

## WAR IN UKRAINE: ANALYSIS OF THE PREREQUISITES, LESSONS OF THE INFIGHTING, AND CONCLUSIONS FOR THE FUTURE

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### War in Ukraine: Analysis of the Prerequisites, Lessons of the Infighting, and Conclusions for the Future

On February 24, 2022, Russia launched an all-out invasion of Ukraine. This situation has radically changed the relations between the states, marked a point of no return in the relations between the once fraternal peoples, changed the vectors and priorities for the further development of Ukraine, and created new challenges in all spheres of its life. Moreover, the war in the center of Europe affected the world economy as a whole and the economy of many individual countries, as well as migration and sociopolitical processes. All this was reflected in the change in the research priorities in the world and, in particular, in Ukraine. The purpose of this study is to formulate generalized proposals on ways to counter Russia's military aggression. The article analyzes: World Military Strength Ranking 2022, losses of the Russian armed forces as of 15.06.2022; changes in the number of personnel, weapons and equipment of Ukraine's Armed Forces in 1991-2021. Also a comparative quantitative assessment of the armed forces of Ukraine and Russia in 2021 was carried out, considering weaknesses and miscalculations in the formation and development of independent Ukraine that had allowed a full-scale war to take place on its territory. The military potential of the Ukrainian and Russian armies in 1991 and 2021 is compared, new types of weapons developed in Ukraine are considered. The results of Delphi analysis of the Ukrainian defense industry clusters necessary for asymmetric deterrence against an external aggression over the time horizon until 2030 are presented. The ways to provide Ukraine's Armed Forces with the main types of weapons and military equipment are defined. The conducted research has allowed us to determine that Russia, being a country with geopolitical ambitions, will always present a threat to Ukraine, so the national security of our country must be built with consideration for the military and economic strength of the aggressor country. Consequently Ukraine must enter into at least one military and economic alliance with other European and world countries. Moreover, Ukraine must have a strong diversified defense industry complex, which will produce its own competitive weapons and military equipment both independently and jointly with other European and world countries or under licenses from foreign manufacturers. Ukraine's Armed Forces must have such a structure of their services and branches that would allow them to withstand threats from the Russian armed forces or asymmetric types of weapons and military equipment that would make it possible to conduct the 2nd, 3rd and 6th generation war.

**Keywords:** Russian-Ukrainian war, Russia's military aggression, national security, defense, weapons and military equipment, armed forces of Ukraine.

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**Кизим М. О., Хаустова В. Є., Шликова В. О. Війна в Україні: аналіз передумов, уроки протистояння і висновки на майбутнє**

24 лютого 2022 року росія почала повне вторгнення в Україну. Така ситуація докорінно змінила відносини між державами, поставила крапку неповернення у відносинах колись братніх народів, змінила вектори та пріоритети подальшого розвитку України, створила нові виклики в усіх сферах її життя. Крім того, війна в центрі Європи вплинула на світову економіку в цілому та економіку багатьох окремих країн, а також на міграційні та

соціально-політичні процеси. Усе це відбулося на зміні пріоритетів досліджень у світі та, зокрема, в Україні. Мета дослідження – сформулювати узагальнені пропозиції щодо шляхів протидії військовій агресії росії. У статті аналізуються: *World Military Strength Ranking 2022*, втрати збройних сил росії станом на 15.06.2022; зміни чисельності особового складу, озброєння і військової техніки ЗС України у 1991–2021 рр. Також проведено порівняльну кількісну оцінку збройних сил України та росії у 2021 році, розглянуто недоліки та прорахунки у становленні та розвитку незалежної України, які дозволили розгорнути на її території повномасштабну війну. Порівняно військовий потенціал української та російської армій у 1991 та 2021 роках, розглянуто нові зразки озброєння, розроблені в Україні. Наведено результати Delphi-аналізу кластерів ОПК України, необхідних для асиметричного стримування зовнішньої агресії на часовому горизонті до 2030 року. Визначено шляхи забезпечення Збройних Сил України основними видами озброєння та військової техніки. Проведені дослідження дозволили визначити, що росія, будучи державою з геополітичними амбіціями, завжди буде становити загрозу для України, тому національна безпека нашої держави повинна будуватися з урахуванням військової та економічної потужності країни-агресора. Отже, Україна має увійти принаймні в один військово-економічний союз з іншими країнами Європи та світу. Крім того, Україна повинна мати потужний багатогалузевий оборонно-промисловий комплекс, який вироблятиме власне конкурентоспроможне озброєння та військову техніку як самостійно, так і спільно з іншими країнами Європи та світу або за ліцензіями іноземних виробників. Збройні Сили України повинні мати таку структуру видів і родів військ, яка б дозволяла протистояти загрозам з боку збройних сил росії або асиметричним видам озброєння та військової техніки, що дозволило б вести війну 2-го, 3-го та 6-го покоління.

**Ключові слова:** російсько-українська війна, військова агресія росії, національна безпека, оборона, озброєння та військова техніка, збройні сили України.

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**Introduction.** The development of the Ukrainian state has been facing new challenges due to the aggressive policies of the Russian Federation aimed to seize Ukraine's territories. The military conflict between the two countries began as early as 2014, when hostilities covered part of the Donetsk and Luhansk regions of Ukraine, almost simultaneously with the annexation of Crimea by Russia. The Russian government directed its efforts to grant a significant political autonomy to the terrorist entities LNR (The Luhansk People's Republics) and DNR (The Donetsk People's Republics), which were created by Russia in the occupied territories of the Donetsk and Luhansk regions with the aim of violating the sovereignty of Ukraine and hindering the implementation of the goals associated with the European vector of its economic development.

On February 24, 2022, Russia launched an all-out invasion of Ukraine. In spite of an 8-year experience of Ukraine's counteracting Russia's aggression, there still was a huge gap in the amount of weapons and human resources, in particular, due to the different size of the countries and a great amount of weapons and military equipment inherited by Russia after the collapse of the Soviet Union. Moreover, defense needs were not considered a priority during the decades of Ukraine's independence.

Thus, Ukraine was not ready for the aggression from the Russian Federation, and the majority of Ukrainians did not believe that a war between the Russian and Ukrainian peoples was possible until the very day of the invasion. However, the current situation has radically changed the relations between the states, marked a point of no return in the relations between the once fraternal peoples, changed the vectors and priorities for the further development of Ukraine, and created new challenges in all spheres of its life. Moreover, the war in the center of Europe affected the world economy as a whole and the economy of many individual countries, as well as migration and socio-political processes. All this was reflected in the change in the research priorities in the world and, in particular, in Ukraine.

**Analysis of publications on the problem under study.** In general, problems of national security have been a relevant research area for both Ukrainian and foreign scientists for many years. Scientists of the National Institute for Strategic Studies, namely, V. Horbulin [1; 2], O. Vlasivuk [3], and others, have made a significant scientific contribution to investigating various aspects of Ukraine's national security. The analysis of problematic issues related to strategic plan-

ning in the field of national security of Ukraine and the development of recommendations for their solution, as well as the study of the nature and consequences of russia's hybrid war against Ukraine in 2014, were conducted in the publications of O. O. Reznikova [4; 5]. The research [6] analyzed the state and development of the national security system, with regard to international practices and prospects for the European and Euro-Atlantic choice of Ukraine, considered changes in the priorities and the main goals set by the country on the path of strengthening its national security. Furthermore, a number of studies by scientists of the National Academy of Public Administration under the President of Ukraine, including V. Abramov, H. Sytnyk, etc., focused on the problems of national security [17].

The issues of the russian-Ukrainian relations, the hybrid warfare between the countries, and dimensions for combating the russian invasion were the subjects of investigations by V. Horbulin [8–12]. Besides, many studies on the national security and defense, hybrid wars, and the russian aggression against Ukraine were proposed by researchers from the Ivan Chernyakhovsky National Defense University of Ukraine, namely, S. Sveshnikov and V. Bocharnikov [13–16]. The historical dimension of russia's hybrid war against Ukraine was studied by experts from the same university S. Sehed and V. Shevchuk [7].

It should be noted that there are already quite a lot of studies by foreign scientists regarding the russian-Ukrainian war. Most of them either touch upon the problems of its impact on the world economy and the economy of individual countries and regions or consider its geopolitical causes and consequences. Moreover, a separate category of research dealing with the strategy and tactics of warfare, analysis of the effectiveness of modern types of weapons, practices of countering cyber threats during war, etc., is being formed [18; 19].

For example, Jagtap, S et al. analyzed the impact of the russia-Ukraine conflict on the global food supply chains [20]. The article by Shakil A. [21] considered the effect of the military conflict between russia and Ukraine on the economy of Pakistan. In the publication by Mbah R. E., Wasum D. [22], the economic impact of the russia-Ukraine war on key global economic actors, specifically, countries that unleashed financial sanctions on russia – the USA, Canada, UK, and EU mem-

bers – was analyzed. Abdelaaziz Ait Ali et al. [23] focused on the war's economic short- and long-term implications on the African economy. Yuehan Li, Xinran Liu [24] investigated the effect of the war on the American economy.

The publication by Arushi Jha et al. [25] dealt with another research area. The authors argued that, in most cases, the underlying factor that triggered conflicts and disagreement was religion. Their idea was to consider the gradual transition of religious dissimilarities into political discord that had further pushed Ukraine away from russia and contributed to the detestation of the Ukrainian people towards russians. Furthermore, the article highlighted the role of international entities and events, direct and indirect, which had exerted a significant impact on the current conflict, with the emphasis on NATO and the collapse of the USSR. As a result of the conducted study, the authors determined that initiating war to meet foreign policies based on religion had only led to casualties, economic losses and loss of faith in the mentioned policies, even by those previously in agreement with them.

Ukraine, as a peaceful country with almost no experience in combat operations and military confrontation, needs to rethink its development strategy and develop a vision of its future in world geopolitics. This should be done in view of the existence of an aggressive neighbor – russia, the government of which for a long time have been forming the views of its society on the basis of a false propaganda and distortion of the history of both countries. This requires conducting an analysis of the problems and processes that had led to the possibility of russia's invasion of the territory of a sovereign country, generalizing the experience of this war, and, based on this, forming a vision of a further development of Ukraine.

**The purpose** of the study is to formulate generalized proposals on ways to counter russia's military aggression.

**Results.** In mid-2021, a group of Ukrainian military experts conducted a study "The Foresight of Ukraine's Defense-Industrial Complex Development for the 2021-2030 Time Horizon". According to this study, the probability of a full-scale military aggression by russia in 2022-2024, was estimated at 8.13 % (Table 1).

As can be seen from Table 1, the experts predicted a large-scale hybrid war with a 92.5 % probability (including local clashes, cyber-attacks on critical infrastructure facilities, etc.).

Table 1

Possible threats to the security of Ukraine over the time horizon until 2030

Type of conflict	Probability of occurrence (%)	Time interval of the conflict occurrence (years)
Full-scale military aggression within the territory of Ukraine	8.13	2022-2024
Full-scale military aggression within the borders of Luhansk and Donetsk regions	20.63	2022-2024
Local military aggression within certain regions of Ukraine	35.00	2021-2025
Permanent clashes along the military demarcation line	53.75	2021-2026
Large-scale hybrid war aimed at destroying the statehood of Ukraine (local military clashes, terrorist attacks, cyber-attacks on critical infrastructure facilities and government agencies, etc.)	92.50	2021-2030

Source: [26]

Unfortunately, the reality turned out to be worse, and, in February, the Russian army, ranking the 2<sup>nd</sup> according to the

Global Firepower 2022, attacked Ukraine, with the army taking the 22<sup>nd</sup> place in this ranking (Fig. 1).

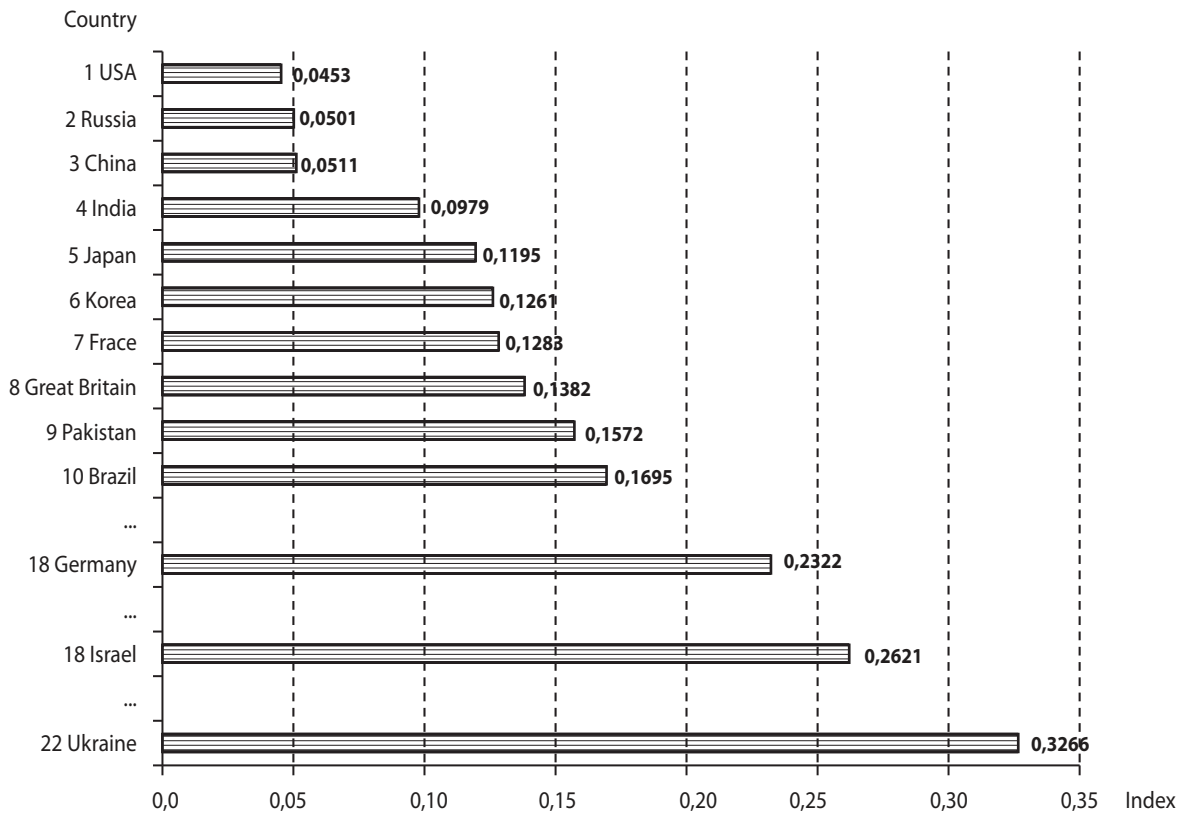


Fig. 1. World Military Strength Ranking 2022

Source: based on [27]

At the same time, the Russian army surpassed the Armed Forces of Ukraine in terms of the number of military personnel by almost 4 times, tanks by 5.14 times, self-propelled artillery

by 8.3 times, fighters by 18.8 times, and the defense budget by 4.4 times (Table 2).

Table 2

Comparative quantitative assessment of the armed forces of Ukraine and Russia in 2021

Indicators	Unit of measurement	Ukraine	Russia	Ukraine-to-Russia ratio (times)
Number of military personnel	people	255 000	1 014 000	3.98
Number of reservists		900 000	2 000 000	2.22
Tanks	pieces	2 430	13 000	5.35
Armored vehicles		11 435	27 100	2.37
Self-propelled guns		785	6 540	8.33
Towed guns	pieces	2 040	4 465	2.19
Multiple rocket launchers		550	3 860	7.02
Fighters		42	789	18.79
Strike-fighters	pieces	25	742	29.68
Attack helicopters		34	538	15.82
Capital ships		-	80	-
Submarines	pieces	-	64	-
Small warships		13	206	15.85
Defense budgets		USD mln	9 600	42 129

Source: Formed by the authors based on [28]

Despite such a numerical superiority, the blitzkrieg of the Russian army failed and it had to retreat from Kyiv and Kharkiv, and has already abandoned most of the previously

captured territories of Ukraine. At the same time, the aggressor country suffered heavy losses both in manpower and military equipment (Table 3).

Table 3

## Losses of the Russian armed forces as of 15.06.2022

Personnel, weapons and military equipment (WME)	Unit of measurement	Number
Personnel (killed)	people	32 750
Tanks	pieces	1 440
Armored fighting vehicles	pieces	3 528
Artillery systems	pieces	722
Multiple rocket launchers	pieces	230
Air defense systems	pieces	97
Planes	pieces	213
Helicopters	pieces	179
UAVs	pieces	591
Cruise missiles	pieces	129
Ships / boats	pieces	13
Automotive equipment and tanker trucks	pieces	2 485
Specialized military equipment	pieces	55

Source: [29]

Russia's full-scale war against Ukraine has already had a negative impact and will have an even greater impact on the global economy in the future. According to IMF forecasts, the global economic growth in 2022 will slow down from 4.4 % to 3.6 %. In March-May 2022, there was an increase in the world prices: for oil – by 1.6 times, for natural gas – by 2 times, for wheat – by 1.3 times, for metal – by 1.2 times. Among the consequences there are also: humanitarian disaster with increasing hunger and poverty in the world's poorest countries (Ukraine and Russia provide food for 400 million people); increase in the non-production expenditure on defense (e.g., in Germany – by EUR100 mln).

Some possible long-term consequences of war can include changes in the structure of energy markets, reformatting of supply chains, and changes in the composition of foreign exchange reserves. Re-dividing the world into blocs separated by barriers negates some of the benefits of specialization, economies of scale, diffusion of information and "know-how" [31].

The economy of Ukraine has already been hit hard by this war and, unfortunately, will suffer an even greater damage. Thus, according to the forecasts of international organizations for 2022, the fall in Ukraine's GDP will be 20–45 %; the incomes of Ukrainians will decrease by 25–30%, and 70 % of the population will have an income below the subsistence level; the inflation growth rate will increase by 20-30 % per year; there will be a significant slowdown in the pace of industrial development: 25–30 % of Ukrainian enterprises have already ceased their operation, and 45 % of them are operating at a limited capacity; the budget deficit will increase, with the monthly budget deficit amounting to USD5 bln [30].

Let us consider weaknesses and miscalculations in the formation and development of independent Ukraine that had allowed a full-scale war to take place on its territory.

First of all, this is explained by the fact that the Ukrainian army had significantly lost its military potential over the 30 years of the country's independence, as evidenced by the behavior of quantitative indicators of weapons and military equipment (WME) (Table 4).

From 1991 to 2021, Ukraine rapidly reduced both the number of military personnel and its military arsenal, selling to other countries or decommissioning tanks, armored vehicles, aircraft, and air defense equipment (Table 5).

Along with this, during the same period, Ukraine developed a large number of new types of weapons and military equipment, including 3 models of tanks, 6 models of armored personnel carriers, 24 models of armored vehicles, 1 model of a short-range ballistic missile system and an anti-ship missile, and several models of man-portable anti-tank missile systems (Table 6).

Most of these types of military equipment are rather competitive (e.g., the Neptune anti-ship cruise missile) (Table 7).

But none of these, with rare exceptions, had entered service in the Armed Forces of Ukraine because of the ineffective and contradictory military procurement policy pursued by the country.

Based on the current situation, we can make the following conclusions:

- Russia, being a country with geopolitical ambitions, will always present a threat to Ukraine, so the national security of our country must be built with consideration for the military and economic strength of the aggressor country;
- to confront such a country as Russia, the Armed Forces of Ukraine must have WME that are proportional in quantity to those used by services and branches of



Table 4

## Comparison of the military power of the Ukrainian and Russian army in 1991 and 2021

Personnel and WME	1991 year	2021 year
Regular army	1 : 3.13	1 : 3.98
Tanks	1 : 1.39	1 : 5.35
Infantry fighting vehicles / armored personnel carriers	1 : 1.77	1 : 11.38
Artillery (cannon and self-propelled guns, multiple rocket launchers)	1 : 1.63	1 : 11.11
Military planes (combat, transport ones)	1 : 2.3	1 : 18.15
Military helicopters (attack, transport ones)	1 : 1.85	1 : 13.87

Source: formed by the authors based on [27]

Table 5

## Changes in the number of personnel and WME of Ukraine's Armed Forces in 1991–2021

Year	Number of military personnel (thousands people)	WME			
		Tanks (thousands pcs)	Armored vehicles (thousands pcs)	Planes (pcs)	Ships and boats (pcs)
1991	980	9	11	1 500	N/A
1992	700	N/A	N/A	N/A	113
1994	N/A	4	8.5	1 000	N/A
1995	400	N/A	N/A	N/A	N/A
1997	N/A	N/A	N/A	N/A	32
2001	400	4.2	6.1	932	N/A
2003	390	4.0	5.7	908	29
2007	200	2.9	2.8	534	27
2010	200	2.7	2.3	383	N/A
2014	250	2.4	2.5	220	10
2020	250	N/A	N/A	N/A	18
2021	246	2.1	3.0	120	21

Source: formed by the authors based on [32–34]

Table 6

## List of some new types of weapons developed in Ukraine

WME	Models of WME (pcs)
Tanks (3 models)	BT Oplot (50), T-84-120 Yatagan (1), T-84U (10)
Infantry fighting vehicles (1 model)	BMPV-64 (2)
Armored personnel carriers (6 models)	BTR-7 (13), BTR-94 (50), BTR-3 (894), BTR-4 (201), BTR Otaman (1), BTR Varan (1)
Self-propelled guns (1 model)	2C22 Bohdana (1)
Multiple rocket launchers (6 models)	Vilkha (50), Verba (50), BM-21UM Berest (1), Bastion-01(N/A), Bastion-02 (N/A), Bastion-03 (N/A)
Armored vehicles (24 models)	BBM Kozak-2 (245), SBA Varta (200), KRAZ Conquer (77), KRAZ Spartan (36) and others
Short-range ballistic missile system (1 model)	Hrim (30)
Coastal missile system (1 model)	Neptune (1)
Cruise missiles (1 model)	Korshun (N/A), Korshun-2 (N/A)
Anti-tank guided missiles (2 model)	Stugna(N/A), Sarmat / Korsar (N/A)

Source: formed by the authors based on [34–37]

Comparison of technical and tactical characteristics of anti-ship missiles across the world

Model	Manufacturing country	Year	Max range (km)	Max speed (Mach)	Length (m)	Diameter (m)	Weight (kg)	Warhead weight (kg)	Guidance system
Neptune	Ukraine	2020	280	0.9	5.05	0.38	870	150	Inertial navigation system (INS), GPS, active radar homing (ARH)
Harpoon	USA	1980	280	0.9	3.84	0.34	667	225	INS, ARH/IR
Naval Strike Missile	Norway	2007	185	0.95	3.95	0.32	410	125	INS, GPS, IR
Sea Eagle	Great Britain	1985	110	0.95	4.1	0.4	600	230	INS, ARH
RBS-15	Sweden	1985	250	0.95	4.33	0.5	800	200	INS, GPS, ARH
ASM-1	Japan	1980	65	0.9	4	0.35	600	150	INS, ARH
X-35	russia	1995	300	0.85	4.4	0.42	600	145	INS, ARH/IR
X-22	russia	1968	600	3.5-4.6	11.67	0.92	5 780	1 000	INS, ARH
P-800 Oniks	russia	2002	120, 300, 500	2.6	8	0.67	3 000	300	INS, ARH
AS.34 Kormoran	Germany	1976	30	0.9	4.4	0.34	660	160	INS, ARH

Source: formed by the authors based on [34–37]

Note: INS – inertial navigation system, GPS – Global Positioning System, ARH – active radar homing, IR – infrared homing, ARH/IR – active radar homing / infrared homing.

russia's army and of a better quality or have asymmetric strategies and tactics, and corresponding types of weapons and military equipment (WME);

- to conduct a large-scale war against russia, Ukraine must have sufficient state stocks of WME (weapons and military equipment) and ammunition;
- during the years of independence, the defense industry complex of Ukraine, instead of producing the latest weapons, was engaged in selling the WME stockpiles inherited after the distribution of the legacy of the Soviet Union, which had greatly weakened the military potential of Ukraine and should not be allowed in the future;
- Ukraine has managed to fight back the invader that outperforms it both in terms of military power and economic potential, due to the following factors:
  - 1) russia is conducting the war to a greater extent using the 2<sup>nd</sup> generation strategies with the 6<sup>th</sup> generation elements, while Ukraine – the 4<sup>th</sup> generation;
  - 2) Ukraine receives significant military and financial support from most countries of the world;
  - 3) the courage of the Ukrainians, the experience gained by the Ukrainian soldiers since 2014, the professionalism of the leadership of the Armed Forces of Ukraine has made it possible to resist the aggressor country.

The tragic lessons of the war should form the basis of the strategy for equipping the Armed Forces of Ukraine.

The pre-war studies conducted by Ukrainian military experts and the experience in counteracting russian military

operations in Ukraine indicate that the priorities for the development of the Armed Forces of Ukraine should be: precision weapons, missile systems, air defense, electronic warfare and electronic intelligence systems, UAVs (unmanned aerial vehicle), etc. (Table 8).

Based on the development priorities of the Armed Forces of Ukraine and the existing scientific, technical and industrial potential of the country, the defense industry complex should ensure the production of necessary weapons and military equipment for the country, primarily through its own production, as well as through participation in cooperative projects with other countries or licensed production of military products from other countries (Table 9).

**Conclusions.** Thus, modern realities have shown that Ukraine has an extremely dangerous aggressive neighbor – russia, which is capable, covering up its own imperial ambitions with false slogans, of unleashing a full-scale war of conquest, taking the lives of thousands of Ukrainians, and destroying entire Ukrainian cities.

As a consequence, the views of Ukrainians, who previously considered the russians to be a fraternal people, underwent cardinal changes.

According to a public opinion poll conducted among Ukrainians in May 2022 by the Kyiv International Institute of Sociology (KIIS) [39], 92 % of the respondents have a negative attitude towards russia and russians, and only 2 % have a positive attitude. The changes in the attitude towards russia for the period 2008–2022 are shown in Figure 2.

Moreover, Ukrainians are aware of the danger posed by russia and have a high degree of mistrust for its policies in the future. According to the results of the survey conducted by the

Table 8

**Delphi analysis of the Ukrainian defense industry clusters necessary for asymmetric deterrence against an external aggression over the time horizon until 2030**

№	Defense industry clusters	Assessment of the priority of the contribution to Ukraine's security	Time interval of cluster growth (years)
1	Ukraine's missile program, precision weapons, anti-ship missile systems	6.79	2021-2025
2	Systems of electronic warfare, electronic reconnaissance, air defense	6.58	2021-2030
3	Unmanned aerial, land and sea vehicles (reconnaissance and strike drones)	6.50	2021-2030
4	Unified automated system for managing the national security, technologies for automated military command and control	6.25	2021-2030
5	Space reconnaissance facilities (satellite constellation)	6.00	2021-2030
6	Precision anti-tank defense systems, precision small arms	5.75	2021-2025
7	Mosquito fleet of small warships	5.50	2021-2030
8	Mobile armored vehicles for general purposes	3.50	2021-2025
9	Transport aircraft and attack helicopters	3.50	2021-2025

Source: [26]

Table 9

**Assessment of the ways to provide Ukraine's Armed Forces with the main types of WME**

Types of WME	Ways of provision				
	Production (modernization) at enterprises of the Ukrainian defense industry complex	Participation in cooperative projects for WME development	Deployment of domestic production, incl. under license	Purchase of weapons abroad, incl. offset and leasing	Search for alternative ways to compensate the need for WME, incl. unconventional or asymmetric ones
Armored fighting vehicles	0.4915	0.1099	0.2505	0.0703	0.0775
Self-propelled guns	0.4377	0.1962	0.2239	0.0827	0.0592
Multiple rocket launchers	0.175	0.1263	0.1284	0.2702	0.2909
Small arms, RPGs, etc.	0.1698	0.2433	0.2353	0.3196	0.0517
Missiles, ammunition	0.1961	0.2068	0.1663	0.3919	0.0386
Precision weapons (ground-based)	0.523	0.1250	0.2530	0.0678	0.0309
Precision weapons (air-based)	0.3541	0.3387	0.1949	0.0714	0.0407
Air defense systems	0.0719	0.2855	0.3639	0.2022	0.0763
Combat aircraft	0.4371	0.1816	0.0956	0.1784	0.1071
Attack helicopters	0.2046	0.2804	0.0970	0.1947	0.2230
UAVs	0.1609	0.2317	0.1444	0.3923	0.0705

Source: [38]

Kyiv International Institute of Sociology, the vast majority of Ukrainians (more than 70 %) would vote for joining NATO if a corresponding referendum were held in Ukraine [40].

All this indicates a significant transformation of Ukrainians' views on their future, as well as threats, strategic priorities and directions for the country's development.

Thus, the conducted research has allowed us to determine that Ukraine must enter into at least one military and economic alliance with other European and world countries. More-

over, Ukraine must have a strong diversified defense industry complex, which will produce its own competitive weapons and military equipment both independently and jointly with other European and world countries or under licenses from foreign manufacturers. Ukraine's Armed Forces must have such a structure of their services and branches that would allow them to withstand threats from the Russian armed forces or asymmetric types of weapons and military equipment that would make it possible to conduct the 2<sup>nd</sup>, 3<sup>rd</sup> and 6<sup>th</sup> generation war.



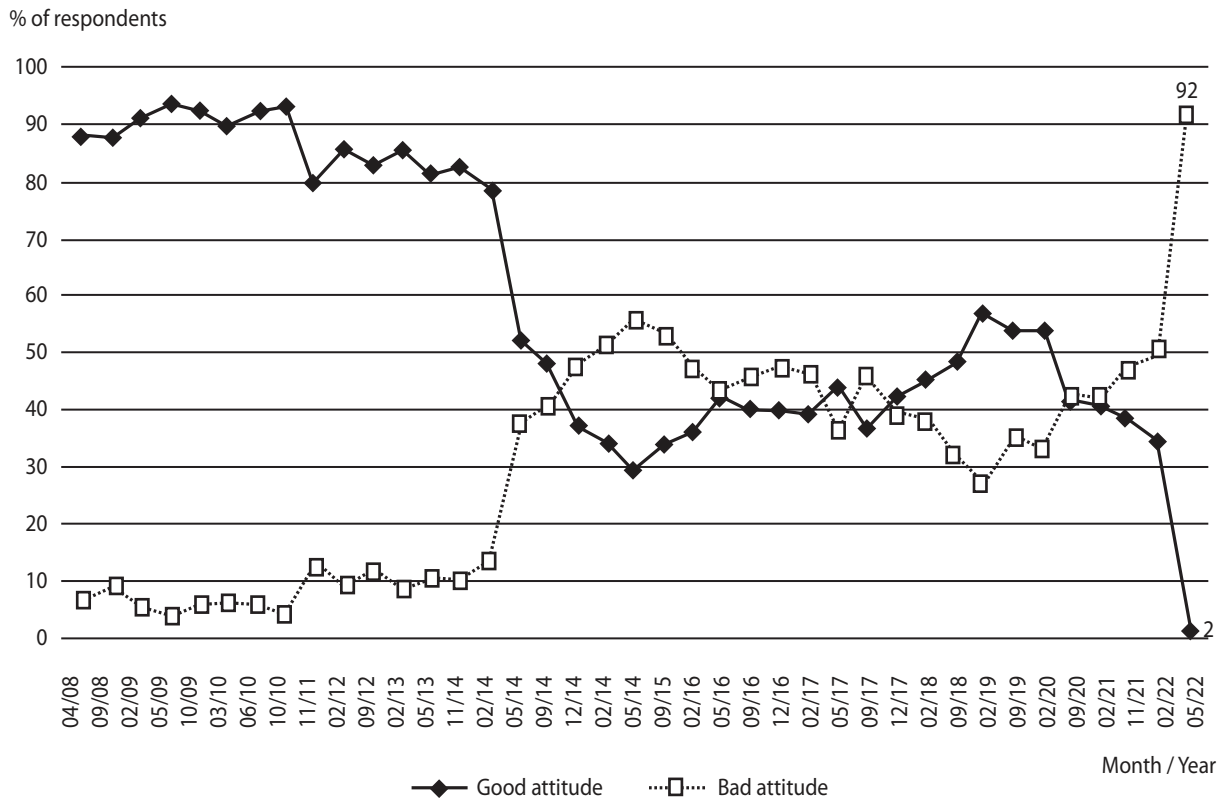


Fig. 2. Changes in the attitude of Ukrainians towards russia over 2008–2022

Source: [32]

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