Influence of Negative Factors of War: Economic, Legal, Regional and Environmental Aspects

Marta Kopytko †, Nataliia Grabar ††, Oksana Storozhuk†††, Yuliia Borutska††††, Tetiana Doroshenko†††††

† Lviv State University of Internal Affairs, Lviv, Ukraine (*The research was carried out within the framework of funding by Polish Academy of Sciences (PAS) and the National Academy of Sciences of the United States (2022))

†† Lviv State University of Internal Affairs, Lviv, Ukraine

††† Central Ukrainian National Technical University, Kropyvnytskyi, Ukraine

†††† Lviv National Agrarian University, Lviv, Ukraine

††††† Flight Academy of National Aviation University, Kropyvnytskyi, Ukraine

Abstract

Mankind has been living in the third millennium of a new era for 15 years. Today he realized that he was on a tiny planet with not much space. The 20th century laid bare its global consequences in all its horror.. According to the Stockholm International Peace Research Institute, more than 30 armed conflicts are recorded on the planet every year, leading to the death of more than 1,000 people during the year. Over the past 15 years, the total number of deaths as a result of military actions in such conflicts has also increased: more than 17 thousand people - in 2002 to more than 22.5 thousand - in 2011. 2022, in turn, became the beginning of a new round of military history, bringing changes in the social, environmental, agro-industrial, economic and other spheres not only in Ukraine, but also in all countries of the civilized world. As a result of the study, the most significant impact of the negative factors of the war, namely the economic, legal, regional and environmental aspects, was identified and analyzed.

Keywords:

war, military actions, negative factors of the war, human civilization, military security.

1. Introduction

The modern world is complex, multifaceted and contradictory. At the same time, it objectively becomes more and more interconnected, more and more integral: the internationalization of activities is intensive, the craving for multifaceted cooperation is growing, and interest in the scientific and cultural values of different countries and peoples is expanding. It is now clear that the security of every people is inseparable from the security of mankind. All this requires new political thinking, constructive approaches to solving the problems of international peace and security, and active construction of new international relations.

This war is the first in the history of mankind that takes place during the existence of social networks, mobile phones from which you can control satellites, the satellites themselves, from which you can see everything on earth, nuclear power plants, combat drones and other technological components of modern civilization.

2. Methodology

The theoretical and methodological basis of our study is the scientific works of scientists in the field of economic, environmental, financial, fiscal and military-political theory in the field of analyzing the impact of war on the state of various spheres of society. In particular, the emphasis was placed on the already existing and potential consequences resulting from the direct military aggression of the Russian Federation against Ukraine. To solve the tasks set, the following methods of studying economic, environmental, socio-political and other phenomena and processes were used: theoretical generalization, comparison, analysis and synthesis, induction and deduction - to determine the real and potential negative consequences for the world and Ukraine; structural-logical analysis - to build the logic and structure of the study; system analysis - improvement of the directions of the most important and critical assistance in various spheres of Ukraine's life.

3. Research Results and Discussions

Military actions, in particular, the military actions that began in Ukraine as a result of an invasion from the Russian Federation, have affected all spheres of human life without exception, both in Ukraine and around the world. In particular, with regard to the environmental sphere, there have been significant negative changes.

The negative consequences of military actions on the territory of Ukraine can be assessed in three areas: economics, law and ecology (Fig. 1).

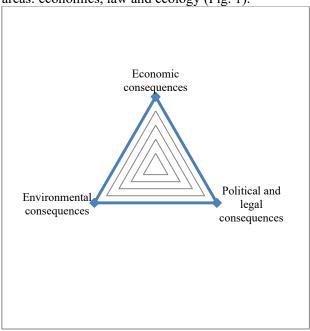


Fig. 1 The negative consequences of military actions on the territory of Ukraine.

The most significant thing in the development of weapons in the 21st century is that qualitatively new types of weapons have appeared - those that are called weapons of mass destruction. These are chemical, bacteriological and atomic weapons. War leads to a number of negative environmental consequences [1-15]:

- 1. Excessive exploitation of natural resources leads to the alienation of large areas, irrational exploitation of resources and significant pollution of surrounding areas.
- 2. Mined areas, remnants of corrosive equipment, chemicals, combustion products and highly toxic fuel reduce the area of economic use and harm the human environment.

- 3. Large-scale consequences from the use of bacteriological and chemical weapons, as well as the conduct of illegal military-scientific chemical and bioexperiments.
- 4. Destruction of protected areas.
- 5. Total ecological degradation.

Modern military operations primarily violate the soil and vegetation cover. The impact of military actions on the soil and vegetation cover and on the environment as a whole can be classified according to the following criteria: a) direct and indirect impact, b) primary and secondary occurrence, c) scale, d) duration and frequency. No less dangerous is the chemical pollution of the landscape, not only with toxic substances, but also with a number of heavy metals contained in shells, mines, etc. Erosion and the lack of environmental restoration can also be attributed to the physical and chemical consequences of military actions for land. The environmental consequences of war also include harm to human health from exposure to dangerous substances, such as inhalation of gases emitted by burning oil fields or uranium dust, which trigger asthma and possibly lung cancer.

If we talk about environmental problems associated with war in Ukraine, then among the main problems we can distinguish: flooding of mines as a result of rising groundwater, air pollution with various gases emitted as a result of coal combustion in industrial enterprises and through artillery entering chemical and metallurgical enterprises, as well as due to the combustion of a large number of powerful ammunition. Attention should be paid to the terrible sanitary and hygienic state of drinking water in the region, due to the fact that disinfection plants in cities are practically turned off, and water is supplied to consumers almost without treatment.

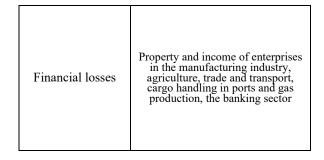
Military action leads to environmental consequences that are difficult to predict and will affect for many years after the end of military actions. Attention should be paid to the main air pollutants and their danger when the maximum permissible concentration is exceeded. Among them, the following can be distinguished: oxides of Carbon, Nitrogen, Sulfur, hydrogen sulfide, Fluor and Chlorine compounds.

The armed conflict in Ukraine has led to largescale changes in the economy. The main consequences are: economic instability, declining business activity; loss of the share of industrial potential (more than 30% of industrial enterprises of Ukraine were in the occupied territories); destruction of production and social infrastructure; damage and destruction of housing stock; reduction of the country's agricultural potential; rising unemployment and declining purchasing power; deteriorating business climate; reduction of exports and loss of budget revenues from occupied enterprises, etc.

Significant funds are allocated for military needs in the budget of Ukraine in comparison with previous years, the military-industrial complex is actively developing, the number of the Ukrainian army is growing. Military conflict causes increased risks in business, in particular in the illegal. The war in Ukraine has given rise to new practices of generating income, often illegal. In addition, as a result of the war, Ukraine suffered significant negative consequences in the form of loss of its own economic, financial and other resources (Table 1).

Table 1: The main losses of Ukraine due to direct military aggression by

the Russian Federation	
N <u>o</u>	The main losses
Industrial sector	Property of state and financial- industrial groups that were destroyed or occupied
Transport infrastructure	Railway tracks, roads, airports were destroyed or occupied
Fiscal sphere	Shortfall in taxes and fees to the state budget, contributions to social insurance funds and the inability to fulfill social obligations



If we consider the social consequences of the war in Ukraine, the following negative changes prevail here:

- the complication of the sanitary and epidemiological situation due to limited water supply and the destruction of sewer networks;
- Unemployment due to the stoppage and closure of enterprises;
- the problem of refugees and migrants from Ukraine to the EU countries and the USA;
- violation of social rights and payments;
- strengthening the social vulnerability of the population.

These and other complex issues need immediate discussion and further resolution, despite the difficult emotional state and concern for the future fate of mankind.

The most acute problem in Ukraine today is the armed conflict, which has spread throughout the country. We are already seeing the tragic consequences of the war - human casualties, destroyed buildings and infrastructure, and disturbed natural environment.

After the end of military actions, Ukraine expects many other large-scale consequences and manifestations. Among them may be a polluted environment, deterioration of the sanitary and epidemiological situation regions. in the unemployment, a demographic crisis, a decrease in the investment attractiveness of the region, as well as other environmental, social and economic problems. The relationship between man and nature from time immemorial has been difficult. But they became especially aggravated under the conditions of a fullscale invasion of the Russian Federation, when the war brought the world to the brink of an ecological catastrophe. The ecological crisis has acquired a truly comprehensive character. All natural ecosystems (atmosphere, hydrosphere, lithosphere and biosphere) experienced powerful anthropogenic pressure on the territory of Ukraine as a result of military operations.

In addition, the world is already suffering from the fact that there are problems of toxic air and water environment, erosion, salinization and depletion of soils, loss of forests, acid rain, the ozone hole, the threat of changes in the energy balance of the planet, the depletion of minerals, desertification, hundreds of thousands of disappeared . species of animals and plants, various types and scale of man-made accidents. Chemical, radioactive and other pollution of the natural environment causes various, often incurable diseases, irreversible changes in the genetic structure of cells, which leads to an increase in the birth rate of an inferior generation.

The formation of Ukrainian statehood is a rather difficult and multifaceted problem. And if such traditional components of the creation of the state economic, political, social, spiritual - are realized and implemented with violence, then such a relatively new, but essential aspect for modern political practice, as an ecological one, is more desirable than real. And this is alarming, because the state that survived Chernobyl should have given environmental policy issues the status of unconditional priority. But due to the full-scale invasion of the Russian Federation, the territory of Ukraine is experiencing huge economic, political and environmental consequences.

One of the manifestations of the new world order at the beginning of the 21st century was the transformation of such a socio-political phenomenon as war. Its main features are: an expanded arsenal of means to ensure the political goals of war (means of armed struggle, as well as non-military means - political, economic, informational, and others); going beyond the time frame of purely armed struggle; an expanded list of subjects of struggle (along with the state ones, paramilitary formations and terrorist organizations are playing an increasingly active role); the absence of a clear limit between its latent and open periods.

After the victory of Ukraine, as a result of the action of the aggressor (the Russian Federation), we will get the now occupied areas of Donbass with an almost completely destroyed economy and, moreover, a critical ecological state. The revival of the mentioned regions will require significant financial and economic resources from Ukraine. And it can be assumed that Russia predicts the depletion of the Ukrainian economy, the undermining of social and political stability and, as a result, the destruction of

the state of Ukraine. When solving a large-scale aggression against Ukraine, under the influence of the enemy, using the entire range of possible means (military and non-military), objects of economic infrastructure throughout Ukraine turned out to be. Along with this, it is necessary to count on the activation of purely economic measures of influence, in particular: the termination of supplies to our state and the transit of gas and oil through its territory; complete severance of trade ties; blocking the transit of goods from Ukraine through the territory of Russia to third countries. We should also expect an increase in the destructive influence of Russia on the implementation of Ukrainian economic policy using the pro-Russian lobby in other countries and international organizations. But this will not stop the Ukrainian people.

Struggle in the economic sphere is becoming an integral part of aggression. It begins long before armed aggression and continues after it ends. In combination with other non-military means of struggle, struggle in the economic sphere can significantly affect the achievement of political goals in interstate conflicts.

Russia's invasion of Ukraine has led to massive human losses and a humanitarian crisis, exacerbating financial instability, slowing economic growth, accelerating inflation, liquidating investments in sustainable development, reconfiguring the global supply chain, and rising prices for food, fuel and fertilizers.

The US and EU countries have unveiled a package of sanctions against large Russian companies, as well as the Central Bank of Russia (CBR), that will prevent it from accessing the \$643 billion it holds in foreign exchange reserves, blocking its ability to convert assets into dollars and euros in rubles. Russia is prohibited from using its Emergency Sovereign Fund and the State Welfare Fund. The US and EU have announced that Russian banks will be disconnected from the SWIFT global payment system. In addition, the export of high technologies and the use of foreign exchange reserves to pay for exports are limited. The Russian economy is facing a deep recession. The Institute of International Finance in Washington predicts a contraction of the Russian economy by 15%, and the Ukrainian economy by 50-60% in 2022.

World socio-economic development is interdependent on geopolitical processes and

international stability. The unprecedented disregard for international law by the Russian government led to large-scale tragic consequences for Ukraine: killings and torture of military, public activists and civilians in Borodyanka, Bucha, Pisky; kidnapping and criminal prosecution of citizens of Ukraine; socio-economic catastrophe in the Lugansk and Donetsk regions It can be said that Ukraine has become a "trigger" for the global transformation of humanity, international security institutions, political and socio-economic systems in different countries of the world.

4. Conclusions

The The modern world is constantly changing. Considering that conflicts accompany the entire history of mankind, they also transform into new previously unknown forms. Researchers believe that classic wars between great states are not possible, because they threaten the existence of all mankind due to the presence of nuclear weapons. However, wars have not disappeared. In different parts of the planet, new wars of varying intensity continue and arise. To date, the largest military conflict is taking place in Ukraine, and the consequences of this conflict are spreading throughout the world. Serving the needs of such armed confrontations has become an integral part of the global economic system. Evidence of this is the annual income of defense corporations. The role of any war in history extends far beyond the chronological framework of its conduct and immediate results. The role of war in history is finally revealed in its consequences, which are understood as the nature of changes in the alignment of socio-economic, political and spiritual forces between states and within them, emerging as a result of military actions, losses incurred and the degree of realization of the goals of the belligerents. Distinguish between immediate and long-term consequences of the war. The historical role of this or that war must be assessed by its consequences only within the framework of one era, since a new era also needs a new solution to the problem of war and peace. The impact of armed conflicts on the economy can be considered in two aspects - global and local. The presence of low-intensity wars in different parts of the world fuels the economy due to the rapid development of the military-industrial complex, as well as the possibility of externalizing the costs of the

capitalist system. On a local scale, any armed confrontation is devastating for the country's economy, which is focused on functioning in peacetime. a protracted conflict entails the reformatting of society in all aspects. The economic system is adapting and giving rise to new practices. There are paradoxical situations when there are opportunities to "earn" on the conflict, and hence the persons interested in its preservation.

If we consider the environmental sphere, then the preservation of peace, the strengthening of the principles of equal international cooperation is the basis for a successful solution of the environmental problem, which is closely connected with many global problems in the development of human civilization, and primarily with the problem of war and peace.

References

- [1] Reuveny, R., et al. "The Effect of Warfare on the Environment." *Journal of Peace Research*, vol. 47, no. 6, 2010, 749–61. JSTOR, http://www.jstor.org/stable/20798961
- [2] Redeker, N. Same shock, different effects: EU member states' exposure to the economic consequences of Putin's war. Hertie School Jacques Delors Centr. 2022. https://www.delorscentre.eu/en/publications/detail/publication/eu-member-states-exposure-to-putins-war
- [3] Kagan, F. W., Barros, G., & Stepanenko, K. Russian offensive campaign assessment, 2022 Institute for the Study of War. https://archive.ph/d3c6B
- [4] Fiore, N. (2019). Divisions in large-scale urban battles: The essential headquarters. Monograph. US Army Command and General Staff College
- [5] Kochnev, A. (2022). Requiem for Donbas: Three essays on the costs of war in Ukraine. *Doctoral dissertation*, Johannes Kepler University, Linz. https://epub.jku.at/obvulihs/content/titleinfo/5295 005/full.pdf
- [6] Bove, Vincenzo & Elia, Leandro & Smith, Ron. (On the heterogeneous consequences of civil war. Oxford Economic Papers. 2017 69. 550-568. https://doi.org/10.1093/oep/afw050
- [7] Skaperdas, S. The costs of organized violence: a review of the evidence, Economics of Governance, 2011, 12, 1–23.

- [8] Meidutė-Kavaliauskienė, I., Dudzevičiūtė, G., & Maknickienė, N. Military and demographic interlinkages in the context of the Lithuanian sustainability. *Journal of Business Economics and Management*, 2020, 21(6), 1508-1524. https://doi.org/10.3846/jbem.2020.13444
- [9] Bar-Nahum, Z., Finkelshtain, I., Ihle, R. *et al.* Effects of violent political conflict on the supply, demand and fragmentation of fresh food markets. *Food Sec.* 12, 503–515, 2020. https://doi.org/10.1007/s12571-020-01025-y
- [10] George Dimitriu (2020) Clausewitz and the politics of war: A contemporary theory, Journal of Strategic Studies, 2020, 43:5, 645-685, 10.1080/01402390.2018.1529567
- [11] Martin-Shields, Charles P., and Wolfgang Stojetz. Food security and conflict: Empirical challenges and future opportunities for research and policy making on food security and conflict." *World Development* 119, 2019, 150-164. http://doi.org/10.22004/ag.econ.288954
- [12] Ghimire, Ramesh & Ferreira, Susana & Dorfman, Jeffrey H., Flood-Induced Displacement and Civil Conflict, World Development, Elsevier, 2015, 66(C), 614-628. http://doi.org/10.1016/j.worlddev.2014.09.021
- [13] Kopytko, M., Franchuk, V., Panchenko, V., Viunyk, O., Myshchyshyn. O. Impact of Military Actions on the EU Labor Market. IJCSNS. Vol. 22 2022, No. 5 pp. 25-30. https://doi.org/10.22937/IJCSNS.2022.22.5.5
- [14] Ignazi, P., Power and the Legitimacy of Political Parties: An Unavoidable Paradox of Contemporary Democracy?', *Party Politics* 20/2 2014, 160–69.

http://doi.org/10.1177/1354068813519970

[15] Warren C., Technology, war and the state: past, present and future, *International Affairs*, Volume 95, 4, 2019, 765–783, https://doi.org/10.1093/ia/iiz106