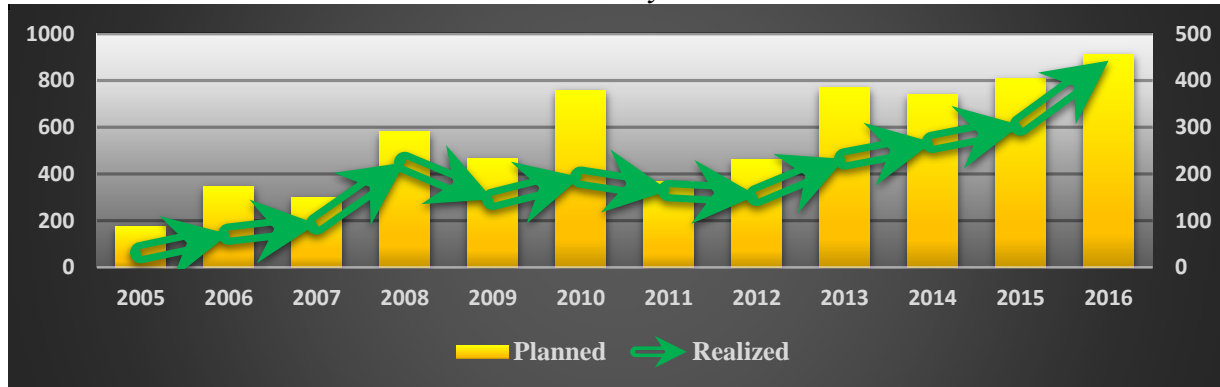
Table 1. Realization of issued licenses for the export of weapons and military equipment to defence companies in the period from 2005 to 2016 business year (in millions USD)

Business year	2005	2006	2007	2008	2009	2010
Planned	176.45	346.33	300	580.69	467.02	757.88
Realized	31.42	71.25	93.12	224.35	145.5	192.64
%	17.81%	20.57%	31.04%	38.64%	31.15%	25.42%
Business year	2011	2012	2013	2014	2015	2016
Planned	369.35	460.03	768.08	739.77	807.17	911.21
Realized	164.02	153.69	231.99	267.85	304.28	442.52
%	44.41%	33.41%	30.20%	36.21%	37.70%	48.56%

Source: Authors' calculation based on data of Ministry of trade, tourism and telecommunication (www.mtt.gov.rs)

The total value of completed foreign trade activities of exports, according to the licenses issued to exporters for the first eight destinations, amounts to 733.24 million. USD, which makes up about 80% of the total value of licenses issued for the export of arms and military equipment in 2016. The value of licenses issued for all other destinations is EUR 177.97 million. USD (Radić & Radić, 2018), which makes up about 20% of the total value of licenses issued for the export of weapons and military equipment in 2016. Observing the value of licenses issued for the export of weapons and military equipment in 2016, the most important export destination is the United Arab Emirates with an agreed value of around 20% of the total value of the licenses issued. Immediately behind the United States (the largest destination in the previous seven-year period from 2009 to 2015), with about 19% of the share in the total value.

Figure 1. Realization of the planned export of weapons and military equipment of the Serbian defence industry



Source: Authors

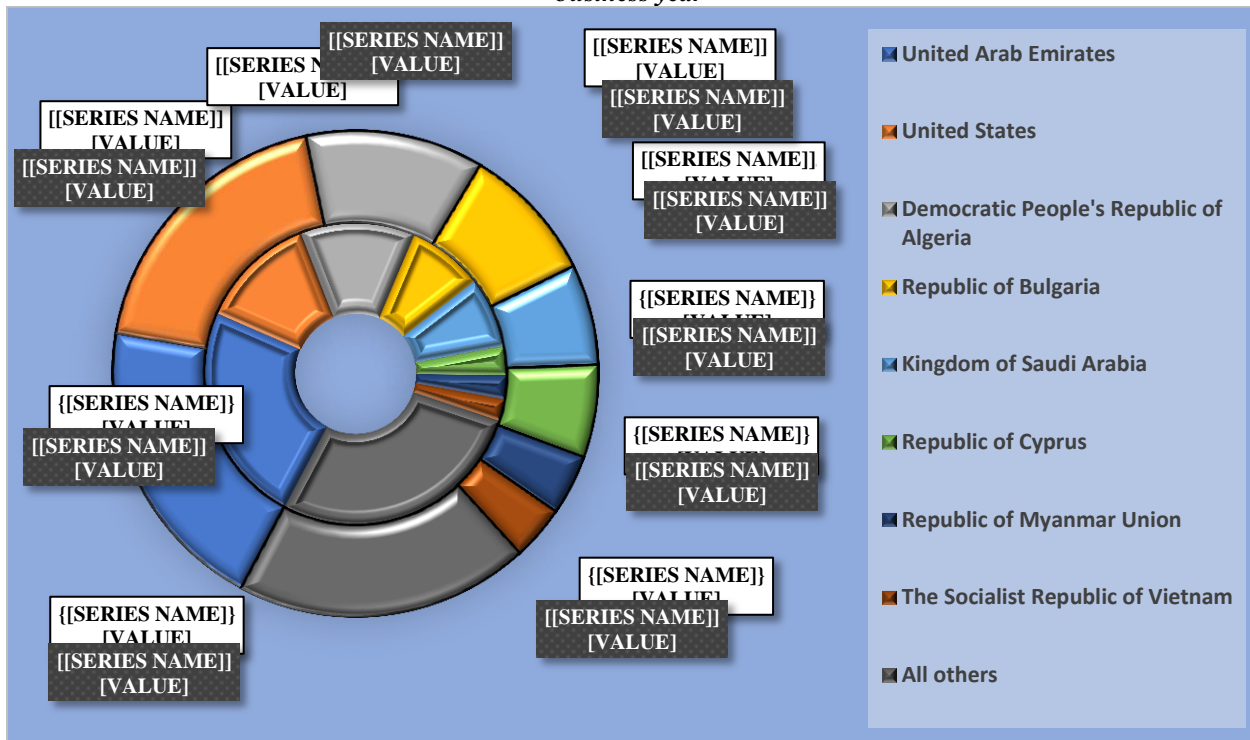
In the analyzed period 2005-2016 For the business year, the total value of licenses for the export of weapons and military equipment is over USD 2 billion (US \$ 2,322.62 million). During this period, a significant surplus in foreign trade in the field of arms and military equipment was achieved, with a cumulative amount of nearly USD 2 billion (USD 1,840.46 million), which indicates the great potential of our dedicated industry. The growth of export growth is constantly exceeding the growth rate of imports of weapons and military equipment in the observed

period. In 2016, the largest surplus of the trade balance from the introduction of civil control in this area was realized, amounting to 308.92 mil. USD.

As shown in figure 1, in the analyzed period of 12 years there is a trend of growth of export of products of the Serbian defense industry, with mild variations. Observing the balance of payments and foreign trade balance, the realization of licenses issued for the export of products for this purpose is in constant growth, which has an economic impact on the country.

If we observe statistically, the number of licenses issued for export and import as well as their values has been steadily growing. This leads us to conclude that Serbia's military industry represents an export-oriented branch of industry, which has a significant surplus in foreign trade (Ilić, et al, 2015), and that the foreign trade of weapons and military equipment has a growth trend, as well as that the export of Serbian weapons and ammunition is present in the world market in taking into account that this product is exported to over 65 different countries and that export business is expanding by expanding into new markets, finding new customers and contracting new businesses.

Figure 2. Comparative analysis of export destination of weapons and military equipment for 2015 and 2016 business year



Source: Authors' calculation based on data from Ministry of trade, tourism and telecommunication

In terms of value, the most important export destinations in 2016 were: United Arab Emirates (US \$ 181.57 million or about 20% of total value), United States (US \$ 173.04 million, or about 19%), Democratic People's Republic of Algeria (USD 108.49 million, or about 12%), Republic of Bulgaria (USD 83.27 million, or about 9%), Kingdom of Saudi Arabia (USD 60.98 million, or about 7%), Republic of Cyprus (\$ 56.29 million, or about 6%), the Republic of Myanmar (\$ 36.30 million, or about 4%) and the Socialist Republic of Vietnam (\$ 33.30 million, also about 4%)(SEESAC, 2018).

The main indicators of the performance and improvement of the domestic defence industry's operations are increased exports, employment of new workers and significant investment investments. Since the export of weapons and military equipment (Radić & Radić, 2018), Serbia has invested \$ 1.215 billion in the last five years, 22 and according to the opening of new companies and the growth of the defence industry, the value of arms exports will

grow from year to year. One of the main indicators of the vitality and competitiveness of Serbia's defence industry is a constant trend of increasing exports

DISCUSSION

The defense policy of the Republic of Serbia is aimed at creating appropriate internal and external, political, economic, social, military and other conditions for the preservation and protection of vital defence interests. Defence policy is based on strengthening its own defense capacities (Ilić et al, 2016), European foreign policy orientation and the ability to participate actively in the processes of cooperation and joint action with other countries and entities of international relations in the building of national, regional and global security. Defence resources influence the functioning of the defense system and its ability to respond to challenges, risks and threats to security and is in the function of protecting the interests of the Republic of Serbia. The material resources of the defense encompass natural, economic, financial, information, technical, technological and other potentials that are engaged for defense (Radić & Radić, 2018). On table 2 is shown SWOT analysis of Serbian defence industry, through which the essential things that distinguish the business of these enterprises can be obvious, and which can be influenced by good management, and maximize the influence of this industry.

Table 2. SWOT analysis of Serbian defence industry

Strengths	Weaknesses
<ul style="list-style-type: none"> - professional competence of employees, - the volume of production capacities, - recognition and competitiveness of the segments of the production program in the foreign market, - scientific research community and experience in research, development of certain products and the production itself 	<ul style="list-style-type: none"> - technological constraints on a part of production capacities, - unfavorable age structure of staff, - low level of investment in research and development, - insufficient use of the results of civilian projects for defence purposes, - insufficient application of modern ecological standards in production and - poor energy efficiency.
Opportunities	Threats
<ul style="list-style-type: none"> - bilateral agreements on the joint development and production of weapons and military equipment, - the possibility of foreign investments, - increased demand on the international market, - greater use of the results of civil projects, - pooling and sharing of capacities at the regional level. 	<ul style="list-style-type: none"> - insufficient demand for products due to uncertainty in the international arms market, - restrictions on imports of equipment, raw materials and technologies and the export of finished products, - insufficient level of investments, - inadequate school system for craftsmen and - inherent possibility of incidents in production.

Source: Authors

Regardless of the fact that the problems that burden the business of the defence industry are inherited and have not been solved for almost twenty years, the issues of employment, staff training, as well as ensuring the economic factors of business (profitability, higher exports and employment, modern corporate governance and management) enterprises (Jovanovic, 2010). Decisions should be the result of the analysis, impact and participation of all stakeholders. The vision of development and the dimensioning of the defence industry's capacities should follow the vision of the development of the defense system, as well as the need to equip the Serbian Armed Forces with a key factor. Formalisation of goals, criteria and limitations decisively influences the strategic defenses of the development of the defense industry. However, in the function of its own economic sustainability, the development of the defense industry should have a high degree of freedom and autonomy in terms of exit to the increasingly demanding world market (Beriša, 2014).

What the Ministry of Defence focuses on, and what has been invested in recent years, is the strengthening of the competitiveness of the defence industry in the world market, and stimulates the continuous increase in exports, its increased participation in equipping the Army with complex combat systems, and the inclusion of this group of companies into the European defense and technological industrial base, in accordance with the dynamics of EU accession (Nikčević, 2009). This goal can be achieved only by the consistent and coherent realization of the following activities:

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- Increasing the volume of investment in the development and modernization of production capacities - which should be based on the principles of the concept of digitization of factories;
 - Increasing and directing financial resources for the research and development of new technologies and products,
 - Implementation of contemporary standards and criteria for the quality control of products and production processes;
 - Optimizing production capacity;
 - Integration and coordinated performance at the market;
 - Improving corporate governance.

CONCLUSION

As a member of the UN and a significant exporter of weapons and military equipment to the region of Southeastern Europe, the Republic of Serbia fully meets all the undertaken international obligations, as the strengthening of the state and its credibility implies a high level of responsibility in the field of export of all defense products and services. Serbia's security integrations to the domestic defense industry brought a number of benefits from various spheres, but primarily affected the expansion of market space. The state is making efforts to intensify the cooperation industry at the regional level, as well as observing global trends and trends. It is recommended to continue generating professional staff and adopting the technologies offered by the civil sector, as technological connectivity with leading national companies can bring crucial advantages to foreign markets through constructive solutions to existing production issues.

By cooperating and concluding a cooperation agreement with the Partnership for Peace signatories, cooperation with business partners from Russia, China, Middle East countries and NATO countries would develop long-term cooperation with mutual interest, and Serbian defence industry companies whose production is at risk from an environmental point of view - considering the production of gunpowder, explosives, ammunition - would greatly facilitate the achievement of the standard of standardization that exists in the EU in the protection of the environment, which requires from the economic aspect of the additional financial investment. In the coming period, we should work on strengthening the competitiveness of the defence industry in foreign markets and the continuous increase in exports, greater participation in equipping the Army of Serbia with complex combat systems and, in accordance with the dynamics of EU accession - preparations for involving this industry in the European defense and technological industrial base. It is obvious that these partial goals are complex, but can be achieved by increasing the volume of investments in the development, modernization and optimization of production capacities, increasing the resources for research and development of new technologies and products, applying modern standards and criteria for quality control of products and processes, as well as integration and coordinated performance in foreign markets.

REFERENCES

- [1] Radić N., Radić V. (2018). Foreign Direct Investments in the Defense Industry of Serbia, *Military Work* 5/18, pp. 163-190.
- [2] Nikčević S. (2009). Security integration and the Serbian defense industry. *Chance for sustainable development. Economics and Security*, Center for Civil-Military Relations, Belgrade, pp. 169-179.
- [3] Radić V., Radić N. (2018). Economic Aspects and National Self-Sufficiency of the Defense Industry of Serbia, *Military Work* Vol. 70, No. 4, pp. 162-179.
- [4] Radić N., Radić V. (2018). Restructuring and competitiveness of the defense industry of the Republic of Serbia. *Military Work*, Vol. 70, No. 6, pp. 191-216.
- [5] Jovanović D. (2010). Risk management in the production of weapons and military equipment. *Vojnotehnički glasnik* 1/10, pp. 5-12.
- [6] Ilić D., Bulajić S., Tomić S. (2015). Management and Perspectives of the Defense Industry of Serbia. *Regional Scientific Research and Business Conference «Limen 2015»*, pp. 274-280.
- [7] Radić D., Žakula B., Jovanović V. (2006). The impact of industrial property on the technical and technological factor of defense. *Vojnotehnički glasnik*, 54 (4), 489-501.
- [8] Beriša H. (2014). Advantages and disadvantages of the Republic of Serbia's entry into NATO. *Megatrend Review*, Vol. 11, No. 12, pp. 271-295.

- [9] Perić N., Lijaković A. (2012). Possibilities for Improving the Marketing Appearance of the Defence Industry of the Republic of Serbia in the Global Market of arms and military equipment, *Military Work* Vol. 64, No. 3, pp. 362-371.
- [10] Ministry of Trade, Tourism and Telecommunications (2017). Annual Reports on the realization of export, import, brokerage and technical assistance in the field of arms and military equipment for 2015 and 2016. Retrieved from www.mtt.gov.rs, accessed on February 3rd 2019.
- [11] Ilić D., Tomić S., Bulajić S. (2016). Implementation of a new assault rifle as a model for the factory "Zastava Arms" military program consolidation, *International May Conference on Strategic Management - IMKSM 2016*, Bor, Serbia, pp. 395-404.
- [12] The South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons (SEESAC), (2018). Regional report on arms exports in 2016, pp. 1-70.
- [13] Law on Defence, "Official Gazette of the Republic of Serbia", No. 116/2007, 88/2009, 88/2009 - other law, 104/2009 - other law, 10/2015 and 36/2018.
- [14] Law on Accounting and Auditing, "Official Gazette of the Republic of Serbia", No. 46/06, 111/09, 99/11 and 62/13.