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DAVIT SHATAKISHVILI

184

EXPERT OPINION





საქართველოს სტრატეგიისა და საერთაშორისო ურთიერთობათა კვლევის ფონდი
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Introduction

Russia's military industry is a fundamental factor of its national power. The enterprises operating in its defense sector are largely state-owned. Consequently, Russia's sizeable military corporations and their subsidiary organizations operate not on the principles of a competitive domestic market, which is one of the key foundations of technological progress, but their main goal is to pursue Moscow's political interests and ensure the stability of the regime. Accordingly, along with military capabilities, having a powerful economic leverage in the form of energy resources, encourages Russia not only to pursue its own economic interests but also intimidate neighboring countries and extort their territories to satisfy its imperialist intentions. The responsibility of the defense industry in Moscow's current governing model is exactly on what the Russian government itself has based its legitimacy - military modernization, restoring Russia's strength and greatness. One of its ill-favored manifestations is the military aggression in Ukraine which is claiming the lives of thousands of innocent people.

The unprecedented scale of sanctions imposed by the West will clearly affect Moscow's defense capabilities but the only questions are - when and to what extent? Russian military production, on the one hand, helps the country to pursue an aggressive foreign policy and, on the other hand, arms exports are an important source of country's budgetary revenues. At the same time, this allows it to exert political influence over the purchasing states. The collapse of the Russian attack on Ukraine may not only sacrifice the hegemonic goals of the latter but also lead to the loss of existing and potential customers of its military weapons. There is no doubt that Russia is experiencing colossal military losses as a result of the war and, at the same time, questions are being raised about the quality of its arms and heavy equipment. Until now, there has been a consensus that Russian armaments were a viable and affordable alternative to Western weapons, although this statement could also be another victim of the war.

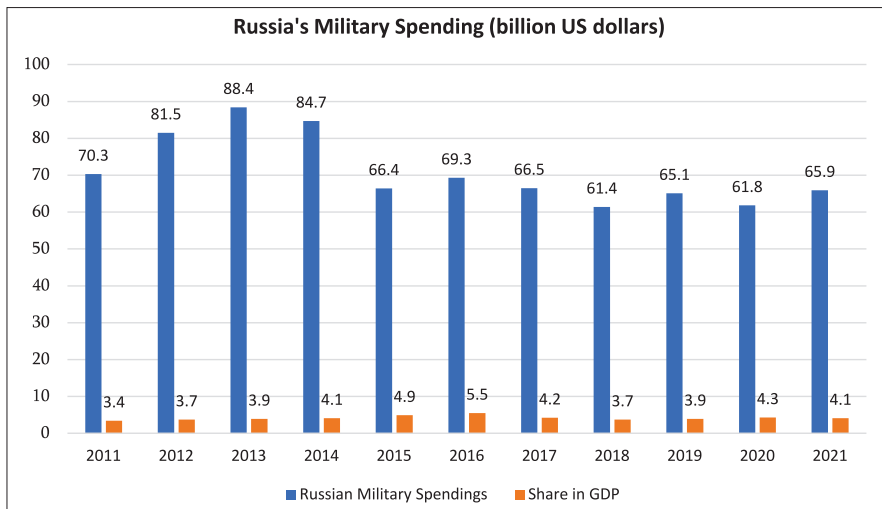
As a result of the sanctions, Russia faced not only financial but also technical problems. In addition to Western countries, Asia's leading technology powers have restricted Russia's access to critical components needed for military production. Existing restrictions apply to advanced technologies such as semiconductors, telecommunications equipment, software and encryption, microelectronics, aviation systems, oil extraction equipment and other manufacturing components. In this context, it is important to discuss the impact that economic sanctions may have on Russia's military capabilities, its recovery prospects and its aggressive foreign policy in the future.

Russian Military Expenditures

Every year, states progressively increase their defense spending. According to a recent annual report by the Stockholm International Peace Research Institute in 2020, the United States spent 778 billion US dollars on armaments, making it the world's leading country in this regard. The next places are shared by China (252 billion US dollars), India (73 billion US dollars), Russia (62 billion US dollars) and the United Kingdom (59 billion US dollars) (SIPRI, 2021). Under the North Atlantic Treaty Organization (NATO), member states are obliged to increase their military budgets up to 2% of their GDP. For comparison, the military spending of the leading EU countries looks like this: Germany - 53 billion US dollars, France - 52 billion US dollars, and Italy - 25 billion US dollars (SIPRI, 2021).

Moscow's military expenditures have increased significantly over the last three decades. Figure 1 shows the amount of Russian military spending in the last 11 years and its share in the Russian GDP. During this period, Russia had the largest expenditures in 2013, which exceeded 88 billion US dollars, and after the annexation of Crimea in 2014, its military spending has slightly reduced and stabilized, ranging between 62-69 billion US dollars.

Figure 1.



Source: World Bank, Revised by the author

Russia's military industry consists of about 1,300 companies which employ about 2.5-3 million people. The largest of these companies is Rostec which was founded in 2007 by President Vladimir Putin. The organization includes about 700 enterprises which together form 14 holding companies. Rostec's production cover up to 60 locations in the Russian Federation and it exports goods to more than 70 countries around the world. The Russian government spends most of its money on modernizing military weapons and heavy equipment. Given that Russia is experiencing colossal military losses after a severe war against Ukraine, it is likely that in this regard it will increase funding in the coming years to replenish its own stockpiles of losses. However, due to the massive economic sanctions and limited access to Western technologies, it is interesting to see how it will manage to do so. At present, Russia's only major source of budget revenue is the export of energy resources whose proceeds are used to wage the war against Ukraine, on the one hand, and protect the national currency and maintain a low inflation rate, on the other, all the while trying to make the economy appear normal while it is not.

Russian Military Production and Dependence on Western Technologies

Russia is one of the largest producers of weapons and heavy equipment in the world. Its military production nomenclature includes air defense systems (S-400, Tor-M1, Strela-10), armored vehicles (T-62, BTR, T-90S), fighter jets (Su-35s, MiG-35), missile weapons (9M113, Kh-35, PJ-10), engines and small arms of various production. Its most famous product is the AK-47 rifle, the so-called "Kalashnikov." It was created in the 1940s by Soviet Army General Mikhail Kalashnikov. It is a cheap, durable and easy-to-use standard infantry weapon used in more than 100 countries around the world. In its abbreviation, "AK" means "Assault Rifle Kalashnikov" and the number "47" represents the year of invention of the weapon (Al Jazeera, 2022).

In terms of military production, Russia is considerably dependent on Western technologies and manufacturing components, including semiconductors, microelectronics, chips, machine tools and software. The sanctions imposed by the West will affect not only the production of military equipment for the Russian Armed Forces and their foreign buyers but also the supply of spare parts, ammunition and updated packages to

existing customers. As a result, foreign buyers may decide to switch to more reliable sources of military equipment, although obviously this is not an easy process and requires additional financial costs. In Russia, there are already signs of tangible problems in military manufacturing. For example, the country has been forced to remove semiconductors from dishwashers and refrigerators in order to use them in making high-tech weapons.

At the end of March this year, the US Treasury Department imposed sanctions on a global network of individuals and fictitious companies. It seems that Russia was trying to circumvent the sanctions to get the necessary components for military production. According to the American side, these individuals helped Russia avoid multilateral restrictions on the export of leading Western technologies. In addition, the US Treasury Department imposed sanctions on four technology companies that supply microelectronics, navigation equipment and satellite imagery software to Russia. One of them is the company Mikron which is the largest manufacturer of chips in Russia. It is responsible for the production of debit card chips used in the Russian internal payment system MIR (Wilkie, 2022). The system was created in response to sanctions imposed after the 2014 annexation of Crimea.

The United States has also targeted three other industrial sectors of the Russian economy - air, naval and electronics - because they have strategic importance to the country's defense and armaments. Moreover, the sectors that were critical to the Kremlin war were the financial services, technology and defense industries against which the West has already imposed an unprecedented package of sanctions (Wilkie, 2022).

One of the targets of US sanctions was the Tactical Missile Corporation (KTRV). It is a Russian state-owned defense conglomerate that produces hypersonic weapons and technology that are actively used in radar systems and other multirole missiles. In late March, the Biden administration imposed sanctions on dozens of Russian defense companies in addition to the KTRV, including the High-Precision Systems Corporation which manufactures air-to-surface missiles such as the Iskander and anti-tank missile systems. The sanctions also apply to Techmash, a company that manufactures a variety of military munitions, missile systems and unguided bombs. The US Department of Commerce has introduced new export control restrictions aimed at halting the supply of US-made technology to Russia that could be used in the manufacture of military equipment,

even if this technology is supplied through third countries. These include microelectronics, telecommunications, information security equipment, sensors, navigation equipment, aviation electrical equipment and civil aircraft parts (OFAC, 2022).

The West believes that sanctions and tight export controls have affected Russia's defense industry and its recovery capabilities, especially when it comes to the military and electronics manufacturing components. To address the existing serious problems, Moscow has set up an inter-agency committee to find out how to obtain more military equipment from the internal market or from the so-called friendly countries, such as China - which may be willing to work around sanctions to supply microelectronic processors and ammunition to Russia which are the two biggest military needs for the latter. Additionally, the problem of workforce qualification will be acute in the near future. Up to 100,000 IT and software specialists have left the country since the start of the war and the number is expected to increase over time. This, in turn, will have a major impact on Russia's technological and military development.

Consequently, it seems, Western sanctions have forced Russia to dust off the Soviet defense systems and armaments. While the existing outdated military equipment is less accurate, reliable, capable and, at the same time, easy to notice for the adversary, the fact is that Russia simply has no choice but to use them at this stage (Detsch, 2022).

Even after the annexation of Crimea in 2014, Russian military production faced significant challenges. One of the reasons for this were the restrictions imposed by the West as a result of the military aggression in Ukraine which also affected the military-technological trade. Moscow's response to this action was that it would develop domestic production and use its own components. However, in 2019, Russian officials themselves acknowledged that technological replacement was a challenge for the Russian defense industry (Karputhin, 2019). Thus, by 2019, the debt of Russian state-owned defense armaments companies reached 10 billion US dollars while the financial liability of the entire Russian military-industrial complex exceeded 31 billion US dollars. The debt of large military equipment companies, in turn, has affected their research and technological development capabilities as well as product demonstration and testing processes (Banerjee, Tkach, 2022). For the past decade, achieving technological sovereignty has been an irreversible priority for Russia, especially since 2014, although achieving

this has proven to be a rather difficult mission for the country. One reason for this is the Russian strategy which is mainly focused on maintaining authoritarian power rather than encouraging economic and technological progress. As a result of the sanctions at that time, Russia was forced to import the necessary production components from various countries. Consequently, from 2014 to 2019, imports of semiconductors to Russia increased by 60% while imports of integrated circuits increased by 25%. Additionally, the country has dramatically increased purchases of various types of electronic equipment, telecommunications, spare parts and data storage systems (Ringhof, 2022). Unlike the retaliatory sanctions after the annexation of Crimea, the scope of the restrictions is much wider and more complex today and so more complications are expected in Russian military production.

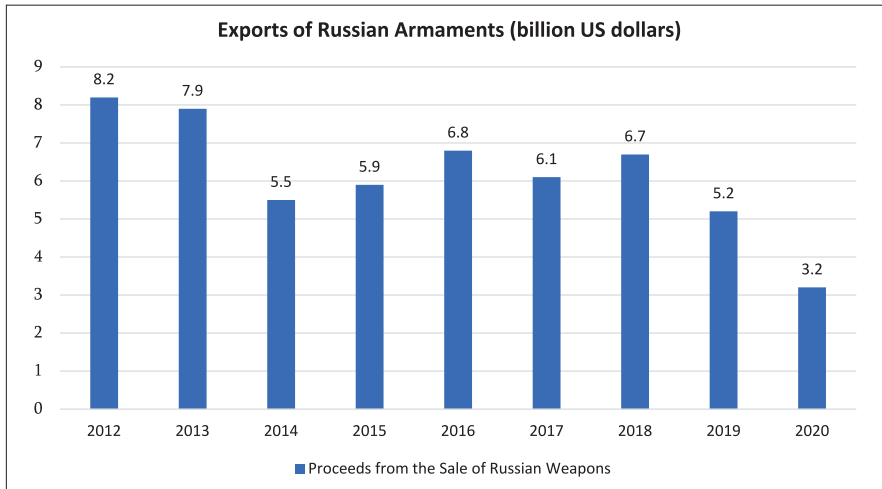
The Western leaders say that the steps they have taken will help disrupt Russian supply chains which will hamper and, in most cases, make it impossible for the aggressor to build, restore and modernize military equipment. Western decisions have been joined by global tech players from Asia such as South Korea, Japan and Taiwan. Consequently, it can be boldly said that Russia is largely disconnected from the global high-tech industry.

When it comes to replacing Western military and technological manufacturing components, the first alternative that comes to mind at this time is China. However, at this stage, China cannot fully satisfy the Russian market. Clearly, there is a certain political and economic rationale behind this. First of all, although China has made significant progress in recent years, there are still areas where Chinese technology lags significantly behind the manufacturing of both Western and Asian certain countries. For example, this is especially true for semiconductors. According to experts, the leading Chinese company SMIC is still a few years away from catching up with technologically advanced manufacturers of chips such as South Korean Samsung and Taiwan's TSMC. On the other hand, Russia's excessive reliance on China in terms of components is an unprofitable political position for Moscow in the context of the ongoing struggle for regional dominance. Moreover, Chinese companies are unlikely to ruin trade and partnership relations in Western markets and risk their own interests simply because they do business in a relatively insignificant Russian market (Ringhof, 2022).

Military Trade

Russia is one of the largest exporters of military weapons, holding the second place. In this regard, it lags only behind the United States. Russia accounts for 19% of global arms sales. In 2016-2020, Russia sold 28 billion US dollar worth of weapons to 45 countries around the world. Its largest customer is India from which it has generated 6.5 billion US dollars in revenue over the last five years. The next places are shared by China (5.1 billion US dollars), Algeria (4.2 billion US dollars), Egypt (3.3 billion US dollars) and Vietnam (1.7 billion US dollars). In addition, the list of buyers of Russian equipment includes the countries of Africa and Southeast Asia as well as the states of the Persian Gulf and Central Asia. Between 1990 and 2010, Russia expanded its sales to new customers such as Venezuela, Pakistan, Turkey, the United Arab Emirates and Myanmar. Russia's military exports include aircraft, engines, missiles, armored vehicles, air defense systems and a variety of small weapons (Al Jazeera, 2022). Figure 2 shows the revenue from Russian exported weapons. It seems that the Western sanctions of 2014 did not have a big impact on Russia in this regard and, despite the shortcomings, it actively continued to sell its own military equipment.

Figure 2.

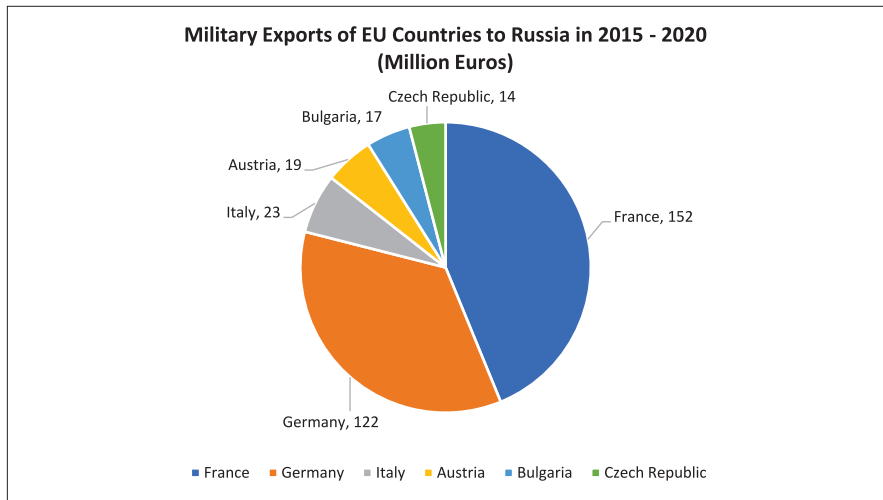


Source: Stockholm International Peace Research Institute, Revised by the author

As can be seen from the graph, Russia was receiving a significant amount of revenue from the sale of military equipment every year which, over time, has become an important source of its economy. Therefore, along with political goals, ending the war in Russia's favor would send a message to its arms buyers that their equipment is successfully coping with difficult military tasks but now this message is under question.

Russia spends about 19 billion US dollars a year importing high-tech goods. The largest share of its purchases, or 45%, comes, from the EU, followed by the US - 21%, China - 11% and the United Kingdom - 2%. The main categories of Russian imports are air components and aviation spare parts, totaling about 6 billion US dollars, and information and communication equipment, which exceeds 4 billion US dollars. The EU is also a major supplier of biotechnology, electronics, life sciences and high-efficiency manufacturing goods which together account for more than half of Russia's military imports. As for the United States, it was a major supplier of air equipment to Russia. This also included military helicopters, aircraft and turbojet aircraft totaling more than 3 billion US dollars annually. The United Kingdom also supplies air equipment to Russia. One-third of its high-tech exports go to Russia totaling 140 million US dollars (Grzegorzczuk, Marcus, Poitiers, Weil, 2022).

Figure 3.



Source: Investigate Europe, Revised by the author

Just a year ago, the Russian Federation and its army were profitable users of European weapons and military equipment. More than a third of the EU member states exported arms to the Russian Federation. In 2015-2020, ten EU member states exported 346 million euros worth of weapons to Russia. This includes small weapons as well as heavy equipment such as missiles, ground vehicles, warships and more. Breaking supply chains due to sanctions could create a huge black market for arms transfers that could be difficult to change even after the end of the Russian war against Ukraine.

During these six years, France was the largest supplier of arms to Russia, supplying armaments worth more than 152 million euros in total and accounting for 44% of the EU's total military exports. It appears that the 2014 Western sanctions did not have a major impact on arms sales. In 2015, France sold weapons worth 59 million euros to Russia and in the following years this number decreased as follows: in 2016 - 49 million euros, in 2017 - 36 million euros, in 2018 - 5.5 million euros, in 2019 - 2.4 million euros and in 2020 - 300 000 euros. The president of France also had to respond to these figures. He denied allegations that the government had violated Western sanctions on arms exports to Russia, saying that certain arms contacts had been suspended, and that they also had obligations to fulfill pre-embargo agreements. French exports are crucial for the Russian military as they receive key components such as thermographic fire control systems for tanks and aircraft navigation systems (Ergocun, 2022).

Germany is not far behind France which supplied equipment worth 122 million euros to Russia which accounts for 35% of the EU's total military exports. The commodity nomenclature mainly included icebreakers, light weapons and special protection vehicles. In third place in this regard is Italy with exports worth 23 million euros. This mostly includes armored vehicles, semi-automatic weapons and ammunition. Along with major countries, the Czech Republic exported critical goods to Russia as well - aviation equipment, drones, aircraft engines and aircraft parts, Austria - automatic and smoothbore weapons, ammunition, other specially made components, Bulgaria - warships, special naval equipment and accessories, technology and industrial development components (Brillaud, Curic, Maggiore, Minano, Schmidt, 2022). In this context, the share of other countries is much smaller, although not zero. Thus, the above data prove that the sanctions of that time did not prevent Russia in military trading and Europe owes its share of responsibility in this process. However, currently the ongoing situation is radically different and the implementation of a similar scenario is unlikely.

Role of “Friendly Countries” in Russian Weapons Sales

The Russian Federation has partners around the world who, on the one hand, share its aggressive policies and, on the other hand, are so dependent on it that they simply have no other choice. One such area is military armaments where Russia has strong political leverage to influence various states. There are countries whose military purchases are mostly from Russia and so terminating this channel means putting their own national security under question. Most of these countries are located in Africa and Asia, although we can single out a few of them.

For reference, in the past Russia has been actively filling the empty spaces of military equipment suspended by Western countries for a number of states. For example, the country did so in 2013 when the United States cut off military aid and arms supplies to Egypt after a military coup there. Russia and France took over the delivery process in this country. The same thing happened in 2014 when the United States terminated its contract with Nigeria for fighter helicopters due to human rights violations. Russia then began supplying Nigeria with Mi-35M combat helicopters. This time, Russia itself may find itself out of the game (Kondratenko, 2020).

African Countries

The African continent is one of the largest buyers of Moscow’s armaments. It buys 49% of its military equipment from Russia. These include heavy weapons, battle tanks, warships, fighter jets and helicopters, and small arms such as the new AK-200 Series rifle. For comparison, China accounts for 13% of arms imports in Africa. The largest and most stable buyers of Russian weapons on this continent are Algeria, Egypt, Sudan, Angola, Burkina Faso, Ethiopia, Morocco and Uganda. In this respect, Egypt and Algeria are also in the top ten list of the largest military goods importers in the world. Egypt accounts for 5.8% and Algeria for 4.3% of world arms imports. Russia, along with the four largest arms exporters, the United States, France, Germany and China, accounted for 76% of major arms imports in 2016-2020 in Africa. At the same time, the number of purchasing countries has also increased. For example, if in the 2000s 16 African countries bought Russian weapons, now their number is 21 (Khanyile, 2022).

Russia has renewed its historical ties with many African countries that it established during the Soviet era. Obviously, the obstacles created for

Russia will affect the armaments and defense capabilities of the African countries. Existing risks include delays in the supply of major spare parts, breaches of operational and training plans for defense forces using Russian equipment and the high cost of maintaining existing equipment in these countries. On the other hand, the current situation allows these countries to diversify their suppliers as well as to take care of the shortfalls in the development of their own production.

The sanctions imposed on Russia by the West have several practical implications for the defense industry of African countries. First of all, it will be difficult and, in some cases, impossible to get the already placed orders. On the other hand, the repair, maintenance or overhaul of heavy equipment and weapons of Russian production already in use will be complicated. The reason for this is that it is practically impossible to supply the necessary spare parts, tools and certificates. Additionally, both parties have contractual obligations, including financial ones. Due to Russia's isolation from the global financial system, this process also requires additional efforts. Moreover, the gap created by the problems of Russia must be filled by the alternative suppliers. African countries will have to find potential defense industry supply partners who can carry out maintenance, repair and overhaul operations on the equipment at their disposal as well as be able to supply them with additional equipment and weapons (Khanyile, 2022).

Russia's interests in Africa are driven not only by economic but also by political and strategic goals. In several African countries, Russia is involved in extracting such important resources as coltan, cobalt, gold and diamonds. In 2019, Russia hosted the first Russian-African summit in history where President Putin said that strengthening ties with African countries is one of the priorities of Russia's foreign policy. A key part of the summit was an exhibition of Russian-made weapons. It is clear here that Russia is focused not so much on new technologies as on improving existing equipment. In addition, its armaments are more affordable than those of other countries, making it even more attractive to African countries (Kondratenko, 2020).

India

India is one of the largest buyers of military weapons in the world. The country still had active ties with Russia during the Soviet era. India buys more than 50% of its military equipment from Russia. A few years ago, this

figure was much higher, reaching as high as 80%, although in the last decade India has started to diversify its arms suppliers. It increased purchases from France, Israel and the United States. For example, according to the Stockholm International Peace Research Institute, the number of weapons purchased from these countries has doubled in the last five years, although Russia remains as its number one supplier (SIPRI, 2021).

India has not openly criticized Russia and has not condemned its actions for invading Ukraine which may be due to its high military affiliation. Although Russia has in some cases failed to fully fulfill its obligations since 2014, it remains an important partner for India. India, for example, bought the S-400 missile system from Russia in 2018, part of which it has not yet received. There is a reasonable suspicion that Moscow had and still has a problem with key production components. Additionally, Russia's military losses after the invasion of Ukraine may mean that it will not be able to meet India's needs as it will have full resources directed at rebuilding its own defense forces. As experts suggest, the Indian army will find it difficult to take effective action without Russian-supplied equipment and in the short to medium term will continue to depend on Russian armaments systems, obviously if Russia finds the resource to do so. Another important factor in this regard is that the Indian military personnel are aware of the use of Russian-made equipment which otherwise requires additional costs for training and testing (Menon, 2022).

At this stage, India is facing a strategic dilemma - to remain dependent on Russia, to diversify markets or to develop domestic production. Clearly, these steps are not mutually exclusive. Thus, in the short term, India may use a combination policy to replace suppliers of low-end equipment and to seek new suppliers of spare parts to reduce its direct dependence on Russia. India can purchase Russian-made spare parts and upgrade them locally. It already produces a large number of Russian weapons under the relevant license, is interested in strengthening domestic defense production and can export weapons to other Russian consumers who have similar deficits. It is also noteworthy that US-India relations have been developing more and more in recent years. Due to China's regional dominance, India is gaining a strategically important role for the United States and, consequently, the deepening of military cooperation between the two countries is not ruled out in the coming years (Benerjee, Trach, 2022).

Southeast Asian Countries

Russia is the largest exporter of military equipment and armaments to Southeast Asia (Brunei, Myanmar, Cambodia, Timor-Leste, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam), although its sales have fallen sharply since 2014. Russia has sold 11 billion US dollars worth of military equipment to the region since 2000. Its largest buyers are Vietnam, Myanmar, Malaysia and Indonesia. Russia offers them a wider choice of equipment and a much lower price than equipment manufactured in the West. In addition, Russia is ready to get a part of the remuneration in exchange for goods produced in the region, develop a joint production with these nations, and unlike Europe and the United States, it does not consider the human rights situation in these countries to be problematic (Storey, 2022).

Russia's sales in the region have dropped significantly since 2014 for a number of reasons. Following the annexation of Crimea in 2014, Western sanctions were imposed on Russia as well as export controls on the Russian defense sector. Additionally, Vietnam has suspended its military modernization program, in part due to delays in the delivery of orders from Moscow. Further additionally, a law passed in 2017 allows the US government to impose sanctions on individuals or countries that have commercial relations with the Russian military sector. Finally, with the problems posed to Russia, there has been growing competition from American and European defense corporations as well as Asian giants such as China and South Korea (Storey, 2022).

After the end of the current war, the decline in sales of Russian-made weapons in Southeast Asia is expected. This will be triggered by Western sanctions and export controls, on the one hand, and by the reputation of Russian armaments, on the other, which fell during the war due to their low performance efficiency. Moreover, the world's largest chipmaker, based in Taiwan, has suspended sales in Russia. Western sanctions have been joined by Asia's leading industrial economies, including Japan, South Korea and Singapore. Clearly, this will have a negative effect on Russian sales in this region.

China

China is the second largest importer of weapons for Russia. In 2016-2020, 18% of Russian weapons were exported to China. Moscow's armaments played a crucial role in the development of the latter's military and defense industry. Russian exports peaked in the mid-2000s when China relied heavily on Russian systems and technologies to modernize its military capabilities. During this period, Russia supplied China with aircraft fighters, various classes of missiles, radar systems, helicopters and submarines. These systems were relatively old and Russian exports did not include more advanced technologies. Nevertheless, China's armament with Moscow was particularly helpful in the development of its navy and air forces. Later, it based part of his production on Russian design and technology.

In 2012, China and Russia agreed to increase military cooperation which also included the arms trade. Since 2015, arms sales between the two countries have increased dramatically. Russia and China signed a military cooperation roadmap in 2017 and joint military exercises in 2021 further highlighted increased cooperation. Recently, Russian exports to China have focused on a smaller number of contracts involving advanced military systems. Each country also trades with major manufacturing components. Russia, for example, relies on China for machine tools and electronic components while China relies on Russia regarding heavier equipment such as aircraft, air defense systems, missiles, submarine technology and helicopters. In this regard, China has an interest in gaining access to the technologies and experiences that it seeks to produce and test domestically. Therefore, due to the fact that the Chinese defense industry continues to grow rapidly, it is likely that Russia's technological advantage over China will weaken in the near future which, in turn, will change the nature of defense cooperation between the two countries and will be more focused on joint military professional development, the improvement of defense services and the transfer of technologies (CRS 2021).

In the military context, China is important and noteworthy partner for Russia in several respects. First of all, Russia is expected to get support from China in terms of the production and the supply of components, although no tangible results have hitherto been seen in this regard. Most likely, this process will become clearer and more relevant after the war. Moreover, at the end of May this year, Russia and China held their first joint exercise after Moscow's invasion of Ukraine. This military activity was an important

sign that the partnership between China and Russia has not weakened even as the four-month war in Ukraine claimed the lives of thousands of civilians. This move by Moscow may be perceived as an attempt to deepen the future partnership, and a sign that Russia has and will have hope in China, even in difficult moments for itself. Clearly, China will seek to gain certain benefits in exchange for certain critical means of production for Russia such as discounts on energy resources and increased access to military technology. On the other hand, if Russia drastically reduces sales to African and Asian countries, the clear signs of which are already visible, it creates an empty space for China to at least partially replace Russian weapons. This, in turn, raises additional concerns for Moscow as there is a risk of losing the partnership built up over the years and less likely to return to these markets even if its forces are restored.

* * *

Western sanctions, on the one hand, will make it harder for Russian defense companies to receive payments from foreign customers while export controls will severely restrict their access to high-tech components. Russia's military industry is likely to find a way out, including deepening co-operation with defense companies in countries that have not imposed sanctions and export controls on Russia, including China and India. In the current difficult situation, it is clear that it has hope for its friendly countries but given the national interests of the partner states and the new political or economic situation, it is still a question as to whether or not these countries will justify Russia's expectations. There is no doubt that the problems in Russia will open up new market opportunities for defense companies in countries such as Israel, Turkey, China and South Korea as well as in Europe. While the delays in production in Russia will have a negative impact on its consumer countries, it will be relatively easier for them to overcome than for Moscow itself which will have to fight on several market fronts.

Conclusion

Western sanctions, along with many other sectors of Russia, have also dealt a major blow to the military and defense industries which will become increasingly visible in the medium and long term. Generally, it is virtually impossible for restrictions to have any tangible effect in the short

term. The fact is that so far, the harsh response of the West has not been followed by a political decision by Moscow which should be reflected in the end of the war. This is due to the fact that Russia has the funds to fund the war at this stage with the exports of its energy products and grain as the main financial sources and thus occupying a leading position in the world in terms of these exports. As a result of the war, the prices of oil products have increased which means additional income for Russia.

The consequences of the sanctions will become clearer once the war is over and Russia wants to replenish its military supplies. This process will be quite difficult and, in many cases, even impossible. On the one hand, this is due to the difficult economic situation in the country and the reduction of sources of budget revenues and, on the other hand, Moscow's limited access to the technologies and production facilities of both the West and the leading countries of Asia. The shortage of electronic components in the case of any product leads to production delays, starting with washing machines and ending with rocket systems. Moreover, this process will be influenced by the next decisions of the international community which are aimed at delivering more powerful blows to the Russian financial and energy sectors.

Moscow's sharply reduced ability to rebuild its military capabilities will affect the country's overall economic situation. In addition to its technical isolation, the greatest reputational damage was done to its weapons and equipment which could have an impact on sales. This in turn means the loss of significant financial resources for Russia. There is no doubt that the Russian military machine has experienced a huge and costly blow. Experts estimate that it may take Russia two decades to restore its military arsenal to pre-war levels. This will be caused by both sanctions and the lack of opportunities for innovation, research and development, brain drain, corruption and the debt of defense companies. Due to the dire consequences in Ukraine and the sharp rise in tensions with NATO, it is likely that Moscow will want to increase its military budget as well and will be ready to rebuild lost power and reputation at the expense of funding for other areas, although its implementation is highly questionable.

Given the current situation, if the West stands firm in defending its values and the sanctions imposed by it remain in place, a reduction in Russia's defense production will be inevitable in the coming years. Clearly, this will affect military enterprises which in turn will increase unemployment and reduce the country's gross domestic product. Additionally, it will challenge

the fulfillment of existing trade agreements into question and hamper gaining the new customers of Russian arms. Thus, the fact is that Russia is already facing the hardest circumstances which will become more and more visible in the near future. After the end of the war, the country will have to fight extremely hard in several directions and then it will most clearly feel the extremely severe political and economic consequences of its own aggression.

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