LEPL - DAVID AGHMASHENEBELI NATIONAL DEFENCE ACADEMY OF GEORGIA



NUCLEAR POWERS, THEIR AMBITIONS AND POTENTIAL THREATS



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Nuclear Order

Brigadier General Mamia Balakhadze

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Abstract

The "global nuclear order" is commonly understood as an evolving set of institutions, norms, and practices governing the development and use of nuclear technology worldwide within certain norms. The pursuit of nuclear order is often portrayed as a "pragmatic" or "practical" compromise between unconstrained nuclear anarchy, on the one hand, and prompt steps toward nuclear disarmament, on the other.

In modern international relations and political science, the ideology of nuclear order aims for a world without nuclear weapons. However, states always want indicators that support their security and strength. Given the nature of the state, it is practically impossible for the world to exist without nuclear weapons. Therefore, it is crucial to ensure the order of the existing nuclear environment. The establishment of the nuclear order as an ideology and its discussion is still considered one of the interesting theories. In this paper, I will explain the essence
of the ideology of the nuclear order, discussing its ideological foundations, approaches, and discourses. William
Walker played a major role in discussing and establishing the nuclear order as an ideology. He provided an interesting explanation for the nuclear order, which many scientists consider to be the main basis of the ideology.

The purpose of this paper is to analyze the formation of the ideology of the nuclear order, and its subsequent integration into international politics. Through this analysis, we will explore the relationship between political elites and groups and their dependence on ideology, as well as the reverse. Finally, we will discuss the role

litical elites and groups and their dependence on ideology, as well as the reverse. Finally, we will discuss the role of the nuclear order ideology in the world security system.

Keywords:

Nuclear weapons, Ideology, Security, Order and integration.

Introduction

In the early 1930s, work began on creating nuclear weapons using the groundbreaking discoveries in physics from the early 20th century. One of the most notable discoveries was Albert Einstein's "mass deficiency" which provided the theoretical foundation for nuclear weapons. However, there were other important discoveries, such as Ernest Rutherford's model of the atom (1911) and others.

The practical basis for the creation of nuclear weapons was discovered by the great German physicist Otto Hahn on December 17, 1938, through nuclear fission. It's worth noting that Fritz Strassman and Lise Meitner also contributed to this work alongside Otto Hahn. Lisa Meitner was a Jew by nationality and through the efforts of her colleagues, especially Otto Hahn, she managed to escape to Sweden and in this way accidentally escaped being sent to a concentration camp. Recent and unconfirmed reports suggest that her contribution to the fission of the atomic nucleus was greater than that of Otto Hahn. During that same period, numerous theoretical studies and experiments were published, indicating that the creation of atomic weapons was becoming a realistic possibility. In September of 1941, Germany initiated Project Uranus, which was led by Werner Heisenberg, an outstanding German physicist and founder of quantum mechanics. Initially, the project was successful, but soon after, the Allies discovered its existence and began actively impeding its progress. Through the use of thousands of bombers, sabotage groups, local underground networks, and guerrilla fighters, any factory, building, or structure that was even suspected of being useful to Project Uranium was systematically demolished and destroyed.

In addition, the USA was conducting the Alsos Mission intending to gather information about the German project through special services. At the same time, the United States of America was carrying out the Manhattan Project, which involved a large group of physicists from around the world, and not just from the field of physics.¹

Shortly after the creation of nuclear weapons, politicians realized that nuclear weapons could pose a great threat to the world's security in the future. There is a possibility that a nuclear arsenal will end up in the hands of dictators or a state that sees it as an opportunity to achieve its own goals. In such a case, the security of the whole world is threatened.

The immense power of nuclear weapons has made the threat of nuclear war a key factor in international politics. Accordingly, as early as the 1950s, diplomats and scientists proposed radical solutions such as the establishment of a world government, nuclear disarmament, and decentralization of nuclear weapons ownership. In the 1960s, the US national security establishment developed the strategic approach of using nuclear weapons as a means of deterring other states and providing security guarantees to allies.

To achieve this goal, it is necessary to establish certain norms and institutions, which are usually called the "global nuclear order". So-called "nuclear realists," including Lewis Mumford, Gunter Anders, and Bertrand Russell, argued that the long-term prospects for a nuclear-armed world were always bleak. Any "order" will only exist until things suddenly fall apart. It is also argued that avoiding nuclear war since 1945 has depended to some extent on luck.²

The main creator and architect of what is now called the "global nuclear order" was the USA. According to analysts, the formation and establishment of the nuclear order led by the US reflected the symbiosis of "a constitutional balance of power and hegemonic strategies". The 1968 Treaty on the Non-Proliferation of Nuclear Weapons, drafted by the UN Committee of Disarmament and approved by the General Assembly on January 12, 1968, can be considered as a result of this strategy. The purpose of the treaty is to create a strong obstacle to further proliferation of nuclear weapons and to limit the number of states possessing such weapons. According to the treaty, a nuclear state is prohibited from directly or indirectly transferring nuclear weapons and control over them to others; and is obliged not to encourage a non-nuclear state to develop, acquire, or gain control over nuclear weapons. Relevant declarations guarantee the security of the non-nuclear states participating in the treaty.

However, in the traditional view, the establishment of a hierarchical nuclear order (which limited access to nuclear weapons by all but the great powers) was based largely on the idea that the possession of nuclear weapons by the five recognized states was a matter of temporary confidence.³

With all this in mind, some scientists were skeptical of the current nuclear order, they predicted that the coming decades would be a period of nuclear blackmail and show of force and that states would try their best to build nuclear arsenals covertly, all of which would lead to a "wave" of proliferation around the world. To some extent, their assumptions were justified. Still, it is worth noting the fact that the nuclear order that emerged in the 1960s has remained relatively unchanged for half a century and continues to observe the norms. Still, all this has been added to the "big games" that states use to gain hegemony, as a measure of power in today's world, and to some extent The nuclear arsenal is considered one of the indicators of gaining hegemony. Technological development and scientific achievements still failed to lead to major political changes. At the end of the Cold War, in 1986, nuclear armament peaked, but after the end of the Cold War, the reduction of the nuclear arsenal began actively. But as of today, nine states are armed with nuclear weapons and all of them are trying to modernize and

¹ Development and proliferation of atomic bombs - https://www.britannica.com/technology/atomic-bomb/Development-and-proliferation-of-atomic-bombs (access date24.10.2023)

² Nicola Horsburgh, Introduction: Global Nuclear Order in Conceptual and Historical Perspective, Pages 1–38

³ Sara Z. Kutchesfahani, Global Nuclear Order, Page 31-40

develop nuclear weapons.4

Considering all this, it is interesting how the nuclear order was stabilized. The main accounts of continuity and change in nuclear policy emphasize the importance of geopolitical factors, technological advances, and knowledge, and in this process, the ideology of the nuclear order itself has played a large role in stabilizing security to some extent. With ideology, it was a kind of basis for politicians to integrate certain norms and beliefs into policies that would lead to the stabilization of the situation. Finally, ideology laid the foundation for the policy-making process. Below, we will consider the process of ideology formation and its subsequent integration into politics.

Main Part

Nuclear order as an ideology

William Walker has scientifically explored the concept, practice, and ideology of the nuclear order. It is a normative structure that relies on interconnected systems of nuclear "abstinence" and "deterrence". The nuclear order encompasses the development of ideologies and activities that aim to save the world, prevent war, and establish international peace at a normative level. Essentially, the "nuclear order" refers to the dominant elite discourse that manages nuclear arsenals, prevents war, and embodies that discourse in the form of institutions, norms, and practices.⁵

Walker's definition of nuclear order can be directly seen as an approach to nuclear order ideology. Indeed, ideologies are cultural patterns that serve fundamental purposes, they are also "imaginative maps" that shape the identity and behavior of individuals and groups. The practice of nuclear order shows all the features of political ideology: 1) the role of nuclear capabilities on international security; 2) specific political views and arrangements; 3) assumptions about how the world works; 4) relevance of the issue.⁶ Thus, the understanding of the nuclear order as an ideology is based on Walker's thinking and analysis. The nuclear order is understood here as a set of activities, institutions, and norms, which subsequently shape nuclear politics.⁷

What we now call the ideology of the nuclear order was integrated into politics in recent years by a group of American politicians between 2007 and 2013. George Shultz, William Perry, Henry Kissinger, and Sam Nunn published a series of articles on nuclear policy in the Wall Street Journal. The policy group argued that as the proliferation of nuclear weapons in the modern world "accelerates" and nuclear deterrence programs become less and less effective, "we have the very real possibility that the world's deadliest weapons will end up in the hands of a rogue government or state." The political group urged the US government to find a favorable way to bring the 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT) into force. The mentioned political group has again brought the topic of nuclear disarmament back to the agenda in the international community, they have also somewhat renewed the basic principles of the ideology of the nuclear order, which was published in the Wall Street Journal in the form of a series of articles. Below, let's briefly consider what issues are focused on:⁸

- "Vision for the Transition to Zero" The first nuclear disarmament is presented as an important goal, but at the same time, it was a long-term project. The main idea of the vision for the transition to zero is to achieve disarmament at a certain percentage.9
- "Nuclear weapons as a means of deterrence" nuclear deterrence is established as an essential and objective prerequisite for international security and stability. According to Shultz, the United States should maintain and protect its nuclear arsenal "as long as national security requires it." By the same logic, nuclear weapons are a means of deterrence, because nuclear states are no longer at war with each other and try to use the nuclear arsenal as the main indicator of deterrence concerning other states. According to this approach, nuclear weapons are beneficial for all nations of the world. But the question is how long states will use nuclear weapons as a deterrent.¹⁰
- "Non-Proliferation" The non-proliferation of military nuclear technology is vital for world security. The ideology calls for states to control and limit the proliferation of nuclear weapons, especially to limit the produc-

⁴ Thomas Jonter, Historicizing the Hegemonic Nuclear Order https://www.wilsoncenter.org/blog-post/historicizing-hegemonic-nuclear-order (წვდომის თარიღი 24.10.2023)

⁵ Kjølv Egeland, The Ideology of Nuclear Order, Pages 208-230 https://doi.org/10.1080/07393148.2021.1886772

⁶ William Walker, "Nuclear Enlightenment and Counter-Enlightenment," International Affairs 83:3 (2007), pp. 431–53.

⁷ Walker, "Nuclear Order and Disorder," p. 703.

⁸ Shultz et al., "A World Free of Nuclear Weapons"; Shultz et al., "Toward a Nuclear-Free World"; George Shultz, William Perry, Henry Kissinger, and Sam Nunn, "How to Protect Our Nuclear Deterrent," Wall Street Journal (January 20, 2010), available online at: https://media.nti.org/pdfs/NSP_op-eds_final_.pdf; George Shultz, William Perry, Henry Kissinger, and Sam Nunn, "Deterrence in the Age of Nuclear Proliferation," Wall Street Journal (March 7, 2011), available online at: https://media.nti.org/pdfs/NSP_op-eds_final_.pdf; George Shultz, William Perry, Henry Kissinger, and Sam Nunn, "Next Steps in Reducing Nuclear Risks," Wall Street Journal (March 5, 2013), available online at: https://www.wsj.com/articles/ SB1000142412788732433860457 8325912939001772.

⁹ Shultz et al., "Toward a Nuclear-Free World."

¹⁰ Cf. Gusterson, "Nuclear Weapons and the Other," p. 132.

tion and proliferation of illegal weapons to third states.¹¹

- "A new and dangerous nuclear age" The world is facing a growing threat due to the modernization and proliferation of nuclear weapons. Although the nuclear order is often presented as a means to reduce tension, deterrence relations are becoming increasingly unstable in the modern world. Non-nuclear states are increasingly skeptical of nuclear states and their promises of disarmament, preferring instead to establish strategic relationships with them and bring them under their own arsenal. However, if the spread of nuclear weapons continues at an accelerated pace, and unstable states acquire nuclear weapons to solve short-term problems, the likelihood of nuclear weapons being used will increase.¹²
- **"Practical Steps"** Despite some tensions, the followers of the ideology of the nuclear order are always optimistic about solving the nuclear problem through practical steps. Since the 1960s, pragmatic diplomatic approaches and proposals have been active in certain political and elite groups.¹³

Finally, to summarize, a set of contradictory claims and orders forms the essential content of the ideology of the nuclear order. By offering both descriptive and prescriptive solutions, the five concepts identified above, published in the Wall Street Journal, have given the ideology of the nuclear order some direction and future relevance. The abovementioned political group integrated the ideology of the nuclear order into the politics of national and international relations, which is guided by the five concepts. Still, at the initial stage, the ideology played a large role in the process of creating the Treaty on the Non-Proliferation of Nuclear Weapons, which was signed on July 1, 1968. It was written on July 1 of the year. The Treaty on the Non-Proliferation of Nuclear Weapons consists of a preamble and eleven articles. In various literatures, the contract is often called a three-pillar system, where these three pillars are in mutual balance: Non-proliferation, disarmament, and the right to peacefully use nuclear technology.¹⁴

Conclusion

In the modern political-economic system, ideologies have great importance and influence. Politicians use the mentioned ideology to govern the state, and it is possible to present the ideology as a kind of compass, what kind of economic policy the country should have, how the political system should be composed, etc. From all this, the purpose of the ideology of the nuclear order is not a means of perceiving certain political processes, but its purpose is to lead a certain order and ensure it. The nuclear order may seem relevant only to states in possession of nuclear weapons, but it actually affects the security of the entire world. Thus, the ideology behind the nuclear order plays a significant role in maintaining the current global order, as every political system requires a strong ideological and theoretical basis to function effectively. The ideology of the nuclear order is not presented as a chrestomatous ideology, but it has slowly established itself. The ideology of the nuclear order still remains in elite political circles, and we still cannot have transparent views. Finally, Walker's definition of the nuclear order created an ideology that is still trying to prevent a world nuclear war, and the above-mentioned political group has already translated the mentioned ideology into practice, the goal of the said policy is to ensure international peace.

References

Horsburgh Nicola, Introduction: Global Nuclear Order in Conceptual and Historical

Perspective, Oxford University Press, 2015.

Egeland Kjøly, The Ideology of Nuclear Order, Roultedge, 2021.

Kutchesfahani Sara Z, Global Nuclear Order, Roultedge, 2019.

William Walker, "Nuclear Enlightenment and Counter-Enlightenment," International Affairs 83:3, 2007.

Shultz et al., "A World Free of Nuclear Weapons"; Shultz et al., "Toward a Nuclear-Free

World"; George Shultz, William Perry, Henry Kissinger, and Sam Nunn, "How to Protect Our Nuclear Deterrent," Wall Street Journal (January 20, 2010).

Treaty on the Non-Proliferation of Nuclear Weapons (NPT) –

https://disarmament.unoda.org/wmd/nuclear/npt/ (access date 24.10.2023)

Thomas Jonter, Historicizing the Hegemonic Nuclear Order

https://www.wilsoncenter.org/blog-post/historicizing-hegemonic-nuclear-order (access date 24.10.2023)

¹¹ ib

¹² Shultz et al., "Toward a Nuclear-Free World"; Shultz et al., "Next Steps."

¹³ ib

¹⁴ Treaty on the Non-Proliferation of Nuclear Weapons (NPT) - https://disarmament.unoda.org/wmd/nuclear/npt/ (access date 24.10.2023)

From Deterrence to Disarmament: Challenges and Ambitions of Nuclear-Armed States

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Abstract

Nuclear-armed states face a complex set of challenges and have varying ambitions related to their nuclear arsenals. In a challenge zone can be that many nuclear-armed states are committed to non-proliferation efforts and face challenges to prevent the spread of nuclear weapons to other states. They work to maintain or strengthen weapons control agreements to limit the growth of nuclear arsenals. This research article explores the complex journey of nuclear-armed states as they navigate the transition from nuclear deterrence strategies to disarmament ambitions. It delves into the historical context of nuclear arsenals, examining the Cold War-era deterrence policies and their evolution. The study sheds light on the stability and risks associated with deterrence, analyzing shifts in the global security environment and the rise of non-state actors in regional conflicts. Furthermore, it investigates international efforts for nuclear disarmament, including treaties and their motivations. By examining the role of public opinion, civil society, and technological advancements, this article offers insights into the obstacles, reluctance, and security dilemmas that influence disarmament initiatives among nuclear-armed states. This research article delves into the complex trajectory of nuclear-armed states, focusing on their evolving strategies and aspirations as they navigate the transition from deterrence-based security policies to the pursuit of disarmament. The proliferation of nuclear weapons has long been a central concern in international relations, with states utilizing nuclear arsenals as a means of deterring potential adversaries. However, recent global developments, including arms control agreements and heightened awareness of the catastrophic consequences of nuclear warfare, have prompted a shift in the discourse surrounding nuclear weapons.

Keywords:

Nuclear-armed states, Deterrence, Disarmament, Stability, Threats.

Introduction

The historical context of nuclear arsenals is marked by several key developments. First, World War II and the Manhattan Project (1940s) when the development and use that atomic bombs by the US (United States) in 1945 during WW II (World War II) ushered in the nuclear age. The events of Hiroshima and also Nagasaki demonstrated the devastating power of using nuclear weapons and led to Japan capitulate. Also, in post-WWII period, Cold War (1947-1991), saw the emergence of the US and the Soviet Union as superpowers in a very tense and ideologically charged rivalry. This Cold War era was characterized by a nuclear arms race, with both nations rapidly expanding their nuclear arsenals to deter each other.

Mutual Assured Destruction (MAD) was a central concept during the Cold War. It posited that if both the US and the Soviet Union had enough nuclear weapons to ensure the destruction of the other side if a conflict using nuclear weapons take place, neither side would risk initiating such a conflict. This idea contributed to stability, as neither superpower wanted to trigger their own destruction. Over time, additional countries developed their own nuclear weapons programs. The UK, France, China, and few years later countries like India, Pakistan, and also North Korea develop programs of nuclear arsenals, leading to a more complex global nuclear landscape.

After the Cold War was end in 1991, the domain was somehow changed, taking in consideration the significant reductions in nuclear arsenals, but the threat of nuclear conflict persisted. New challenges arose, including the risk of nuclear materials going to people that cannot be trusted and also concerns about the opportunity non-state actors to have nuclear weapons. Today, the world faces ongoing nuclear challenges, including tensions between nuclear-armed states, efforts in preventing the proliferation of nuclear weapons, and concerns about the actions to modernize the nuclear arsenals. Nuclear deterrence continues to be the main effort in global security policies.

Nuclear-armed states often have aging nuclear weapon systems that require modernization. This presents financial and technical challenges, as they seek to upgrade their arsenals while ensuring they remain effective and secure

Probable being the main reason for nuclear-armed states having these weapons: Deterrence and Strategic Stability: These states must maintain a credible deterrence posture to discourage potential adversaries from aggression. Ensuring the reliability of their nuclear deterrents is a constant challenge.

In the era of computers, cybersecurity and Emerging Threats can be a challenge for nuclear-armed states, and protecting nuclear command and control systems from cyberattacks and addressing new emerging threats, such as hypersonic missiles, challenges the security of nuclear arsenals.

Like ambitions, many nuclear-armed states aim to modernize their arsenals to maintain their deterrent capabilities. This includes developing advanced delivery systems, improving warhead designs, and enhancing command and control infrastructure.

In regions with multiple nuclear-armed states, ambitions may involve achieving regional stability and security through arms control agreements or confidence-building measures to reduce the risk of conflict.

Being already nuclear-armed states, they want to prevent proliferation, so nuclear-armed states often aim to prevent other countries or non-state actors from acquiring nuclear weapons. They may pursue diplomacy, sanctions, or other measures to achieve this goal.

One actual ambition can be about having a nuclear posture. States may adjust their nuclear postures based on evolving security threats and international relations. Ambitions can include making declaratory policy changes to signal intentions and capabilities. One example can be Rusia in ongoing conflict with Ukraine, threatens with using nuclear weapons if is necessary.¹

The specific challenges and ambitions of nuclear-armed states can vary significantly based on their geopolitical circumstances, security concerns, and diplomatic priorities. Balancing the need for deterrence with the pursuit of global stability and disarmament remains a complex and ongoing endeavor for these states.

Main Part

1. The Era of Nuclear Deterrence

Nuclear deterrence is a strategic concept in international relations and military policy that relies on the threat of using nuclear weapons to prevent adversaries from taking hostile actions. The idea is that if a country possesses a credible and robust nuclear arsenal, it can dissuade potential adversaries from attacking, as they fear the devastating consequences of this big scale retaliation. The main principle of nuclear deterrence can be that the prospect of mutually assured destruction discourages conflict and promotes stability by making the costs of aggression too high to bear. This concept played an important role during the Cold War and continues to influence global security strategies today.

^{1 1.} Josh Pennington, Alex Stambaugh, and Brad Lendon, "Medvedev Says Russia Could Use Nuclear Weapon If Ukraine's Fightback Succeeds in Latest Threat," CNN, July 31, 2023, https://edition.cnn.com/2023/07/31/europe/medvedev-russia-nuclear-weapons-intl-hnk/index.html.

Nuclear deterrence include some key components. First, this should be a credible threat, so to be effective, a country's nuclear deterrence strategy must be seen as credible by potential adversaries. This means possessing a robust and reliable nuclear arsenal and demonstrating the willingness and capability to use it if necessary. Also, deterrence typically relies on the principle of mutual vulnerability. Both sides acknowledge that if a nuclear conflict were to occur, both would suffer catastrophic damage. This recognition makes the costs of aggression prohibitively high, discouraging any such actions.

Embrace policy like No-First-Use and Second-Strike Capability can be considerate a key component. Some countries adopt a "no-first-use" policy, pledging not to use nuclear weapons unless they are attacked with them first. To maintain deterrence, they focus on building a "second-strike" capability, ensuring the ability to retaliate even after absorbing a nuclear attack.

The overarching purpose of nuclear deterrence is to maintain stability and peace by preventing major conflicts, particularly those involving nuclear weapons. By making the prospect of war too risky, it aims to discourage nations from resorting to violence as a means of achieving their objectives.

Today, nuclear deterrence continues to shape the strategies and policies of nuclear-armed states. While it has been credited with keeping peace between major powers, it also raises concerns about the potential for accidental nuclear escalation and the continued presence of a significant number of weapons worldwide.

During the Cold War, US and also Soviet Union, developed and implemented various deterrence policies to manage their rivalry and prevent direct military conflict. Including MAD, here are some examples of Cold Warera deterrence policies:

No-First-Use Policy: Some countries, including the Soviet Union, accepted a "no-first-use" policy, wherein they pledged not to use this very dangerous weapons first in a conflict but reserved the right to retaliate if attacked with nuclear weapons. This policy reinforced the idea of deterrence by emphasizing the defensive nature of nuclear arsenals.

Flexible Response: The United States adopted the Flexible Response strategy, which sought to provide a range of military options, including conventional and nuclear, to respond to various levels of aggression by the Soviet Union or its allies. It aimed to deter aggression through the credible threat of using an appropriate level of force.

Deterrence by Extended Deterrence: The United States extended its nuclear umbrella to its NATO allies in Europe, assuring them that it would use nuclear weapons to defend them if the Soviet Union attacked. This extended deterrence strategy has the mail goal to prevent the Soviet Union from attempting to exploit the vulnerability of individual NATO members.

Arms Control and Arms Reduction Treaties: Both superpowers engaged in a series of weapons control negotiations and treaties in order to limit the extent of their nuclear arsenals and reduce the risk of accidental conflict. Examples include the Strategic Arms Limitation Talks (SALT) and the Strategic Arms Reduction Treaty (START).

Crisis Management: Both US and also Soviet Union developed procedures and communication channels to manage crises and avoid accidental nuclear escalation. The goal was to ensure that misunderstandings or miscommunications did not lead to unintentional nuclear conflict.

As it was presented, deterrence is a complex strategy with both benefits and risks. Its effectiveness depends on various factors, and while it can contribute to stability by preventing major conflicts, it also presents significant dangers.

Stability can be associated with Deterrence for many reasons:

Prevention of Major Conflict: Deterrence, when successful, can prevent major conflicts between nuclear-armed states by making the cost of aggression too high. The fear of a devastating response deters nations from initiating military actions.

Strategic Stability: Deterrence contributes to strategic stability by maintaining a balance of power among nuclear-armed states. When both sides understand the consequences of nuclear conflict, they are less likely to engage in actions that could lead to a nuclear war.

Nuclear Proliferation Control: Nuclear-armed states often use deterrence to dissuade other countries from pursuing nuclear weapons programs. The fear of facing a well-established nuclear arsenal can discourage proliferation efforts.

Crisis Management: Deterrence can provide a framework for managing crises between nuclear-armed states. Communication channels and established protocols for crisis de-escalation can help prevent misunderstandings from leading to nuclear conflict.

Also, risks can be associated with deterrence:

Accidental Use: One of the most significant risks of deterrence is the potential for accidental or unauthorized use of nuclear weapons. Miscommunications, technical glitches, or false alarms could lead to unintended nuclear escalation.

Nuclear Arms Races: Deterrence often leads to arms races, as states seek to enhance their nuclear capabilities to maintain credible deterrence. This can increase the overall number of nuclear weapons and heighten tensions.

Crisis Instability: While deterrence aims to maintain stability, there is a risk that during crises, both sides may perceive a need to take provocative actions to demonstrate resolve. This can inadvertently increase the likelihood of conflict.

Credibility Challenges: Maintaining the credibility of deterrence can be challenging. If an adversary doubts a country's willingness or ability to use nuclear weapons, deterrence may be less effective.

Escalation Risks: Deterrence can create a situation where, in a crisis, both sides feel compelled to escalate, believing that the other side might launch a pre-emptive strike. This can lead to a dangerous spiral of increasing tensions and the risk of nuclear use.

Human Error and Cyber Threats: The reliance on complex systems for command and control introduces the risk of human error or cyberattacks that could compromise the security and control of nuclear weapons.

In summary, deterrence is a double-edged sword. While it has contributed to preventing major conflicts between nuclear-armed states, it carries substantial risks, including the potential for accidental use, arms races, and crisis instability. To mitigate these risks, efforts must be made to strengthen communication, crisis management mechanisms, and arms control agreements, and to decrease the overall number of nuclear weapons through disarmament initiatives.

2. Changing Global Dynamics

The global security environment has witnessed several shifts concerning nuclear power over the years. These shifts are influenced by changes in geopolitics, technology, and international relations.

The proliferation of nuclear weapons still is a persistent concern. While the number of nuclear-armed states has not dramatically increased after 1991, countries like North Korea have successfully developed nuclear weapons, challenging global non-proliferation efforts. Also, China have increased the nuclear arsenal and will be more than triple its nuclear arsenal by 2023.²

Furthermore, Iran Nuclear Deal: The Joint Comprehensive Plan of Action (JCPOA) was a significant diplomatic effort to curb Iran's nuclear program. However, shifts in U.S. policy, including the withdrawal from the agreement, have raised questions about the future of nuclear diplomacy and non-proliferation.³

Due to advance of technologies, several nuclear-armed states, have embarked on programs to modernize their nuclear arsenals. This has led to concerns about a new arms race and the potential destabilizing effects of advanced nuclear capabilities. Advances in technology, such as hypersonic missiles and cyber capabilities, have added complexity to the nuclear security environment. These technologies can potentially undermine traditional deterrence and early warning systems, and can have an impact at the security of nuclear facilities, both civilian and military, is of paramount importance to prevent unauthorized access to nuclear materials or sabotage.

Regional dynamics has changed. Regional tensions in the Asia-Pacific, particularly involving China and Taiwan, have implications for nuclear stability. The increasing importance of nuclear weapons in regional security dynamics adds complexity to the global landscape.

Terrorist Organizations: Non-state terrorist groups, such as Al-Qaeda and ISIS, have expressed interest in acquiring and using nuclear weapons. While the acquisition of a fully functional nuclear weapon by such groups is extremely difficult, concerns persist about their potential to acquire and use radiological or fissile materials for "dirty bombs."

Nuclear Black Market: Non-state actors have tried to exploit weaknesses in the security and control of nuclear materials. The existence of black markets for nuclear materials and technology poses a significant risk. The A.Q. Khan network, for example, facilitated the proliferation of nuclear technology to several countries.⁴

Cyber Threats: Non-state actors, including hacktivists and cybercriminals, have demonstrated capabilities in cyberattacks targeting nuclear facilities and command and control systems. Cyber vulnerabilities can potentially undermine the security of nuclear infrastructure.

Tensions in South Asia: The India-Pakistan rivalry in South Asia is of particular concern due to both countries' nuclear arsenals. Escalating tensions or a conflict in this region could have severe nuclear implications. Both countries have developed short-range nuclear-capable missiles, raising the risk of nuclear weapons being used in a regional conflict.

North Korean Nuclear Program: This program and its provocative behavior have led to regional tensions and concerns about nuclear proliferation. Its nuclear tests and development of long-range missiles have heightened security concerns, leading to international sanctions and negotiations.

Middle East Instability: Ongoing conflicts and regional rivalries in the Middle East have raised concerns about the potential for nuclear proliferation. Iran's nuclear program and the Israel-Arab conflict are particularly noteworthy in this context.

Ukraine Crisis: The recent annexation of Crimea by Russia and the ongoing war in Ukraine have caused a tension between Russia and the West. Russia's nuclear capabilities and its involvement in the conflict have major

^{2 &}quot;Pentagon: China to More than Triple Its Nuclear Arsenal by 2035," POLITICO, accessed November 21, 2023, https://www.politico.com/news/2022/11/29/pentagon-china-nuclear-stockpile-00071101.

³ U.S. Department of State, accessed November 21, 2023, https://2009-2017.state.gov/e/eb/tfs/spi/iran/jcpoa.

^{4 &}quot;Aq Khan Is Dead – Long Live the Proliferation Network," Royal United Services Institute, October 15, 2021, https://rusi.org/explore-our-research/publications/commentary/aq-khan-dead-long-live-proliferation-network.

impact for regional and global security.5

East Asia Territorial Disputes: Territorial disputes in the China Sea, Filipine Sea and the Taiwan Strait, involving countries like China, Taiwan, Japan, and others, have added complexity to regional security, and China nuclear weapons arsenal can play a major role in these conflicts and their potential escalation are areas of concern.⁶

The rise of non-state actors and regional conflicts has created additional layers of complexity in the context of nuclear power. These dynamics increase the risk of nuclear proliferation, unauthorized use, or accidental escalation in regional conflicts. As such, managing these challenges requires a concerted international effort to strengthen nuclear security, arms control, and diplomatic resolutions to regional conflicts.

In summary, the global security environment related to nuclear power is characterized by a complex interplay of factors, including concerns about proliferation, arms races, technology, terrorism, and diplomatic efforts. As geopolitical dynamics evolve, managing these challenges and promoting nuclear disarmament and non-proliferation will remain critical for global security.

3. The Emergence of Disarmament Initiatives

International efforts for nuclear disarmament have been a crucial aspect of global security policy after Cold War. Several treaties and agreements have been negotiated to decrease the number of nuclear weapons and promote disarmament. In the experts' opinion, one of the most significant series of agreements in this regard is the Strategic Arms Reduction Treaty (START) treaties. Here's an overview of international efforts for nuclear disarmament, including the START treaties:

Strategic Arms Reduction Treaty (START):

- START I (1991): Signed between the US and the Soviet Union in 1991, marked the beginning of significant reductions in strategic nuclear arms. It required both states to decrease their deployed strategic nuclear warheads and delivery systems.
- START II (Not Ratified): START II, signed in 1993, aimed to further reduce strategic arms, including the elimination of multiple-warhead intercontinental ballistic missiles (ICBMs). However, it was not ratified by the Russian Duma, and the treaty did not enter into force.
- START III (Not Ratified): START III was proposed but was never negotiated or ratified. It would have continued the process of strategic nuclear arms reductions.
- New START (2011): Signed between the US and Russia in 2010, succeeded the original START I Treaty. The main aspect of this treaty is to put limits for deployed strategic nuclear warheads and delivery vehicles for both countries. The treaty was extended for five years in 2021, ensuring continued limits on nuclear arsenals.⁷

Comprehensive Nuclear-Test-Ban Treaty (CTBT): Signed in 1996, prohibits all nuclear explosions for both civilian and military purposes. The mail purpose was preventing the development of new nuclear weapons and sustain disarmament. Although it has been signed by many countries, it has not yet entered into force, as some key countries, including the United States, have not ratified it.

Treaty on the Prohibition of Nuclear Weapons (TPNW): Initiated in 2017 and entering in force in 2021, the TPNW is the first international treaty to ban nuclear weapons. It prohibits the extending, testing, production, possession, use, and also threat of use this weapons. While it has not been supported by nuclear-armed states, it reflects growing global concerns about the impact to humanitarian of using the nuclear weapons.

Nuclear Non-Proliferation Treaty (NPT): The NPT, starting with 1970, put the base for all efforts in preventing the spread of nuclear weapons and promote disarmament. It divides states into nuclear-armed states (recognized under the treaty) and non-nuclear-armed states (which committed not to acquire nuclear weapons). The NPT's Review Conferences serve as venues for discussing disarmament measures.

Conference on Disarmament (CD): Is a multilateral forum established to negotiate disarmament agreements, including efforts related to nuclear disarmament. It has played a role in discussions about Fissile Material Cut-off Treaty (FMCT) plus other nuclear disarmament measures.

Disarmament initiatives in the context of nuclear power are motivated by a combination of ethical, security, humanitarian, and practical considerations. These motivations reflect the desire of nations and the international community to decrease the risks associated with nuclear weapons. Here's an evaluation of some key motivations behind disarmament initiatives:

Ethical and Humanitarian Concerns-Preventing Catastrophic Humanitarian Consequences: The most catastrophic consequence of nuclear weapons use is the loss of human life on an unprecedented scale, along with long-lasting environmental damage. Many disarmament proponents are driven by a moral imperative to prevent such catastrophic suffering.

⁵ Josh Pennington, Alex Stambaugh, and Brad Lendon, "Medvedev Says Russia Could Use Nuclear Weapon If Ukraine's Fightback Succeeds in Latest Threat," CNN, July 31, 2023, https://edition.cnn.com/2023/07/31/europe/medvedev-russia-nuclear-weapons-intl-hnk/index.html.

⁶ Jacque Schrag, "How Is China Modernizing Its Nuclear Forces?," ChinaPower Project, October 28, 2020, https://chinapower.csis.org/china-nuclear-weapons/.

^{7 &}quot;New START Treaty - United States Department of State," U.S. Department of State, June 1, 2023, https://www.state.gov/new-start.

Enhancing Global Security-Avoiding Nuclear Conflict: Reducing the number of nuclear weapons also their potential use contributes to global security by reducing the likelihood of nuclear conflicts. Fewer nuclear weapons decrease the risk of accidental or unauthorized launches, miscalculations, and escalations.

Fostering Stability: Arms control and disarmament measures can contribute to regional and global stability by addressing the risks associated with arms races and power imbalances.

Non-Proliferation and Preventing Nuclear Terrorism:

- Curbing Proliferation: Efforts to disarmament are closely linked to non-proliferation objectives. By demonstrating a commitment to disarmament, nuclear-armed states can encourage non-nuclear-armed states to refrain from pursuing nuclear weapons programs.
- Preventing Nuclear Terrorism: Reducing the number of nuclear weapons and securing nuclear materials through disarmament initiatives helps prevent the possibility of terrorists acquiring nuclear weapons or materials. Economic and Resource Considerations:
- Resource Allocation: Maintaining nuclear arsenals is expensive. Disarmament can free up resources for other pressing national and global needs, such as healthcare, education, and infrastructure development.
- Technological Dividends: Scientific and technological expertise developed for military purposes can be redirected toward civilian applications, potentially benefiting society in various ways.

Global Norms and Humanitarian Initiatives:

- Changing Perceptions: The international community's evolving normative framework views nuclear weapons as inherently dangerous and morally unacceptable. Initiatives like the TPNW reflect this changing perspective and encourage disarmament efforts.
- Civil Society Movements: Grassroots movements, including those led by humanitarian organizations and survivors of nuclear bombings, have mobilized public opinion and pushed for disarmament as a moral imperative.

While disarmament initiatives are driven by these motivations, progress remains a complex and challenging endeavor. It often requires cooperation among nuclear-armed states, addressing security concerns, and building trust. Nonetheless, these motivations continue to guide international efforts toward the main goal of a world without nuclear weapons.

Public opinion and civil society have played significant roles in driving nuclear disarmament efforts and shaping the policies of governments and international organizations. Their influence can be seen in various ways:

Raising Awareness: Public awareness campaigns and advocacy efforts by civil society organizations have educated the public about the dangers and consequences of nuclear weapons use. They have highlighted the catastrophic humanitarian impacts, fostering a sense of urgency around disarmament.

Mobilizing Public Opinion: Civil society groups, including peace activists, NGOs, and grassroots movements, have mobilized public opinion against nuclear weapons. They have organized rallies, protests, petitions, and social media campaigns to generate public support for disarmament.

Pressure on Governments: Public opinion influences government policies. When a significant portion of the population expresses a desire for disarmament, it can create political pressure on leaders to take meaningful steps toward reducing and eliminating nuclear arsenals.

Promoting Transparency: Civil society organizations have called for greater transparency from nuclear-armed states regarding their nuclear arsenals and disarmament efforts. This pressure has led to increased reporting and discussions about disarmament measures.

Monitoring Treaty Compliance: Civil society organizations often serve as watchdogs, monitoring compliance with disarmament treaties and holding governments accountable for their commitments. This oversight ensures that nations adhere to their disarmament obligations.

Advocating for Treaty Ratification: Civil society played a vital role in advocating for the TPNW. The successful negotiation and adoption of the TPNW were driven, in part, by the efforts of civil society and humanitarian organizations.

Survivor Stories and Testimonies: Survivors of nuclear bombings and nuclear testing have shared their experiences and testimonies, bringing a human dimension to disarmament discussions. Their stories emphasize the humanitarian imperative of nuclear disarmament.

Shaping Public Opinion Globally: Global campaigns and initiatives, like International Campaign to Abolish Nuclear Weapons (ICAN), create a bound between civil society organizations worldwide to advocate for disarmament. ICAN was awarded with Nobel Peace Prize in 2017 for all the efforts in advancing the TPNW.

Public opinion and civil society involvement have led to tangible outcomes in the disarmament arena, including arms control agreements, nuclear testing moratoriums, and the adoption of the TPNW. Their persistent efforts continue to influence the nuclear disarmament agenda, pushing for a world without nuclear weapons.

4. Challenges to Disarmament

Nuclear disarmament faces several significant obstacles, which have hindered progress in reducing and eliminating nuclear weapons. These obstacles include:

Verification and Transparency-Complexity of Verification: Verifying disarmament is a complex and technically challenging process. It requires extensive monitoring and verification measures to ensure that states are complying with their disarmament commitments. Also, mistrust among nuclear-armed states can impede the sharing

of sensitive information and the willingness to allow intrusive verification measures, as each party may be concerned about the other's intentions.

Security Concerns-Security Dilemma: Nuclear-armed states often cite security concerns as a reason for retaining nuclear weapons. They argue that as long as other states possess nuclear arsenals, they must maintain their own for deterrence. Also, perceptions of external threats or regional instabilities can lead countries to believe that nuclear weapons are necessary for their security. These perceptions make disarmament less likely.

Arms Control Deterioration-Arms Races: Instead of reducing arsenals, some nuclear-armed states take masurements in modernization efforts, potentially leading to new arms races. This modernization can erode the progress made in disarmament, and the withdrawal of certain states from main arms control agreements, like Intermediate-Range Nuclear Forces (INF) Treaty, can undermine disarmament efforts and contribute to mistrust.

Geopolitical Tensions-Great Power Rivalries: Heightened tensions among major powers, like those between the US and Russia, can impede disarmament discussions. Political rivalries and disputes can overshadow disarmament efforts. Also, regional conflicts and territorial disputes can create instability, leading states to maintain or even expand their nuclear arsenals as a means of deterrence.

Security Assurances: Nuclear-armed states often provide security guarantees to their allies, pledging to defend them with nuclear weapons if necessary. These commitments can create obstacles to disarmament, as allies may rely on these guarantees for their security.

Perceived Utility-Nuclear Deterrence: Some states continue to consider nuclear weapons as vital for their national security. They believe that only possession of nuclear weapons enhances their geopolitical influence and acts as a deterrent against aggression.

Domestic Politics-Political Opposition: In some countries, domestic politics can be an obstacle to disarmament. Leaders may face opposition from political factions, military establishments, or public opinion that favors maintaining nuclear arsenals.

Normative Differences-Differing Views on nuclear weapons: Differing normative views on nuclear weapons, particularly between nuclear-armed and non-nuclear-armed states, can hinder disarmament initiatives. States may have varying interpretations of their disarmament obligations.

Lack of Consensus-Lack of Agreement: Achieving consensus on the path to disarmament is challenging. Different states have different visions of how disarmament should proceed, including the sequencing and pace of reductions

Uncertain Alternatives-Security Alternatives: For some states, nuclear weapons may be seen as a "necessary evil" because they are unsure about viable alternative security arrangements that can replace the perceived security benefits of nuclear deterrence.

Overcoming these obstacles requires sustained diplomatic efforts, trust-building measures, and creative solutions to address security concerns while advancing disarmament goals. Achieving a world without nuclear weapons remains a complex and long-term endeavor that demands international cooperation and dialogue.

5. Ambitions of Nuclear-Armed States

The major nuclear powers—particularly the US and Russia—have articulated various disarmament goals over the years. These goals often reflect their positions in international disarmament negotiations and their commitment to reducing nuclear risks. While the specifics may vary, the overarching objectives include:

United States:

Arms Reductions: The US has expressed a commitment to reducing its nuclear arsenal. The New START Treaty, which was extended in 2021, exemplifies this goal by limiting the number of deployed strategic nuclear weapons.

Non-Proliferation: The United States places strong emphasis on non-proliferation efforts in preventing the spread of nuclear weapons in other states. It seeks to discourage countries from pursuing nuclear weapons programs.

Nuclear Testing Moratorium: The U.S. has noted a moratorium on the nuclear testing starting with 1992. It advocates for the CTBT and supports efforts to bring it into force.

FMCT: The U.S. supports negotiations on a FMCT, which would ban the production of fissile material necessary for nuclear weapons. Such a treaty aims to reduce the capacity of states to expand their nuclear arsenals.

Arms Control: The U.S. seeks to negotiate arms control agreements with Russia and other nuclear-armed states to enhance strategic stability and decrease the risk of accidental conflict.

Russia

Arms Reductions: Russia, like the U.S., has expressed a commitment to reducing its nuclear arsenal. It has participated in arms control agreements, such as New START, and has indicated its readiness to negotiate further reductions.

Non-Proliferation: Russia supports non-proliferation efforts and has cooperated with international bodies in preventing the spread of nuclear weapons. Also, Russia has been a party to NPT and supports efforts to strengthen the treaty.

Nuclear Testing Moratorium: Russia, like the United States, observes a nuclear testing moratorium and supports the CTBT. However, the CTBT has not yet been ratified by the Russian Duma.

Arms Control: Russia advocates for arms control agreements that enhance strategic stability and prevent an arms race. However, it has expressed concerns about the United States missile defense system and other issues that impact the balance of power.

It's essential to note that while both the U.S. and Russia have articulated disarmament goals, progress has been affected by geopolitical tensions, differing interpretations of treaty obligations, and the broader security environment. Additionally, each country's specific policies and priorities may evolve with changes in leadership and international developments. Achieving significant disarmament progress often requires diplomatic efforts, confidence-building measures, and a commitment to reducing nuclear risks.

6. Regional Perspectives

Disarmament efforts in specific regions, such as North Korea and South Asia, have been characterized by unique challenges and complexities. Here is an overview of disarmament efforts in these regions:

North Korea:

North Korea (DPRK-Democratic People's Republic of Korea), is one of the most challenging cases in nuclear disarmament diplomacy. The DPRK withdrew from the NPT in 2003 and conducted, for achiving modern nuclear weapons, multiple nuclear tests. Key developments and efforts include:

Six-Party Talks: The Six-Party Talks, involving North Korea, South Korea, China, Russia, Japan, and the US, having like main objective to denuclearize the Korean Peninsula. These talks made some progress, leading to agreements like the September 2005 Joint Statement, where DPRK made a promise about abandoning its nuclear weapons program in order to receive economic and security incentives.

Diplomatic Fluctuations: Disarmament negotiations with North Korea have experienced periods of optimism and setbacks. The DPRK has conducted nuclear tests and missile launches, leading to tensions in the region.

Current Status: North Korea had not taken significant steps toward complete denuclearization. Diplomatic efforts and negotiations, such as those between the U.S. and North Korea, remained ongoing but faced challenges.

International Sanctions: International sanctions have been imposed on DPRK in response to its nuclear activities. These sanctions have had varying degrees of impact in their economy and access to resources.⁸

South Asia (India and Pakistan):

South Asia is home for two nuclear-armed forces, India and Pakistan, which have a history of regional conflicts. Both countries conducted nuclear tests in 1998 and declared themselves nuclear-armed states. Key developments and efforts include:

Bilateral Engagement: India and Pakistan have engaged in various bilateral dialogues and confidence-building measures in order to decrease the risk of nuclear conflict. However, progress has been limited due to ongoing tensions.

Strategic Restraint: Both countries have declared no-first-use (NFU) policies, stating they will not use these weapons first in a conflict. However, the credibility of these policies remains a subject of debate.

Arms Race Concerns: The rapid expansion of nuclear arsenals in South Asia, coupled with unresolved political and territorial disputes, has raised concerns about a potential arms race and also the risk of using nuclear weapons by accident going to a nuclear conflict.

International Involvement: International actors, including the United States, have attempted to mediate and encourage dialogue between India and Pakistan. These efforts have occasionally led to reductions in tensions, but long-term solutions remain elusive.

Regional Dynamics: The evolving regional dynamics, including India's relationship with China and Pakistan's alliance with China, influence the security calculus in South Asia and impact disarmament efforts.

It's important to note that the situation in both North Korea and South Asia is subject to change over time, but successful disarmament efforts in these regions require sustained diplomatic engagement, confidence-building measures, and addressing the underlying political and security issues that contribute to nuclear proliferation and tensions.

It's important to recognize that each region has its unique dynamics and challenges, and progress in disarmament often requires tailored approaches that address the specific factors at play. Successful disarmament negotiations in regions with complex dynamics demand sustained diplomatic efforts, conflict resolution, and the cultivation of an environment conducive to disarmament.

7. The Role of International Organizations-UN

Organizations like the United Nations (UN) play a central role in advancing disarmament efforts on a global scale. Their functions range from promoting multilateral disarmament agreements to facilitating negotiations and providing a platform for dialogue among member states. Here is an assessment of the role of organizations like the United Nations in disarmament:

Treaty Negotiations: The UN, through its various bodies such as the Conference on Disarmament (CD) and the UN General Assembly, provides a platform for states to negotiate and draft international disarmament treaties, like NPT and TPNW.

⁸ Michelle Nichols, "North Korea Developing Nuclear Weapons, Evading Sanctions in 2023 - UN Report," Reuters, August 10, 2023, https://www.reuters.com/world/asia-pacific/north-korea-developing-nuclear-weapons-evading-sanctions-2023-unreport-2023-08-10.

Monitoring and Verification/Nuclear Inspections: The International Atomic Energy Agency (IAEA), an independent agency within the UN system, plays a crucial role in verifying compliance with nuclear disarmament agreements, such as the NPT. It conducts inspections to ensure the right use of nuclear technology and prevent proliferation The IAEA just "has a job" recently in ongoing conflict in Ukraine at Zaporizhzhya Nuclear Power Plant (ZNPP).9

Promoting Norms-Normative Framework: The UN helps establish and reinforce global norms against the use of weapons of mass destruction (WMDs) and in favor of disarmament. Resolutions and conventions adopted by the UN General Assembly and Security Council contribute to shaping international norms.

Conflict Resolution-Preventing Conflict: Disarmament efforts are closely linked to the prevention of armed conflicts. The UN, through its peacekeeping missions and diplomatic initiatives, works to resolve regional conflicts and reduce the potential for military confrontations that could involve nuclear weapons.

Advocacy and Awareness-Global Campaigns: The UN promotes disarmament through global campaigns and initiatives. It raises awareness about the impact of humanitarian by using nuclear weapons and advocates for elimination.

Treaty Implementation-Supporting Implementation: The UN provides technical assistance and support to states in implementing disarmament treaties, including the destruction of nuclear weapons and also the safe management of disarmament-related materials.

Confidence-Building Measures: Conflict Prevention: UN efforts to build confidence among member states through meetings and confidence-building measures helps in reducing tensions and the risk of nuclear conflict.

Reporting and Transparency: Reporting Obligations: The UN encourages member states to submit regular reports on their disarmament activities and compliance with treaties. This transparency enhances trust and accountability.

Disarmament Education-Promoting Awareness: The UN promotes disarmament education and awareness programs to inform the public and policymakers about the risks associated with nuclear weapons and which are the benefits of disarmament.

Peace and Security: Disarmament is a fundamental component for UN's mission to maintain global peace and security, as outlined in the UN Charter. It helps prevent conflicts and reduce the potential for violence on a global scale.

While the United Nations plays an essential role in disarmament, progress in this area depends on the political will of UN member states, the effectiveness of diplomatic negotiations, and the ability to address regional and global security concerns. Nevertheless, the UN provides a vital framework for dialogue, cooperation, and the promotion of disarmament as a means to enhance global security and prevent catastrophic conflict.

During the time the progress in disarmament area not remains in van. One notable disarmament setback is in North Korea's Nuclear Program. This program has been a persistent challenge to global disarmament efforts, especially when the country withdrew from the (NPT) in 2003 and conducted nuclear tests, raising concerns about nuclear proliferation and regional security. DPRK's withdrawal from the NPT signaled its intent to extend nuclear weapons outside the framework of the treaty. This move undermined the global non-proliferation regime. Also, DPRK conducted six nuclear tests, the most recent in 2022, demonstrating its progress in developing nuclear weapons.¹⁰

Despite various diplomatic efforts, including the Six-Party Talks, there have been limited successes in halting North Korea's nuclear ambitions. Negotiations have faced setbacks and periods of tensions.

Geopolitical Complexities: North Korea's nuclear program is influenced by complex regional dynamics, including its relationship with South Korea, China's role as its ally, and concerns about its intentions and capabilities

Outcome: DPRK pursuit of nuclear weapons has remained a significant challenge to disarmament and non-proliferation efforts. Despite diplomatic engagements and sanctions, the country intention is to continue in developing nuclear capabilities, raising concerns about regional stability and global security.

Lessons Learned: Persistent Challenges Require Patience: North Korea's nuclear program illustrates that some disarmament challenges may persist for years or even decades. Patience and sustained diplomatic efforts are necessary.

Regional Dynamics Matter: Regional geopolitics, alliances, and rivalries can significantly influence disarmament efforts. Understanding and addressing these dynamics is critical in regional disarmament negotiations.

Adaptive Diplomacy Is Key: Diplomacy in disarmament must be flexible and adaptive, capable of responding to changing circumstances and setbacks without abandoning the pursuit of disarmament.

This case studies illustrate significant setbacks, as seen in North Korea's nuclear program. They highlight the complexities and challenges associated with disarmament efforts, which depend on a range of factors, including political will, verification mechanisms, regional dynamics, and the evolving security environment. Successful disarmament requires sustained diplomatic efforts and adaptability in addressing emerging threats.

In conclusion, the case studies of North Korea's nuclear program offer valuable lessons for future disar-

^{9 &}quot;Nuclear Safety and Security in Ukraine," IAEA, March 2, 2022, https://www.iaea.org/nuclear-safety-and-security-in-ukraine. 10 "North Korea: What Missiles Does It Have?," BBC News, September 5, 2023, https://www.bbc.com/news/world-asia-41174689.

mament efforts. Effective verification, targeted agreements, international support, patience, attention to regional dynamics, and adaptability in diplomacy are key principles that can inform and enhance the prospects for successful disarmament initiatives in the future. Achieving disarmament remains a complex and evolving challenge, but these lessons can contribute to progress in decreasing nuclear risks and promoting global security.

Conclusion

The transition from nuclear deterrence to nuclear disarmament is an exceptionally complex and multifaceted process. This transition involves numerous challenges and considerations that make it a formidable undertaking. Here's an emphasis on the complex nature of this transition:

Security Concerns: One of the primary complexities lies in addressing states' legitimate security concerns during disarmament. Nuclear-armed states often argue that nuclear weapons provide a deterrent against aggression. As they move toward disarmament, they must find alternative security arrangements that maintain stability.

Geopolitical Rivalries: Geopolitical rivalries among nuclear-armed states can hinder disarmament efforts. Competing security interests and mistrust can create substantial obstacles to negotiating meaningful reductions in arsenals.

Nuclear Modernization: Many nuclear-armed states are simultaneously pursuing modernization programs for their nuclear arsenals, which can be seen as contradictory to disarmament efforts. The challenge is to reconcile modernization with disarmament goals.

Verification and Transparency: Ensuring compliance with disarmament agreements is complex. Comprehensive verification measures are essential to building trust among states. The technical challenges of monitoring and verifying disarmament processes are considerable.

Diplomatic Challenges: Disarmament negotiations involve complex diplomacy. Balancing national interests, building consensus among states with diverse priorities, and navigating potential spoilers in negotiations require skilled diplomacy and persistence.

Strategic Stability: As states reduce their nuclear arsenals, they must carefully manage the potential for destabilizing imbalances in strategic capabilities. Ensuring stability during and after disarmament is a complex challenge.

Regional Security Concerns: Regional conflicts and security dynamics can complicate disarmament efforts. Countries may resist disarmament if they perceive regional threats or if neighboring states retain nuclear weapons.

Arms Control vs. Disarmament: Differentiating between arms control agreements (which limit and regulate nuclear arsenals) and disarmament agreements (which aim for the complete elimination of nuclear weapons) can be complex. Some states may prefer arms control as an intermediate step.

Alternative Security Assurances: Finding alternative security assurances for states that rely on nuclear deterrence can be challenging. These may involve security guarantees, conventional military capabilities, or confidence-building measures.

Public Opinion and Political Will: Achieving disarmament requires sustained political will and support from the public and policymakers. Public opinion, domestic politics, and leadership changes can all impact disarmament efforts.

Non-State Actors: The risk of nuclear materials going into hands of non-state actors adds a layer of complexity to disarmament efforts. Preventing nuclear terrorism is a shared global security concern.

Technological Advancements: Evolving technologies, including cyber threats and hypersonic weapons, can impact disarmament considerations and the calculation of security.

Civil Society Advocacy: Civil society plays a crucial role in pushing for disarmament, but it also faces complex challenges in influencing state policies and overcoming entrenched interests.

The transition from deterrence to disarmament is a long-term, multifaceted process that requires careful diplomacy, comprehensive agreements, confidence-building measures, and a commitment to address the various complexities involved. Success in this endeavor ultimately hinges on the ability of the international community to navigate these challenges and maintain the vision of a world without nuclear weapons.

References

- Pennington Josh, Stambaugh Alex, and Lendon Brad, "Medvedev Says Russia Could Use Nuclear Weapon If Ukraine's Fightback Succeeds in Latest Threat," CNN, July 31, 2023, https://edition.cnn.com/2023/07/31/europe/medvedev-russia-nuclear-weapons-intl-hnk/index.html
- "Pentagon: China to More than Triple Its Nuclear Arsenal by 2035," POLITICO, accessed November 21, 2023, https://www.politico.com/news/2022/11/29/pentagon-china-nuclear-stockpile-00071101
- U.S. Department of State, accessed November 21, 2023, https://2009-2017.state.gov/e/eb/tfs/spi/iran/jcpoa
- "Aq Khan Is Dead Long Live the Proliferation Network," Royal United Services Institute, October 15, 2021, https://rusi.org/explore-our-research/publications/commentary/aq-khan-dead-long-live-proliferation-net-work
- Schrag Jacque, "How Is China Modernizing Its Nuclear Forces?," ChinaPower Project, October 28, 2020, https://chinapower.csis.org/china-nuclear-weapons/
- "New START Treaty United States Department of State," U.S. Department of State, June 1, 2023, https://www.state.gov/new-start
- Nichols Michelle, "North Korea Developing Nuclear Weapons, Evading Sanctions in 2023 UN Report," Reuters, August 10, 2023, https://www.reuters.com/world/asia-pacific/north-korea-developing-nuclear-weapons-evading-sanctions-2023-un-report-2023-08-10
- "Nuclear Safety and Security in Ukraine," IAEA, March 2, 2022, https://www.iaea.org/nuclear-safety-and-security-in-ukraine
- "North Korea: What Missiles Does It Have?," BBC News, September 5, 2023, https://www.bbc.com/news/world-asia-41174689

The Russia-Ukraine War and the Activities of the Council of Europe

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Abstract

The Russian war against Ukraine, initiated on February 24, 2022, has been estimated as the most brutal armed aggression, the analogs of which have not been seen in Europe since 1945. From then, the Council of Europe's only stated position has been to support Ukraine on all platforms, through its institutions and all possible means.

The Committee of Ministers suspended Russia's representative rights on February 25, 2022, after which, on March 16, Russia was excluded from the Organization for gross violations of the statute of the Council of Europe. Last December, the Committee of Ministers adopted the Council of Europe's action plan for Ukraine for 2023-2026. The total budget for this program of cooperation amounts to 50 million euros, which is the largest budget for a single country under the Action Plan of the Council of Europe. The Action Plan aims to enhance the sustainability of State institutions by reinforcing democratic governance, the rule of law, and the protection of human rights. One of the objectives of the action plan is to protect the rights of children during the war and postwar period and promote decent social security for the war-affected population. The Council of Europe Development Bank also assists Ukraine in reconstruction work and helps member states to resettle refugees from Ukraine.

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On May 16-17, Reykjavik, the capital of Iceland, hosted the Council of Europe summit, where 46 heads of state and government discussed the most pressing global problems, including the consequences of Russia's armed aggression against Ukraine and efforts to find a path to a fair peace. The Summit participants expressed solidarity with Ukraine and gave further priorities and vision to the work of the Organization by adopting the Reykjavik Declaration

In this article, we will briefly review all the efforts the Council of Europe has undertaken since 2022 to the present day regarding the Russia-Ukraine war.

Keywords:

Council of Europe, Russia-Ukraine war, Ukraine, International organization, PACE resolution.

Introduction

Founded in 1949, the leading human rights organization on the European continent, the Council of Europe, comprises 46 member states today. The Council of Europe's primary purpose is to strengthen human rights and the rule of law in the member states. The Committee of Ministers of the Organization is its decision-making body. It is composed of the Ministers of Foreign Affairs of the member states. The Secretary General leads the Organization and is responsible for its strategic management. The Parliamentary Assembly (PACE) currently consists of 306 principal members and the same number of substitutes, nominated or elected by each member state's parliament. The Assembly serves as a forum for democratic debate, monitors elections in European states, the human rights and rule of law situation, and the implementation by member states of their obligations under the Council of Europe. The committees of the Parliamentary Assembly of the Council of Europe play an important role in deliberating on current and important issues, drafting relevant resolutions and recommendations in various areas, which are subsequently endorsed by the Assembly. Over the decades, the European Court of Human Rights, as well as other Council of Europe institutions, the Office of the Commissioner for Human Rights, the Congress of Local and Regional Authorities, and monitoring and advisory bodies, including the Committee for the Prevention of Torture, the Group of States against Corruption and the Venice Commission, have played a crucial role in protecting the fundamental rights and freedoms of Council of Europe member states and their citizens.

The invasion of Ukraine by Russian armed forces on February 24, 2022, has been hailed by the international community as the most significant attack against a European state since the Second World War. Moscow has unleashed large-scale military action, resulting in the devastation of a wide range of cities and claiming many lives of Ukrainian civilians and soldiers on both sides. The full-scale armed conflict between Russia and Ukraine and the developments that unfolded in its wake have made severe adjustments to the agenda of international organizations and prompted a more active approach to addressing international conflicts.

On the same day, various international organizations reacted to the Russian invasion of Ukraine by strongly condemning Russia's military aggression. The European Council, holding Russia fully responsible for this aggression and all the destruction and human losses, demanded from the Russian Federation an immediate cessation of hostilities, unconditional withdrawal of all forces and military weapons from the entire territory of Ukraine, and full respect for its sovereignty and territorial integrity (European Council conclusions, February 24, 2022). The brutal and unprovoked attack by the Russian side was immediately responded to by the Secretary General of NATO, the Organization for Security and Cooperation in Europe (OSCE), other key international organizations, the heads of all leading Western countries.

Main Part

The Council of Europe was one of the first international organizations to respond to the event on the same day and has been working on the issue almost every day for nearly two years since the outbreak of military actions. In this article, we will examine the activities of the Council of Europe from the outbreak of war to the present day in chronological order and consider the structural involvement of the Organization in the effort to find a solution to this most challenging problem.

Russia's aggression against Ukraine was immediately condemned by all institutions of the Council of Europe. In her statement, Marija Pejčinović Burić, Secretary General of the Council of Europe, pointed out that with its actions, Russia had flagrantly violated the Council of Europe's statute and the European Convention on Human Rights. Similarly, statements were made by the Italian Minister for Foreign Affairs and Chair of the Council of Europe's Committee of Ministers, President of the Parliamentary Assembly of the Council of Europe, Commissioner for Human Rights, President of the Congress of Local and Regional Authorities of the Council of Europe.

On the same day, the Committee of Ministers, following its extraordinary meeting, issued a statement condemning the armed attack on Ukraine and calling on Russia to unconditionally and immediately cease its military actions and fulfill its obligations under the international organization. The Committee of Ministers decided to discuss urgently and in complete coordination with the Parliamentary Assembly and the Secretary General the measures that should be taken with regard to the grave breach of the statutory obligations by a member state of the Council of Europe.⁴

The measure was indeed decisive and immediate. On February 25, 2022, at its extraordinary meeting, the Committee of Ministers decided to immediately suspend the rights of representation of the Russian Federation in

- $1\ \ European\ Council\ conclusions,\ 24\ February\ 2022\ -\ Consilium,\ accessed\ November\ 23,\ 2023,\ https://www.consilium.europa.eu/en/press/press-releases/2022/02/24/european-council-conclusions-24-february-2022/$
- 2 Nato, "NATO Secretary General: 'NATO and the EU Stand with the Brave People of Ukraine," NATO, February 24, 2022, https://www.nato.int/cps/en/natohq/news_192397.htm.
- 3 "Joint Statement by OSCE Chairman-in-Office Rau and Secretary General Schmid on Russia's Launch of a Military Operation in Ukraine," OSCE, accessed November 23, 2023, https://www.osce.org/chairpersonship/512890
- 4 Guerre d'agression de la Fédération de Russie contre l'ukraine : Page ..., accessed November 23, 2023, https://pace.coe.int/fr/pages/ukraine

the Committee of Ministers, the Parliamentary Assembly and the Congress of Local and Regional Authorities in accordance with the Article 8 of the Statute of the Council of Europe.⁵

At the same time, the Council specified that the suspension of the representation rights of the Russian Federation was only temporary, and this decision did not terminate the communication between the country and the organization. For that period, the Russian Federation remained a member of the Council of Europe and, accordingly, a party to the respective conventions, including the European Convention on Human Rights. The judge elected to the European Court of Human Rights in respect of the Russian Federation also remained a member of the Court, and complaints against the Russian Federation could still be considered and decided by the Court.⁶

Following the decision, on March 14-15, 2022, the Parliamentary Assembly of the Council of Europe held an extraordinary plenary session in hybrid mode to discuss the consequences of aggression from Russia against Ukraine. The only item on the agenda was a debate under urgent procedure on a statement to the Committee of Ministers, a report presented by the Political Affairs Committee of the Assembly. The Storting's head of delegation, Ingjerd Schou (Norway, EPP/CD), has been elected as the rapporteur on the matter.

At the end of the extraordinary session on March 15, the PACE unanimously (216 in favor 0 against 3 abstentions) adopted an Opinion calling on the Committee of Ministers to immediately exclude the Russian Federation from the Council of Europe. According to the Assembly, the Russian Federation has grossly violated the Statute of the Council of Europe and has failed to meet its commitments to the Council of Europe. Consequently, the Russian Federation could no longer be a member state of the organization.

It should be noted that on the same day, March 15, prior to the adoption of the decision of the Parliamentary Assembly, the Government of the Russian Federation informed the Secretary General of its withdrawal from the Council of Europe in accordance with Article 7 of the Statute and its intention to denounce the Convention on Human Rights. On March 16, following the procedure initiated under Article 8 of the Statute of the Council of Europe, the Committee of Ministers decided to terminate the membership of the Russian Federation in the Council of Europe.

The decision on the exclusion of the Russian Federation from the Council of Europe after 26 years of membership was taken by the Council of Europe immediately after the outbreak of war and Russia became the first country to be excluded from the Council of Europe in the 70 years of the Organization's existence. Taking into account the fact that almost two years after the beginning of the Russia-Ukrainian war, Russia still maintains its membership in other most significant and credible international organizations, we can state that this was an extreme measure and the toughest, unprecedented response from the Council of Europe.

However, the Russian government claims to have withdrawn from the Council of Europe itself. As for withdrawal, there is only one analog in the Organization's history. Previously, only one country left the Council of Europe - Greece in 1969, knowing that it faced expulsion for human rights violations by the regime of the Colonels. When the regime in the country changed, Greece was readmitted to the Council in 1974.⁷

To what extent Russia's returning to the Council of Europe is possible, time will tell since it depends, first and foremost, on Russia's further actions and the processes developing in the future. However, the country has now ceased to be a High Contracting Party to the European Convention on Human Rights, thus depriving more than 140 million people of the protection afforded by the Convention. Russian citizens have been denied the opportunity to appeal to the Strasbourg Court and seek enforcement of its decisions. Recently, Russian President Vladimir Putin signed the law on the denunciation by the Russian Federation of the Council of Europe Framework Convention for the Protection of National Minorities. Russia is increasingly alienating itself from the Organization. The Russian Duma passes laws denouncing Council of Europe conventions and gradually abandons all obligations imposed on it during its membership in the Council of Europe.

The Council of Europe's activities largely depend on the functioning of the Parliamentary Assembly. The Parliamentary Assembly of the Council of Europe is considered a consultative body, although the work of the European Council is largely based on its decisions. In the most recent period, PACE has become a significant factor in determining the political course of the Council of Europe. The resolutions by the Assembly form the basis of primary texts of the primary texts and important decisions subsequently adopted by the Council. Accordingly, below we will consider the documents debated and passed by the Parliamentary Assembly in the context of the Russia-Ukraine war. At its sessions held four times a year, the Assembly regularly discusses issues related to the fulfillment by Russia of its commitments, including in the international context and with regard to other countries, among them, since 2014, very active towards Ukraine, after the annexation of Crimea by the Russian Federation. From February 2022 to the present day, in every session, an issue related to the Russia-Ukraine war was raised and discussed by the Assembly.

The general policy debate at the second part of the 2022 PACE Ordinary Session, held on April 25-28, 2022, focused on the consequences of Russia's ongoing aggression against Ukraine and the role and response of

⁵ CETS 001 - statute of the Council of Europe, accessed November 23, 2023, https://rm.coe.int/1680935bd0.

⁶ Russian Federation's War of Aggression Against Ukraine: Special Page, accessed November 23, 2023, https://pace.coe.int/en/pages/ukraine.

^{7 &}quot;Parliamentary Assembly," PACE website, accessed November 23, 2023, https://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=14583&lang=en

the Council of Europe in this regard. Mr. Schwabe (Rapporteur of the Political Committee) introduced the report. In the resolution,⁸ while condemning Russia's aggression not only against peace and security but also against international law and fundamental values, the Assembly calls for unity in support of Ukraine and maximum pressure for an immediate and unconditional cessation of this aggression. The Assembly calls on member states to increase assistance to Ukraine, both directly and by participating in humanitarian funding appeals; consider increasing their contribution to Ukraine's efforts to strengthen the protection of its territory, including airspace; to cease arms transfers and impose sanctions on all third States attempting to circumvent the embargo; to establish schemes allowing allowing more accessible entry to their territories for displaced persons and to guarantee their access to adequate consultation and medical care. The Assembly called on the European Union and Member States to maintain pressure on the Russian Federation to withdraw its troops from the entire territory of Ukraine and comply with international law.

In the resolution of the second topic of the session agenda, on ensuring accountability for grave breaches of international humanitarian law, presented by the rapporteur of the Legal Affairs and Human Rights Committee, Mr Pociej, the Assembly calls on the international community to send a strong message that those responsible for war crimes and committing crimes against humanity, as well as possible genocide, will be held accountable. The Assembly urges all the Council of Europe member and observer states to establish an ad hoc international criminal tribunal urgently and invites the European Court of Human Rights to consider prioritizing cases related to the Russia-Ukraine war and to undertake an investigation in accordance with Article 38 of the European Convention on Human Rights; urges the Council of Europe Commissioner for Human Rights to monitor the situation regarding human rights in Ukraine carefully and, in targeted reports or statements, to immediately condemn any cases of gross human rights abuses.

The issues outlined in the resolutions of the April session of the Parliamentary Assembly were also discussed at the annual Session of the Committee of Ministers (Turin, May 20, 2022), with the participation of Foreign Affairs Ministers of 46 member states. With regard to assistance to Ukraine, the Ministerial Session adopted the "Priority adjustments to the Council of Europe Action Plan for Ukraine 2018-2022," which broadly equate with the areas of activity identified by the Assembly. The issue was considered as part of the package "United around our values - Council of Europe's response to the aggression of the Russian Federation against Ukraine" together with resolutions dealing with the consequences of the Russia-Ukraine war, including the resolution on the termination of the membership of the Russian Federation in the CoE and the resolution on the legal and financial consequences of depriving the Russian Federation of its rights of representation in the CoE. Thus, the representatives of 46 countries, at both parliamentary and ministerial levels, confirmed their unanimity on the issue.

The humanitarian situation was the focus of the June part session, where a resolution on humanitarian impact, internal and external migration (report submitted by the Committee on Migration and its Rapporteur, Mr. Friedes) was unanimously adopted.⁹

The last session of 2022 was exceptionally high-profile. It follows the annexation of four Ukrainian regions by Russia. Mr Volodymyr Zelenskyy, President of Ukraine, addressed the Assembly (by videoconference). "Russia only wants to speak with the language of terror. [...] Europe is much stronger now, as anyone could have thought," – the President said and thanked the Assembly for the resolution, which was considered on the same day. "I want to thank you, because this Assembly can become the first international organisation that will recognise Russia as a terrorist state." In the resolution adopted unanimously by the Assembly on the report on the further escalation of the aggression of the Russian Federation against Ukraine (rapporteur of the Political Committee, Mr. Zingeris), dealing mainly with Russia's recognition of four Ukrainian regions - Donetsk, Kherson, Luhansk and Zaporizhzhya - the so-called referendums held in those regions of Ukraine were called "an affront to international law" and "null and void and without any legal or political effect". PACE called for a comprehensive system, including the accelerated establishment of a special tribunal to hold the Russian Federation and its leadership accountable for all human rights violations. The Assembly also called on member states to declare the existing Russian regime "terrorist." 11

In 2023, at each Assembly session, the course of the Russia-Ukraine war and the steps to be taken in this direction have been discussed in various aspects. At its January session, the PACE unanimously adopted a resolution advocating the creation of an international criminal tribunal to investigate the actions of the Russian and Belarusian authorities in Russia's war against Ukraine. The document on the legal and human rights aspects of Russia's aggression was considered during the debate under the urgent procedure (intervention by Mr. Cottier, Rapporteur of the Legal Affairs Committee, and Ms. Alexandra Matwijchuk, 2022 Nobel Peace Prize Laureate and Head of the Center for Civil Liberties). The adopted resolution states that establishing an international tribunal should be supported by as many states and organizations as possible, especially the UN General Assembly. 12

⁸ Res. 2433 - resolution - adopted text - council of Europe, accessed November 23, 2023, https://pace.coe.int/en/files/30017/html. 9 Res. 2448 - resolution - adopted text - council of Europe, accessed November 23, 2023, https://pace.coe.int/en/files/30191/html. 10 Verbatim of Thursday 13 10 2022, Morning - Council of Europe, accessed November 23, 2023, https://pace.coe.int/en/verbatim/2022-10-13/am/en.

 $^{11\ \} Res.\ 2463-resolution-adopted\ text-council\ of\ Europe,\ accessed\ November\ 23,\ 2023,\ https://pace.coe.int/en/files/31390/html$

¹² Res. 2482 - resolution - adopted text - council of Europe, accessed November 23, 2023, https://pace.coe.int/en/files/31620/

the same time, the Assembly stated that there is growing evidence that Russian rhetoric justifying the war shows a "genocidal intent" to destroy all national groups in Ukraine and that certain acts committed against civilians, including the killing, forced displacement, and "Russification," may fall within the definition of genocide. For this, Russia must also "make reparations". The Assembly called for developing an international compensation mechanism for Ukraine, including, initially, a global registry of damages, followed by a claims commission and a compensation fund. In doing so, the Council of Europe should lead in establishing and managing this future mechanism.

Another urgent procedure debate on deportations and forced displacement of Ukrainian civilians, especially children, to the territory of the Russian Federation or temporarily occupied Ukrainian territories (presented by Mr Pisco, Rapporteur of the Migration Committee) was held during the April session. The Assembly also heard a statement on the issue by Ms. Olena Volodymyrivna Zelenska, First Lady of Ukraine (online). On June 22, the Assembly adopted the resolution on political consequences of war of aggression, presented by the rapporteur of the Political Committee Emanuelis Zingeris. The resolution emphasizes that support for Ukraine should be "a political imperative for the Council of Europe and its member states" as a matter of the rule of law and international justice, as well as the protection of European democratic security. The PACE has identified several priorities and has recommended strengthening assistance to Ukraine and finalizing and implementing a comprehensive accountability system for the Russian Federation and its allies. The Assembly decided to improve dialog and cooperation with Russian forces and civil society, seeking democratic change in Russia and sharing the CoE values.¹³

The year's last session was held on October 9-13, 2023. In the resolution based on the report "Ensuring a just peace in Ukraine and lasting security in Europe" of Iulian Bulai, PACE reiterated its condemnation of the ongoing war of aggression against Ukraine, calling for "a united front to stop the aggression" and achieve a comprehensive, just and lasting peace.¹⁴

We have briefly reviewed all the documents discussed and adopted by the Council of Europe from 2022 to the present concerning the Russia-Ukraine war. The structures of the Orgaization are also actively involved in the issue, including the Congress of Local and Regional Authorities, which has regularly discussed and made decisions on this issue since the outbreak of the war. In this connection, it is necessary to emphasize the general approach of the Council of Europe and, in particular, with regard to the obligations of the Russian Federation towards one specific country, in this case, Ukraine, in all the documents under consideration, whether a report, resolution, recommendation, declaration, etc., the CoE always emphasizes Russia's obligations towards Georgia and Moldova and continues to exert pressure on the Russian Federation for the complete withdrawal of its forces from sovereign territory. Accordingly, this approach and principle are respected in all the documents we examined.

Since 2023, the second year since the beginning of the war, the Council of Europe has not ceased its activities in support of Ukraine and for the end of hostilities. The most significant in this regard was the Fourth Summit of the Council of Europe in Reykjavik, Iceland (May 16-17, 2023). The main messages of the Summit participants and future priorities in their work have been reflected in the outcome document Reykjavík Declaration - United around our values. With the Declaration in support of the Enlarged Partial Agreement on the Register of Damage Caused by the Aggression of the Russian Federation against Ukraine, the Heads of State and Government expressed their readiness to participate in international initiatives to develop a future international compensation mechanism and Register, intended as a first component of such a mechanism, would serve to record evidence and information on claims for damage or loss caused since February 24, 2022 to all affected individuals, entities and the State of Ukraine. The Leaders also welcomed progress on establishing an ad hoc tribunal and offered the support of the Council of Europe to the process. They called on the Russian Federation to release immediately all those civilians forcibly displaced or deported illegally to its territory or to temporarily controlled or occupied areas, in particular children. Member states adopted a Declaration on the situation of the children of Ukraine, which called for support from the Ukrainian authorities to ensure the immediate return of children. All those responsible for such crimes against children must be held accountable. Assistance should also be provided to CoE member states that temporarily host Ukrainian children.¹⁵

Conclusion

Together with international organizations, the Council of Europe continues to proactively raise the issue related to the Russia-Ukraine war using all its institutions and platforms. Even though more than a year and a half has passed since the beginning of the war, this topic is still the core issue of the Organization's work. It should be said that in the end, the Council of Europe was the only one among the largest and most reputable international organizations that took a very radical decision not only at the level of resolutions and reports but also in a practical way - the exclusion of the Russian Federation from its membership.

- 13 Res. 2506 resolution adopted text pace.coe.int, accessed November 23, 2023, https://pace.coe.int/en/files/32994/html
- 14 Res. 2516 resolution adopted text pace.coe.int, accessed November 23, 2023, https://pace.coe.int/en/files/33142/html.
- 15 "4th Summit of Heads of State and Government of the Council of Europe Committee of Ministers Www.Coe.Int," Committee of Ministers, accessed November 23, 2023, https://www.coe.int/en/web/cm/reykjavik-summit.

html.

The extent to which the decision was justified and hasty should be the subject of the necessary discussion, which will become more apparent with time. The question should be viewed from two sides: the political and the human rights protection on the territory of a country that is no longer under its control. Moreover, it is necessary to raise the question of how effective the decision against Russia was and how immediate it might have been if other international organizations besides the Council of Europe had acted similarly.

However, the Council of Europe continues to actively pursue its work to stop the gravest development and the greatest threat to Europe - Russia's military aggression.

References

- European Council conclusions, 24 February 2022 Consilium, accessed November 23, 2023, https://www.consili-um.europa.eu/en/press/press-releases/2022/02/24/european-council-conclusions-24-february-2022/
- Nato, "NATO Secretary General: 'NATO and the EU Stand with the Brave People of Ukraine," NATO, February 24, 2022, https://www.nato.int/cps/en/natohq/news_192397.htm
- "Joint Statement by OSCE Chairman-in-Office Rau and Secretary General Schmid on Russia's Launch of a Military Operation in Ukraine," OSCE, accessed November 23, 2023, https://www.osce.org/chairpersonship/512890
- Guerre d'agression de la Fédération de Russie contre l'ukraine : Page ..., accessed November 23, 2023, https://pace.coe.int/fr/pages/ukraine
- CETS 001 statute of the Council of Europe, accessed November 23, 2023, https://rm.coe.int/1680935bd0
- Russian Federation's War of Aggression Against Ukraine: Special Page, accessed November 23, 2023, https://pace.coe.int/en/pages/ukraine
- "Parliamentary Assembly," PACE website, accessed November 23, 2023, https://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=14583&lang=en
- Res. 2433 resolution adopted text council of Europe, accessed November 23, 2023, https://pace.coe.int/en/files/30017/html
- Res. 2448 resolution adopted text council of Europe, accessed November 23, 2023, https://pace.coe.int/en/files/30191/html
- Verbatim of Thursday 13 10 2022, Morning Council of Europe, accessed November 23, 2023, https://pace.coe.int/en/verbatim/2022-10-13/am/en
- Res. 2463 resolution adopted text council of Europe, accessed November 23, 2023, https://pace.coe.int/en/files/31390/html
- Res. 2482 resolution adopted text council of Europe, accessed November 23, 2023, https://pace.coe.int/en/files/31620/html
- Res. 2506 resolution adopted text pace.coe.int, accessed November 23, 2023, https://pace.coe.int/en/files/32994/html
- Res. 2516 resolution adopted text pace.coe.int, accessed November 23, 2023, https://pace.coe.int/en/files/33142/html
- Res. 2506 resolution adopted text pace.coe.int, accessed November 23, 2023, https://pace.coe.int/en/files/32994/html
- Res. 2516 resolution adopted text pace.coe.int, accessed November 23, 2023, https://pace.coe.int/en/files/33142/html
- "4th Summit of Heads of State and Government of the Council of Europe Committee of Ministers Www.Coe. Int," Committee of Ministers, accessed November 23, 2023, https://www.coe.int/en/web/cm/reykjavik-summit

Comparative Analysis of Nuclear and Failed States and Their Potential Threats to the Modern World

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Abstract

Security is the most controversial subject in international relations studies. Numerous schools and trends define the causes and nature of emerging threats in different ways and offer different ways to maintain international stability. Of particular importance is H. Kissinger's book "World Order," which formulates the principles for achieving global stability. Adherents of political realism view international politics as a struggle for power, as states constantly try to take advantage of each other, and strive to achieve their security, acting on the principle of "help yourself." The referent object of security is the state as a rational political entity, the behavior of which is determined by national interests and the desire for absolute power and strength, as for security, it is considered as protection from the invasion of external enemies and threats. The paper compares the threat coming from Failed States and superpowers. While the contemporary world is concerned about the use of nuclear weapons and its threat to human beings, they seem to forget about the threat coming from the Failed States. The paper mostly deals with the case of a Failed State with the example of Afghanistan, as for the Super Power State it gives a clear analysis of the Russian Federation's Nuclear Doctrine and the speeches and states of the Russian President, Politicians, and experts.

Keywords:

Security, Nuclear weapons, State, Failed state, International relations.

Introduction

Since the beginning of the 90s of the 20th century, a new system of international relations has been emerging. The collapse of the Yalta-Potsdam system began right after the meeting of the leaders of the USSR and the USA in 1989, in Malta. The old-world order was replaced by a new system of international relations, the design of which was completed in 1997 in Madrid, at the summit of the North Atlantic Treaty Organization. As soon as the Soviet Union collapsed, the bipolar world system became unipolar, it is the period of 1991 – 2008 US-led relations, which means that here the only superpower was the USA. Then it turned into multipolar with several new trends such as globalization, democratization, military security parameters, and cosmopolitanization of world politics.1 Here we have to mark the period after 2008 up to the present. The main leaders of this period as we see are the USA, Russia, the European Union, China, and Japan. While speaking about the multipolar world order we have to refer to the thoughts of Henry Kissinger who stated that the international relations of the 21st century will consist of six participants - the USA, Europe, China, Japan, Russia, and India. And that the structure of international relations of the future will be "six-polar", where one of the "poles" - Europe - will be a collection of several states. While strong states are competing with each other for power, seizing neighboring territories, interfering in the internal affairs of sovereign states either disguised under democracy or humanitarian assistance, conquering the developing country economically, etc., threatening each other with nuclear weapons, failed states have faded into the background or even have completely been forgotten. In this case, we have to refer to the thoughts of Waltz's thoughts, where he states that the most stable world order is the bipolar world because it is based on the confrontation between two superpowers.2

The work is based on the following special scientific research methods such as general scientific theoretical methods, including cause-and-effect analysis, classification method, generalization, comparative analysis, method of selection and evaluation of scientific material; empirical research methods - situational analysis, description, and forecasting.

Main Part

The Essence and Notion of Security

In the second half of the 20th century, studies began, the subject of which for the first time became the "security of states", reflected in the notion of the "security dilemma", which studies the process of building up armaments among the warring parties.³ Subsequently, in connection with the end of the Cold War and the entry of the world community into the phase of combating global terrorism, these concepts were rethought by such areas of security research as the Welsh School, postcolonialism, poststructuralism and the theory of securitization, which determined the parameters of ideas about regional security in the light of environmental, terrorist, military, migration threats that have become palpable in every region.⁴

In the 1970s there appears the concepts of "comprehensive security" or "overall security", which are considered as an alternative to national security and as a means of giving a new and broader basis to cooperation in the context of stabilizing the international system. Comprehensive and/or global security phenomena are multidimensional since they focus not only on political and diplomatic disputes which often lead to conflict, but also on factors such as an underdeveloped economy, trade tensions, uncontrolled population movements, environmental conditions, drug trafficking, terrorism, and human rights. However, the main and most operational in this complex is the concept of collective security. It refers to a situation in which all members of a particular security community renounce the use of force on each other and agree to assist any participating state that has come under attack by another state of the community. The main direction of theoretical research and political efforts aimed at overcoming the impasse that resulted from the arms race (the most concentrated expression of the Cold War) was aimed at creating a system of comprehensive collective security under the auspices of the United Nations.⁵ Further research showed that creating such a system is fraught with serious difficulties. They are related to the fact that comprehensive collective security must meet several difficult conditions, among which, summarizing the research on this problem, five groups can be distinguished: moral, legal, institutional, systemic, and situational. Thus, we are talking about the need to solve complex issues of international interaction.

While analyzing the security sector one should pay attention and refer to the conception of human security. Since the basic idea of the safe and secure existence of man and society has always been considered within the

¹ O. Khlopov, "The System of International Security of the 21st Century: the Search for an Acceptable, 2019.

Theoretical Model". Bulletin of the Russian State University for the Humanities 45-57.

² K. Waltz, Theory of International Politics. Boston: Addison-Wesley, 1979.

³ E. Gvenetadze, The Aspects of International Security. Tbilisi: Lawers World, 2017.

⁴ A. Ovchinnikov, Bases of National Security. RIOR, 2015.

⁵ Sh. Tadjbakhsh, "Human Security: Concepts and Implications." Les Etudes du CERI 1-77, 2005.

bounds of social relationships that determined the essence of a particular state, and later this understanding found corresponding development, "in two main concepts security: national and public." The dominant element of human security is the state. In the system of ensuring national security, when creating acceptable conditions for the development of the state, it is necessary to implement functions of power.⁶ It is the factor of power in modern society that ensures any kind of security, stability, and guarantees, as most modern political leaders believe, the chance to respond urgently to external forces, considering the possibilities and perspectives for social space development. Considering the positive scenario for the development of the secure world, it is necessary to incorporate into the national security system the principle of constantly searching for an optimal strategy to repel threats to exclude a maximalist approach in resolving issues related to the security sphere.⁷

The defining point in such a national security strategy should be the requirement of guaranteed movement in a secure reality and peaceful cooperation. This means that, along with the mobilization elements of human and social security, the importance of fundamentally new elements that support the competitiveness and vitality of society is very important.⁸ To develop comprehensive security and successfully implement it in practice, an appropriate system of public relations and innovative structures with elements of civil society are required. This will make it possible to control the reflection of specialized structures on the threats and dangers that arise and regulate the process of eliminating the consequences of emergencies, economic crises, political conflicts, military clashes, and social upheaval.

Balance of Threat and its Impact on the World Politics

Analyzing security theory one has to refer to the theory of the balance of threat raised by Stephen Walt in the late 1980s which, according to the author, should complement the widely known balance of power theory.9 As already noted, the theory of the balance of threats was intended to develop, improve, and supplement the theory of the balance of forces. The latter, as is known, shows the consequence of the behavior of states in case one or a coalition of several of them achieves a power that significantly exceeds the power of the others.¹⁰ As for the balance of power, Kissinger recognizes that the balance of power is based on realities, so participants in international relations should theoretically see these realities in the same way, but in practice, their perception depends on the internal structure, culture, and history of every society and state. 11 While referring to the balance of threat and balance of power it is worthy to consider the essence of imbalance of power appears if in a system one state or coalition has significantly more power than the other strongest state or coalition of this system. They respond primarily to force which includes military and economic capabilities, natural resources, and population. 12 In this case, there is a certain threat if the state has nuclear weapons the state may use them, even though it has not right to it. Here we have to refer to Russian President Vladimir Putin's words spoken at the St. Petersburg Economic Forum, where he clearly says that, Russia may use nuclear weapons in case its territorial integrity or existence is under threat. He added that for the moment there is not a need for it. And that the fact that the issue is discussed already reduces the possibility of its use. Also, he highlighted that Russia has much more such weapons than NATO countries.¹³ While considering the use of weapons of mass destruction that cause unnecessary suffering to people one has to refer to the Declaration on the Prohibition of the Use of Nuclear and Thermonuclear Weapons Adopted by General Assembly resolution 1653 (XVI) on November 24, 1961, that states that it has been prohibited in the past since it opposed to the laws of humanity and the principles of international law by the following international declarations and agreements:

the St. Petersburg Declaration of 1868, the Declaration of the Brussels Conference of 1874;

the Convention of the Hague Peace Conferences of 1899 and 1907;

the Geneva Protocol of 1925.

The Declaration states that the use of any kind of mass killing weapons is opposed to the purposes of the <u>UN and it is considered</u> a direct violation of the <u>UN's Charter</u>; that the use of nuclear and thermonuclear. Here it

6 E. Alaverdov, G Ilik, Z.Tchabashvili, "The Impact of Migration on the State and Social Security:

Theoretical and Practical Aspects." In Handbook of Research on the Regulation of the Modern Global

Migration and Economic Crisis, by E. Alaverdov, M, Bari, 1-17. Hershey: IGI Global, 2023.

7 United Nations. Human Security Handbook. New York: Human Security Unit United Nations, 2016. https://www.un.org/humansecurity/wp-content/uploads/2017/10/h2.pdf

8 F. Fukuyama, "Weak States and the International Legitimacy". In State Building: Governance and World Order in the 21st Century, by F. Fukuyama, 92-118. Ithaca: Cornell University Press, 2004.

9 S, Walt, Origins of Alliances. Ithaca: Cornell University Press, 1987

10 J. Patrick, "Balance of Threat." In Realism and International Relations: A Graphic Turn Toward Scientific Progress, by J. Patrick, 386–416. New York: Oxford Academic, 2022

11 H. Kissinger, World Order. Penguin Publishing Group, 2015

12 S. Cooper, "State-Centric Balance of Threat Theory: Explaining the Misunderstood Gulf Cooperation Council". Security Studies, 2010. P. 306-349

13 ru. Lenta, Putin named the conditions for the use of nuclear weapons. June 16. Accessed September 25, 2023. https://lenta.ru/news/2023/06/16/yadernoe/

is highlighted that the use of mass destruction weapons will cause devastating results and suffering to humanity and civilization. Therefore, it contradicts international and human law. Moreover, the use of nuclear weapons is a war directed against all humanity as a whole, as the world population not participating in such a war will be susceptible to disasters; that state using any kind of mass destruction weapon must be considered to have violated the UN Charter, to have acted against the laws of mankind and to have committed a crime against humanity.¹⁴

To the Definition of Nuclear Strategies

In case of direct war, the nuclear deterrence of the state policy of the Russian Federation will be aimed at ending the war on terms acceptable to its favor. This is stated in the latest version of the nuclear doctrine. According to the document, Russia considers the use of nuclear weapons to be the last resort. At the same time, the conditions under which nuclear weapons can be used have expanded. In June 2020, V. Putin the president of the Russian Federation approved the Fundamentals of State Policy in the Field of Nuclear Deterrence. The document was made publicly available for the first time; previously this document was classified. According to the Russian interpretation, nuclear weapons are intended to be used in case of extreme necessity. According to Pavel Podvig, director of the Russian Strategic Nuclear Weapons project and senior researcher at the UN Institute for Disarmament Research, the Fundamentals for the first time established in writing the thesis that Russia could launch a retaliatory strike based on information from the early warning system about a missile attack. The doctrinal codes regarding nuclear weapons in Russia and the United States today are approximately the same. According to doctrines, both countries can use nuclear weapons in a large number of cases. The documents contain provisions on the use of the nuclear arsenal not only in the event of an enemy attack but also in situations of danger for countries, says Konstantin Bogdanov, a senior researcher at the Center for International Security at IMEMO RAS.¹⁵

It is worthy to refer to Vladimir Putin's words spoken in Sochi in October 2018. Particularly he claimed the concept of Russia's nuclear strategy does not have a preventive strike, moreover, it is aimed at a counterattack, and Russia is in a ready position in case its country is assaulted by its enemies. According to V. Putin's words, their nuclear potential is developing and improving constantly, and currently, the system is able to recognize strategic missile attacks launched from any point. In the context of the current heightened tensions, these questions have drawn the attention of military experts and politicians in the West and Russia itself. In

It is worthy to consider paragraph 17 of the Decree of the President of the Russian Federation dated June 2, 2020 No. 355 On the Fundamentals of the State Policy of the Russian Federation in the Field of Nuclear Deterrence which states that the Russian Federation has the right to react by using nuclear weapons in response to mass destruction attack even against its allies, also Russia can use the nuclear weapons if there is a certain risk to its existence. We have to refer to paragraph 8 of the same decree which says that these Fundamentals may be updated depending on external and internal factors affecting the provision of defense, and paragraph 17 d) aggression against the Russian Federation using conventional weapons when the very existence of the state is threatened. Since they mean that Russia will use nuclear weapons at any time when it considers that the statehood is under threat. Thus if Russia loses the war with Ukraine, it will not surrender, it will just press the button.

To the Notion of Failed State

Failed states present a great danger to the whole world, either from the point of international stability or from the well-being of their populations. As for internationally and regionally – in the first case they are favorable grounds for terrorist organizations, centers for the trade of drugs and arms, and breeding grounds for dangerous diseases; regionally, they cause instability in their neighborhood. A failed state is a state that cannot maintain its existence as a viable political and economic entity, it has lost control of its territory, economy, and people. Numerous characteristics determine the state of the country, for instance, refugee situation; level of complaints from national, religious, and other groups; level of "brain drain", etc. If we speak about Afghanistan, which according

14 United Nations General Assembly 1961, "Declaration on the prohibition of the use of nuclear and

thermonuclear weapons." United Nations Digital Library. Accessed September 25, 2023.

https://digitallibrary.un.org/record/205660#record-files-collapse-header

15 tv. Ren, Russian nuclear doctrine: basics and differences from American strategy. April 14. Accessed

September 25, 2023. https://ren.tv/longread/962448-kak-izmenilas-iadernaia-doktrina-rossii

16 V, Putin, interview by F Lukyanov. 2018, Meeting of the Valdai International Discussion Club (October 18).

Accessed September 25, 2023. http://en.kremlin.ru/events/president/news/58848

17 A. Arbatov, The role of nuclear deterrence in strategic stability. Warranty or Threat. Analytical Report,

Moscow: Carnegie Endowment for International Peace, 2019

 $18\ V.\ Putin,$ "Decree of the President of the Russian Federation dated June 2, 2020 No. 355." June 2.

Accessed September 25, 2023. http://kremlin.ru/acts/bank/45562#sel=22:2:zhU,22:10:ngf

19 M. Ottaway, S. Mair, "States at Risk and Failed States." Carnegie Endowment for International 2004, Peace 1-10.

to the World Population Review is in 8th place among the failed states, 20 we can say that these indicators are malfunctioning of state services and legal system, drug production, and narco-trafficking, which has destroyed the country's economy, religion, education, economy, human rights, crime, and security level, and last but not least interference of superpowers. Since the first is mentioned drug production, it would be reasonable to say that it is the most important economic and political factor of Afghanistan, both within the country and at the regional and even planetary level due to which thousands of people die every year around the world. Moreover, drug trafficking at the regional level is a tool for the advancement of geopolitical interests. The role and place of Afghanistan in the contemporary system of international relations are determined primarily by the armed conflict that has lasted for decades, which is accompanied by acute political and ideological confrontation. This has practically deprived the country of political agency in the international arena, does not allow it to pursue any clear foreign policy course, and threatens a complete loss of statehood.²¹ All states of the world can be divided into groups according to some criteria. In the previous century, a typology began to occupy a special place, dividing all states of the world into five categories: critical state (the so-called failed states), dangerous, boundary, stable, and most stable. The greatest danger to the international situation comes from failed states. The main example of the threat posed by weak states is the tragedy of September 11,22 which showed that these countries serve as cover for international terrorists who are capable of causing enormous harm to all countries of the world.

Conclusion

In reality, it is impossible to achieve a state of complete security, since one or another threat is always present, which means that such a situation is fundamentally unattainable. In the modern world, all states openly support and develop weapons of mass destruction for containment purposes. However, it is not so as it is written in their strategies since this is too general and amorphous a concept. The aim of nuclear weapons creation is to carry out specific military missions, for instance, to destroy any military targets or if needed even civilians. Certain weapon specifications and related operational plans may increase or escalate military conflict. Now it happens under the impact of military-technical development and updated strategic plans of the key super states and is aggravated by the increasing tension in relations between the two Super States - the United States of America and the Russian Federation. As for the threat coming from any failed state, it is not less than one coming from the superpower state. Since it combines all aspects of security: terrorism, trafficking, drug and any illegal business, shadow economics, healthcare system, etc.

²⁰ World Population View, Failed States 2023. Accessed September 25, 2023. https://worldpopulationreview.com/country-rankings/failed-states

²¹ E. Alaverdov, "The Importance of Regional Triangular - India- Pakistan- Afghanistan and Russian Interests in the Region." Journal of Education Culture and Society, 2022. P. 85-94

²² F. Fukuyama, "Weak States and the International Legitimacy". In State Building: Governance and World Order in the 21st Century, by F. Fukuyama, 2004, p. 92-118. Ithaca: Cornell University Press.

References

- Alaverdov, E. "The Importance of Regional Triangular India- Pakistan- Afghanistan and Russian Interests in the Region." Journal of Education Culture and Society, 2022. p. 85-94.
- Alaverdov, E., Ilik, G., Tchabashvili, Z. "The Impact of Migration on the State and Social Security: Theoretical and Practical Aspects." In Handbook of Research on the Regulation of the Modern Global Migration and Economic Crisis, by E. Alaverdov, M, Bari, 1-17. Hershey: IGI Global, 2023.
- Annan, K. n.d. "Definitions of Human Security ." United Nations Definitions. https://www.gdrc.org/sustdev/husec/Definitions.pdf
- Arbatov, A. The role of nuclear deterrence in strategic stability. Warranty or Threat. Analytical Report, Moscow: Carnegie Endowment for International Peace, 2019.
- Cooper, S. "State-Centric Balance of Threat Theory: Explaining the Misunderstood Gulf Cooperation Council". Security Studies, 2010, p. 306-349.
- Fukuyama, F. "Weak States and the International Legitimacy". In State Building: Governance and World Order in the 21st Century, by F. Fukuyama, 92-118. Ithaca: Cornell University Press, 2004.
- Gvenetadze, E. The Aspects of International Security. Tbilisi: Lawers World, 2017.
- Khlopov, O. "The System of International Security of the 21st Century: the Search for an Acceptable Theoretical Model". Bulletin of the Russian State University for the Humanities, 2019, p. 45-57.
- Kissinger, H. World Order. Penguin Publishing Group, 2015.
- Lenta.ru. Putin named the conditions for the use of nuclear weapons. June 16. Accessed September 25, 2023. https://lenta.ru/news/2023/06/16/yadernoe/.
- Ovchinnikov, A. Bases of National Security. RIOR, 2015.
- Ottaway, M., Mair, S.. "States at Risk and Failed States." Carnegie Endowment for International Peace, 2004, p. 1-10.
- Patrick, J. "Balance of Threat." In Realism and International Relations: A Graphic Turn Toward Scientific Progress, by J. Patrick, 386–416. New York: Oxford Academic, 2022.
- Putin, V. "Decree of the President of the Russian Federation dated June 2, 2020 No. 355." June 2. Accessed September 25, 2023. http://kremlin.ru/acts/bank/45562#sel=22:2:zhU,22:10:ngf
- Putin, V, interview by F Lukyanov, Meeting of the Valdai International Discussion Club (October 18). Accessed September 25, 2023. http://en.kremlin.ru/events/president/news/58848.
- Ren. tv. Russian nuclear doctrine: basics and differences from American strategy. April 14. Accessed September 25, 2023. https://ren.tv/longread/962448-kak-izmenilas-iadernaia-doktrina-rossii
- Tadjbakhsh, Sh. "Human Security: Concepts and Implications." Les Etudes du CERI, 2005, p.1-77.
- United Nations General Assembly, "Declaration on the prohibition of the use of nuclear and thermonuclear weapons." United Nations Digital Library. Accessed September 25, 2023. https://digitallibrary.un.org/record/205660#record-files-collapse-header
- United Nations. Human Security Handbook. New York: Human Security Unit United Nations. https://www.un.org/humansecurity/wp-content/uploads/2017/10/h2.pdf.
- World Population View, Failed States 2023. Accessed September 25, 2023. https://worldpopulationreview.com/country-rankings/failed-states
- Walt, S. Origins of Alliances. Ithaca: Cornell University Press, 1987.
- Waltz, K. Theory of International Politics. Boston: Addison-Wesley, 1979.

Holding Russia Accountable for War Crimes in Ukraine: A Quest for Justice

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Abstract

Atrocities committed by Russia in Ukraine demand response not just for the sake of Ukraine but because of what they mean for human rights, and global stability, because they are war crimes and crimes against humanity. Russia breached United Nations Charter, precipitated humanitarian crises, engaged in mass killings and targeted civilian population, engaged in torture, rape, and inhumane treatment. The ICC stands as a beacon of hope for the victims of these heinous crimes. Ukrainian courts, along with courts in countries utilizing universal jurisdiction, play a crucial role in the pursuit of justice. The question of prosecuting Putin and senior Russian officials is fraught with legal complexities and geopolitical considerations. Through a multifaceted approach, we can pave the way towards a future where impunity has no place, and the principles of human rights reign supreme.

Keywords:

Russia, Ukraine.

Introduction

The conflict in Ukraine has unleashed a torrent of violence, leaving in its wake a landscape scarred by atrocities that demand international scrutiny. The pursuit of justice for these grievous offenses is imperative, not only for Ukraine but for the principles of human rights and global stability. This article delves into the critical aspects surrounding the pursuit of accountability for war crimes and crimes against humanity in Ukraine, addressing the following key questions:

1. Types of Atrocities: War Crimes and Crimes Against Humanity

Unlawful Invasion and Occupation

The war of aggression initiated by Russia in Ukraine constitutes a blatant breach of the United Nations Charter, which prohibits the use of force against the territorial integrity and political independence of any state. The unlawful occupation of Crimea and subsequent military interventions in Eastern Ukraine have left a trail of devastation.

Escalating Humanitarian Crisis

The conflict has not only claimed countless lives but has also resulted in a humanitarian crisis of staggering proportions. Displacement, loss of livelihoods, and the disruption of essential services have compounded the suffering of Ukrainian civilians, highlighting the urgent need for accountability.

Mass Killings and Targeted Attacks

The streets of Ukraine bear witness to indiscriminate bombings, where no distinction is made between military and civilian targets. Such acts constitute a blatant violation of international humanitarian law, qualifying as war crimes. Additionally, there are reports of deliberate targeting of civilian populations, exacerbating the suffering of innocent lives caught in the crossfire.³

Forced Displacement and Ethnic Cleansing

The heartbreaking scenes of displaced Ukrainians fleeing their homes reveal a deeper horror – a calculated effort to uproot communities based on ethnic identity. This constitutes a crime against humanity, a deliberate act to alter the demographics of a region through forced expulsion, creating lasting scars on the social fabric of Ukraine.⁴

Torture, Rape, and Inhumane Treatment

Behind closed doors, detainees are subjected to unspeakable horrors. Reports of torture, sexual violence, and inhumane treatment in detention facilities echo through the testimonies of survivors. These acts, committed systematically and with impunity, stand as stark evidence of war crimes.

2. The Pursuit of Justice: Who's Taking Charge?

International Criminal Court (ICC)

The ICC stands as a beacon of hope for the victims of these heinous crimes. Established to prosecute individuals responsible for the most egregious violations of international law, the ICC holds the authority to bring perpetrators to justice. However, it grapples with jurisdictional complexities and the challenge of prosecuting high-ranking officials.⁵

National Courts and Universal Jurisdiction

Ukrainian courts, along with courts in countries utilizing universal jurisdiction, play a crucial role in the pursuit of justice. Universal jurisdiction allows nations to prosecute individuals for crimes committed outside their territory, potentially opening avenues for accountability even beyond the ICC's reach.

 $^{1\ \}text{``Russia-Ukraine War,''}\ Encyclopædia\ Britannica,\ November\ 21,\ 2023,\ https://www.britannica.com/event/2022-Russian-invasion-of-Ukraine.$

^{2 &}quot;Silencing Critics and Actions in the West," Encyclopædia Britannica, accessed November 21, 2023, https://www.britannica.com/biography/Vladimir-Putin/Silencing-critics-and-actions-in-the-West#ref1310232.

³ The Role of International Law in the Russia-Ukraine War, Case Western Reserve Journal of International Law, Vol. 55, No. 1, 2023 available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4433416

^{4 &}quot;Russia, Ukraine & International Law: On Occupation, Armed Conflict and Human Rights," Human Rights Watch, March 4, 2022, https://www.hrw.org/news/2022/02/23/russia-ukraine-international-law-occupation-armed-conflict-and-human-rights

^{5 &}quot;The Slow Effects of the War in Ukraine and International Law," Opinio Juris, September 13, 2023, https://opiniojuris.org/2023/09/14/the-slow-effects-of-the-war-in-ukraine-and-international-law/.

3. Piecing Together the Truth: Gathering Evidence

Eyewitness Testimonies and Survivor Accounts

In the quest for truth, eyewitness testimonies and survivor accounts serve as pillars of evidence. The harrowing narratives of those who have endured these atrocities are powerful tools in building a comprehensive understanding of the crimes committed.

Forensic Evidence and Document Trails

Beyond personal accounts, the pursuit of justice hinges on concrete evidence. Forensic examinations, along with the meticulous tracing of document trails, provide a factual foundation for legal proceedings, establishing a record of the crimes that have taken place.

4. The Complex Endeavor: Prosecuting Putin and Senior Russian Officials

Legal Hurdles and Political Realities

The question of prosecuting Putin and senior Russian officials is fraught with legal complexities and geopolitical considerations. The immunity of heads of state poses a formidable obstacle, requiring innovative legal approaches and unwavering diplomatic pressure.⁶

Alternatives to Individual Prosecution

While individual prosecutions may face hurdles, the concept of collective responsibility and state accountability offers an alternative avenue for justice. Through targeted sanctions and diplomatic channels, the international community can exert pressure on Russia to acknowledge its role and address the crimes committed.⁷

5. The Road to Accountability: A Multifaceted Approach

Strengthening International Institutions

Empowering international institutions like the ICC and bolstering their capacity to handle cases of this magnitude is paramount. A collective commitment to upholding justice on the global stage is imperative to ensure that those who perpetrate such crimes face the consequences of their actions.⁸

International Cooperation and Assistance

Ukraine can seek assistance from international bodies, such as the International Criminal Court (ICC) or other countries, in prosecuting war crimes. This collaboration can provide expertise, resources, and additional legal avenues for accountability.⁹

Universal Jurisdiction

Ukraine, like many countries, recognizes the principle of universal jurisdiction. This allows Ukrainian courts to prosecute individuals for war crimes regardless of their nationality, potentially expanding their capacity to pursue justice.¹⁰

The international law that governs an armed conflict between Russia and Ukraine includes:

The Geneva Conventions of 1949 and Additional Protocols: These conventions form the core of international humanitarian law (IHL) and establish the rights and protections of civilians and combatants during armed conflicts. The Additional Protocols (I and II) further detail the treatment of victims of non-international armed conflicts.

Customary International Humanitarian Law: These are established practices that have gained widespread acceptance in international law and are considered binding on all states, even those that have not ratified specific treaties.

International Human Rights Law: While IHL is the primary body of law governing armed conflicts, certain human rights standards still apply, especially those that are considered non-derogable rights. This includes the

⁶ Prof. Dapo AKANDE Blavatnik School of Government Oxford Institute for Ethics, Law and Armed Conflict University of Oxford USE OF FORCE UNDER PUBLIC INTERNATIONAL LAW - THE CASE OF UKRAINE - 62nd meeting of the Committee of Legal Advisers on Public International Law (CAHDI) on 25 March 2022 in Strasbourg, France

^{7 &}quot;Assessing the Outcomes of Russia's War on Ukraine," Wilson Center, accessed November 21, 2023, https://www.wilsoncenter.org/blog-post/assessing-outcomes-russias-war-ukraine

⁸ Professor Yarik Kryvoi, "Russia's Invasion of Ukraine and International Law: Questions and Answers," British Institute of International and Comparative Law, March 17, 2022, https://www.biicl.org/blog/34/russias-invasion-of-ukraine-and-international-law-questions-and-answers?cookiesset=1&ts=1697616648.

⁹ Ayesha Malik, "The Russian Invasion of Ukraine and International Law," RSIL, April 6, 2022, https://rsilpak.org/2022/the-russian-invasion-of-ukraine-and-international-law/

^{10 &}quot;International Law and the War in Ukraine," Institut Montaigne, March 5, 2022, https://www.institutmontaigne.org/en/expressions/international-law-and-war-ukraine.

prohibition of torture, the right to life, and the prohibition of inhumane treatment.

The United Nations Charter: This is a foundational document of international law, which outlines the principles of sovereign equality among nations, non-interference in the domestic affairs of states, and the prohibition of the use of force, except in cases of self-defense or when authorized by the United Nations Security Council.

The Rome Statute of the International Criminal Court (ICC): The ICC has jurisdiction over the most serious international crimes, including war crimes, crimes against humanity, genocide, and the crime of aggression. However, it's important to note that Russia is not a member of the ICC.

Customary International Law: This includes established practices that have been accepted as law by the international community, even in the absence of formal treaties.

Other Relevant Treaties and Agreements: Depending on the specific circumstances of the conflict, other treaties or agreements may be applicable, such as arms control agreements or regional conventions.¹¹

It's important to note that the applicability and interpretation of international law can be complex, and legal experts may have varying perspectives on specific situations. Additionally, the practical enforcement of international law can be influenced by political, diplomatic, and military considerations.

Grassroots Movements and Civil Society Efforts

At the heart of the pursuit of justice lies the power of grassroots movements and civil society. Advocacy groups play a vital role in raising awareness, mobilizing public opinion, and pushing for accountability. Their unwavering dedication is essential in galvanizing the international community to act.

6. Beyond Ukraine: A Quest for Global Justice

Deterrence and Prevention of Future Atrocities

The pursuit of justice in Ukraine carries profound implications for the broader landscape of international relations. Holding Russia accountable sets a precedent, sending a clear message that the international community will not tolerate impunity for war crimes. This serves as a deterrent against future atrocities.¹²

Fostering Reconciliation and Healing

Justice is not only about punishment; it is also about healing and reconciliation. Addressing the long-term impact of war on affected communities is essential. By acknowledging the suffering of victims and providing reparations, the international community can take steps towards rebuilding trust and fostering a more just and humane world.¹³

A war crime is a serious violation of the laws and customs of war, which are established to protect civilians, combatants who are no longer taking part in the hostilities, and those who are in custody. These crimes are considered among the most serious offenses under international law. War crimes can include acts such as:

Intentionally targeting civilians or civilian objects: Deliberate attacks on non-combatants or civilian infrastructure are prohibited.

Attacks on protected persons or objects: This includes attacks on hospitals, schools, cultural sites, and humanitarian convoys that are not being used for military purposes Excessive harm or unnecessary suffering: This involves using weapons or tactics that cause unnecessary harm or suffering to combatants or civilians. Torture or inhumane treatment: The mistreatment or torture of individuals who are in the custody of an opposing force is strictly prohibited.

Forced labor or human trafficking: Forcing civilians to work under duress or engaging in human trafficking is considered a war crime. Attacks using prohibited weapons: The use of chemical, biological, or certain types of conventional weapons in a manner that violates international law is prohibited.¹⁴

Regarding the potential prosecution of Vladimir Putin over actions related to Ukraine, there are several legal avenues that could be explored:

International Criminal Court (ICC): The ICC is a tribunal established to prosecute individuals for crimes of genocide, war crimes, crimes against humanity, and aggression. However, it's important to note that Russia is not a member of the ICC, and getting jurisdiction over Putin would be a complex legal process.¹⁵

¹¹ Arab Center Washington DC, "The Russian Invasion of Ukraine and International Law," Arab Center Washington DC, accessed November 21, 2023, https://arabcenterdc.org/resource/the-russian-invasion-of-ukraine-and-international-law/.

¹² Stxu, "Armed Conflict in Ukraine: A Recap of Basic IHL Rules," Humanitarian Law & Policy Blog, March 17, 2022, https://blogs.icrc.org/law-and-policy/2022/03/17/armed-conflict-in-ukraine-a-recap-of-basic-ihl-rules/.

¹³ David Turns Senior Lecturer in International Law, "Ukraine War: What International Law Says about the Russians Fighting against Their Own Country," The Conversation, June 16, 2023, https://theconversation.com/ukraine-war-what-international-law-says-about-the-russians-fighting-against-their-own-country-207638.

¹⁴ Paul Williams, "The Prohibition against Torture and Its Pragmatic Effects," Public International Law & Policy Group, June 9, 2023, https://www.publicinternationallawandpolicygroup.org/lawyering-justice-blog/2023/6/9/the-prohibition-against-torture-and-its-pragmatic-effects.

^{15 &}quot;Russia's War on Ukraine – an International Rule of Law Perspective," Fredrikson & Byron P.A., accessed November 21, 2023, https://www.fredlaw.com/alert-russias-war-on-ukraine-an-international-rule-of-law-perspective.

Universal Jurisdiction: Some countries have laws allowing them to prosecute individuals for certain international crimes, even if those crimes did not occur within their territory or involve their citizens. This could potentially be used to prosecute Putin, although it would require cooperation from a country with jurisdiction. Yes, other countries can exercise jurisdiction over international crimes committed in Ukraine under the principle of universal jurisdiction. This allows states to prosecute individuals for certain crimes, even if those crimes did not occur within their territory or involve their citizens. However, extradition and legal cooperation agreements may play a role in the practicality of such prosecutions. ¹⁶

National Courts of Affected Countries: Ukraine itself could potentially prosecute Putin or other individuals for war crimes under Ukrainian law.

Special International Tribunals: In some cases, ad hoc international tribunals have been established to address specific conflicts or situations. This would require the consent of the involved parties.

It's important to note that pursuing legal action against a sitting head of state, especially one as powerful as Vladimir Putin, would be extremely challenging and could have significant geopolitical implications. It would require a combination of legal expertise, political will, and international cooperation.

The International Criminal Court (ICC) plays a crucial role in prosecuting individuals for the most serious international crimes, which include war crimes, crimes against humanity, genocide, and aggression. Regarding the Russian-Ukrainian conflict, there are several aspects to consider:¹⁷

1. Admissibility:

a. Complementarity:

The principle of complementarity means that the ICC can only intervene when national legal systems are unwilling or unable to prosecute crimes. If Ukraine can demonstrate a genuine willingness and ability to prosecute individuals responsible for war crimes and crimes against humanity, the ICC might decide that the case is inadmissible.¹⁸

b. Challenges in Ukraine's Legal System:

Ukraine has made efforts to investigate and prosecute crimes related to the conflict. However, there have been challenges, including political interference, resource constraints, and the complex nature of the conflict. These factors could be considered in assessing the admissibility of cases related to the Russian-Ukrainian war.¹⁹

2. Jurisdiction:

a. Temporal Jurisdiction:

The ICC's jurisdiction is determined by the date on which a crime was committed. The Court can prosecute crimes that occurred after July 1, 2002, which is when the Rome Statute (the treaty that established the ICC) came into force.

b. Territorial Jurisdiction:

The ICC can exercise jurisdiction over crimes committed on the territory of a state party to the Rome Statute. Ukraine is a state party, which means that crimes committed on its territory can fall under the jurisdiction of the ICC.

c. Non-State Parties:

Even if Russia is not a state party to the Rome Statute, the ICC could potentially have jurisdiction over crimes committed by Russian nationals if those crimes took place on the territory of a state party (such as Ukraine).²⁰

3. Crimes:

a. War Crimes:

Given the nature of the conflict in Eastern Ukraine and Crimea, there are allegations of war crimes, including indiscriminate attacks, targeting of civilians, and use of prohibited weapons. These actions could potentially fall under the jurisdiction of the ICC.

b. Crimes Against Humanity:

Acts such as forced displacement, torture, and other inhumane acts have been reported in the context of

¹⁶ Mdzinarshvili and Siti Sa'atun, "The Review of International Law on the Causes of the Russia-Ukraine Conflict," International Journal of Law Reconstruction, accessed November 21, 2023, https://jurnal.unissula.ac.id/index.php/lawreconstruction/article/view/20490

^{17 &}quot;Why the War in Ukraine May Be a Long One," Crisis Group, July 10, 2023, https://www.crisisgroup.org/europe-central-asia/eastern-europe/ukraine/why-war-ukraine-may-be-long-one.

¹⁸ Yoni Wilkenfeld, "Only Two Scenarios for Russia's War against Ukraine," GIS Reports, August 31, 2023, https://www.gisreportsonline.com/r/two-scenarios-for-war-ukraine/.

^{19 &}quot;International Law and War in Light of the Ukrainian Conflict: A Relation Biased since Its Inception," Groupe d'études géopolitiques, accessed November 21, 2023, https://geopolitique.eu/en/articles/international-law-and-war-in-light-of-the-ukrainian-conflict-a-relation-biased-since-its-inception/.

^{20 &}quot;International Armed Conflict in Ukraine," Rulac, accessed November 21, 2023, https://www.rulac.org/browse/conflicts/international-armed-conflict-in-ukraine.

²¹ Anna Qiang, "The Russian Invasion of Ukraine: Examining the Legality of US Interference," Columbia Undergraduate Law Review, May 21, 2022, https://www.culawreview.org/journal/the-russian-invasion-of-ukraine-examining-the-legality-of-us-interference.

Conclusion

The pursuit of justice for war crimes and crimes against humanity in Ukraine is a moral imperative that transcends national boundaries. It is a collective endeavor that demands the unwavering commitment of the international community. By holding Russia accountable, we not only seek justice for the victims of this conflict but also establish a precedent for a more just and humane world. Through a multifaceted approach, we can pave the way towards a future where impunity has no place, and the principles of human rights reign supreme.

References

- "Russia-Ukraine War," Encyclopædia Britannica, November 21, 2023, https://www.britannica.com/event/2022-Russian-invasion-of-Ukraine
- "Silencing Critics and Actions in the West," Encyclopædia Britannica, accessed November 21, 2023, https://www.britannica.com/biography/Vladimir-Putin/Silencing-critics-and-actions-in-the-West#ref1310232
- The Role of International Law in the Russia-Ukraine War, Case Western Reserve Journal of International Law, Vol. 55, No. 1, 2023 available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4433416 ,
- "Russia, Ukraine & International Law: On Occupation, Armed Conflict and Human Rights," Human Rights; Watch, March 4, 2022, https://www.hrw.org/news/2022/02/23/russia-ukraine-international-law-occupation-armed-conflict-and-human-rights.
- "The Slow Effects of the War in Ukraine and International Law," Opinio Juris, September 13, 2023, https://opinio-juris.org/2023/09/14/the-slow-effects-of-the-war-in-ukraine-and-international-law/
- Prof. Dapo AKANDE Blavatnik School of Government Oxford Institute for Ethics, Law and Armed Conflict University of Oxford USE OF FORCE UNDER PUBLIC INTERNATIONAL LAW THE CASE OF UKRAINE 62nd meeting of the Committee of Legal Advisers on Public International Law (CAHDI) on 25 March 2022 in Strasbourg, France;
- "Assessing the Outcomes of Russia's War on Ukraine," Wilson Center, accessed November 21, 2023, https://www.wilsoncenter.org/blog-post/assessing-outcomes-russias-war-ukraine
- Professor Yarik Kryvoi, "Russia's Invasion of Ukraine and International Law: Questions and Answers," British Institute of International and Comparative Law, March 17, 2022, https://www.biicl.org/blog/34/russias-invasion-of-ukraine-and-international-law-questions-and-answers?cookiesset=1&ts=1697616648
- Ayesha Malik, "The Russian Invasion of Ukraine and International Law," RSIL, April 6, 2022, https://rsilpak.org/2022/the-russian-invasion-of-ukraine-and-international-law/
- "International Law and the War in Ukraine," Institut Montaigne, March 5, 2022, https://www.institutmontaigne.org/en/expressions/international-law-and-war-ukraine
- Arab Center Washington DC, "The Russian Invasion of Ukraine and International Law," Arab Center Washington DC, accessed November 21, 2023, https://arabcenterdc.org/resource/the-russian-invasion-of-ukraine-and-international-law/.
- Stxu, "Armed Conflict in Ukraine: A Recap of Basic IHL Rules," Humanitarian Law & Policy Blog, March 17, 2022, https://blogs.icrc.org/law-and-policy/2022/03/17/armed-conflict-in-ukraine-a-recap-of-basic-ihl-rules/
- Turns David Senior Lecturer in International Law, "Ukraine War: What International Law Says about the Russians Fighting against Their Own Country," The Conversation, June 16, 2023, https://theconversation.com/ukraine-war-what-international-law-says-about-the-russians-fighting-against-their-own-country-207638
- Williams Paul, "The Prohibition against Torture and Its Pragmatic Effects," Public International Law & Policy Group, June 9, 2023, https://www.publicinternationallawandpolicygroup.org/lawyering-justice blog/2023/6/9/the-prohibition-against-torture-and-its-pragmatic-effects;
- "Russia's War on Ukraine an International Rule of Law Perspective," Fredrikson & Byron P.A., accessed November 21, 2023, https://www.fredlaw.com/alert-russias-war-on-ukraine-an-international-rule-of-law-perspective;
- Mdzinarshvili and Siti Sa'atun, "The Review of International Law on the Causes of the Russia-Ukraine Conflict," International Journal of Law Reconstruction, accessed November 21, 2023, https://jurnal.unissula.ac.id/index.php/lawreconstruction/article/view/20490
- "Why the War in Ukraine May Be a Long One," Crisis Group, July 10, 2023, https://www.crisisgroup.org/europe-central-asia/eastern-europe/ukraine/why-war-ukraine-may-be-long-one
- Wilkenfeld Yoni, "Only Two Scenarios for Russia's War against Ukraine," GIS Reports, August 31, 2023, https://www.gisreportsonline.com/r/two-scenarios-for-war-ukraine/
- 22 Milena Sterio, "Russia v. Ukraine: The Limits of International Law," IntLawGrrls, February 28, 2022, https://ilg2.org/2022/02/28/russia-v-ukraine-the-limits-of-international-law/.

- "International Law and War in Light of the Ukrainian Conflict: A Relation Biased since Its Inception," Groupe d'études géopolitiques, accessed November 21, 2023, https://geopolitique.eu/en/articles/international-law-and-war-in-light-of-the-ukrainian-conflict-a-relation-biased-since-its-inception/
- "International Armed Conflict in Ukraine," Rulac, accessed November 21, 2023, https://www.rulac.org/browse/conflicts/international-armed-conflict-in-ukraine
- Qiang Anna, "The Russian Invasion of Ukraine: Examining the Legality of US Interference," Columbia Undergraduate Law Review, May 21, 2022, https://www.culawreview.org/journal/the-russian-invasion-of-ukraine-examining-the-legality-of-us-interference
- Sterio Milena, "Russia v. Ukraine: The Limits of International Law," IntLawGrrls, February 28, 2022, https://ilg2.org/2022/02/28/russia-v-ukraine-the-limits-of-international-law/

Maritime Reactors on the Strategic Tide: Assessing the Non-Proliferation Challenges of Floating Nuclear Power Plants

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Abstract

This study delves into the challenges and opportunities presented by Floating Nuclear Power Plants (FNPPs), a novel development in nuclear energy. Offering mobility and flexibility, FNPPs also pose significant challenges in terms of regulatory compliance, environmental impact, seismic safety, and the balance between pollution regulation and navigational rights. We emphasized a harmonized approach to align national laws with international standards, address environmental concerns, and ensure stringent safety protocols. An in-depth case study of China's FNPP deployment in the South China Sea is examined, shedding light on the geopolitical dynamics and tensions involved. The importance of integrating Safeguards-by-Design (SBD) for effective nuclear safeguarding and upholding the non-proliferation regime is underscored. The paper argues that the successful incorporation of FNPPs into the global energy infrastructure requires strong international cooperation, transparency, and a focus on the commitment of Nuclear Weapon States (NWS) to nuclear non-proliferation. The paper provides an extensive overview of these issues and outlines a strategy for the responsible implementation of FNPP technology.

Keywords:

Atom, Nuclear power plant, Nuclear energy, Impact on the environment.

Introduction

Nuclear and the Quest for Sustainable Energy

As developing economies grapple with a projected 50% increase in energy demand by 2040, largely driven by nations in the Global South, the urgency for sustainable and clean energy sources is at an all-time high. The effects of climate change, manifesting through extreme weather events and rising sea levels, further intensify this urgency. Nuclear power, with its minimal greenhouse gas emissions, emerges as a compelling solution. On average, nuclear power plants emit about 12 grams of CO2 per kilowatt-hour, which is significantly lower than fossil fuel-based sources, making it a viable option for reducing carbon footprint.

Traditional nuclear power plants, despite their effectiveness in providing a stable energy supply, often face financial challenges. The average cost overrun for nuclear projects is about 117%, and the upfront capital costs can reach as high as \$9 billion for a 1,000 MW plant.³ This financial burden makes it challenging for many countries to adopt conventional nuclear technology. In contrast, Small Modular Reactors (SMRs), with their reduced size and modular construction, offer a more accessible alternative.⁴ SMRs can cost as little as \$300 million – although the actual cost is yet to be known as there are no operating commercial SMRs as of 2023 – significantly lowering the entry barrier for nuclear power.

Floating Nuclear Power Plants (FNPPs), a subset of SMRs, bring an added dimension of mobility, capable of being deployed across oceans to meet energy demands in remote or disaster-stricken regions. However, this novel approach introduces challenges, especially in terms of international non-proliferation and legal complexities. The rise of FNPPs necessitates rigorous safeguarding measures by the International Atomic Energy Agency (IAEA).⁵

This paper thoroughly examines these challenges, focusing on the technical and legal aspects of FNPPs. A case in point is China's ambitious FNPP program in the geopolitically sensitive South China Sea, which illustrates the multifaceted nature of these issues. Addressing the complexities associated with FNPPs demands proactive, collaborative efforts to navigate the legal, security, and non-proliferation challenges inherent in this emerging technology.⁶ As FNPPs are poised to play a crucial role in the global shift toward sustainable energy, understanding and addressing these challenges is paramount for their successful integration into the world's energy portfolio.

Main Part

FNPP Overview

FNPP can be described as movable power stations that utilize nuclear reactors mounted on floating structures, such as offshore platforms, barges, or ships. Classified as Small and Medium Reactors, their power outputs typically range from 100 to 800 MWe. The central element of an FNPP is a floating power unit, a non-self-propelled vessel equipped with modular energy components akin to those in conventional nuclear power plants, including reactor vessels, steam generators, and turbines for electricity generation, but scaled down relative to larger NPPs. In addition, FNPPs incorporate mooring complexes and onshore facilities equipped with energy transmission infrastructure, essential for their operation.

The primary advantage of FNPPs lies in their mobility and ease of transportation, enabling electricity provision to remote or disaster-impacted areas by being towed and connected to local power grids. This mobility is complemented by minimal land use requirements and inherent earthquake resistance due to their offshore location. Another key benefit is the enhanced safety afforded by their ability to use seawater for cooling, significantly reducing the risk of meltdown. Compared to advanced SMR designs like Molten Salt Reactors and Pebble Bed Reactors, FNPPs closely align with the proven technology of Light Water Reactors (LWRs), offering a less risky option in terms of control and operation.

The concept of FNPPs dates back to the 20th century with the MH-1A, the first floating nuclear power station, which achieved criticality in 1967. While the United States explored FNPP proposals in the 1970s, these were not pursued, and the focus shifted to land-based nuclear power plants. In contrast, Russia's geographic vastness and harsh climate sustained interest in FNPPs, exemplified by the 1959-built icebreaker 'Lenin' and the subsequent Arktika-class icebreakers. The Akademik Lomonosov's operationalization in 2019 marked a significant

¹ Information Library - World Nuclear Association, accessed November 21, 2023, https://www.world-nuclear.org/information-library.aspx.

² United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR). (2017). "Sources and Effects of Ionizing Radiation." UNSCEAR 2017 Report.

³ M., Schneider, A. Froggatt, J. Hazemann, T.Katsuta, M. V.Ramana,, A.Stienne, , ... & B. Wealer, "The World Nuclear Industry Status Report 2020."

^{4 &}quot;Advanced Small Modular Reactors (Smrs)," Energy.gov, accessed November 21, 2023, https://www.energy.gov/ne/nuclear-reactor-technologies/small-modular-nuclear-reactors

^{5 &}quot;Safeguards and Verification," IAEA, June 8, 2016, https://www.iaea.org/topics/safeguards-and-verification.

⁶ Author: Viet Phuong Nguyen|Nov. 21 et al., "China's Planned Floating Nuclear Power Facilities in South China Sea: Technical and Political Challenges," Belfer Center for Science and International Affairs, accessed November 21, 2023, https://www.belfercenter.org/publication/chinas-planned-floating-nuclear-power-facilities-south-china-sea-technical-and.

milestone in FNPP development.⁷ It is the first operational FNPP – serving the Chukotka region in the Arctic – highlighting the practical application of this technology. More recently, the U.S. Department of Energy, NuScale Power, Prodigy, Samsung, and Core Power have initiated projects exploring FNPP and compact molten salt reactor technologies.⁸

Despite these advantages, FNPPs face significant regulatory and institutional hurdles. As the technology's popularity and usage are expected to grow, ensuring that FNPPs adhere to strict nuclear safeguards and are not diverted for non-peaceful purposes becomes crucial. Russia and China, both Nuclear Weapon States (NWS), are at the forefront of FNPP development and deployment, adding complexity to the proliferation and safety landscape.

The origins of FNPPs are closely tied to naval nuclear propulsion, particularly in military icebreakers and submarines. The development of nuclear-powered vessels for military purposes laid the groundwork for civilian FNPP technology. This cross-over from military to civilian application underlines the dual-use nature of nuclear technology and underscores the importance of stringent safeguards and non-proliferation measures in the development and deployment of FNPPs.

Challenges Related to FNPPs

Myriad institutional and legal issues faced by the FNPPs are detailed in a report by the IAEA. This section highlights a number of challenges across different areas to provide a sample of the wide spectrum currently being contended with.

One of the foremost challenges facing FNPPs is public opposition fueled by environmental concerns. The apprehension centers around the potential impact of FNPPs on marine ecosystems, particularly in coastal areas where they are likely to be deployed. Given the relatively new concept of FNPPs, there is a lack of comprehensive data on their long-term environmental effects. This uncertainty contributes to public skepticism and resistance, necessitating thorough environmental impact assessments and transparent communication of findings to alleviate these concerns.

The regulatory landscape for FNPPs is currently underdeveloped, marked by gaps in both national legislation and international law. For instance, in countries like the United States, specific legislation governing FNPPs is sparse. Additionally, international conventions, such as the United Nations Convention on the Law of the Sea, offer limited guidance on structures like FNPPs. This nascent regulatory framework complicates FNPP governance, particularly concerning environmental protection and safety standards. The international operation of FNPPs, potentially within or near various territorial waters, necessitates a nuanced understanding and integration of diverse legal and institutional frameworks.

Evaluating the impact of FNPPs in marine environments, particularly in seismically active zones, poses a significant challenge. Due to their floating nature, FNPPs require specialized seismic and environmental impact assessments to identify and mitigate risks associated with natural disasters, including earthquakes and tsunamis. Developing and standardizing these assessment methodologies is crucial for ensuring the safe operation of FNPPs in various marine settings.

A key legal challenge is balancing the need to regulate pollution from FNPPs with the principle of freedom of navigation, a cornerstone of maritime law.¹² This issue becomes particularly complex in international waters, where multiple jurisdictions and international regulations converge. Crafting a regulatory framework that harmonizes environmental protection with navigational rights is essential to address this conflict effectively.

The existing liability and compensation frameworks for FNPPs are inadequate, particularly in scenarios involving accidents or environmental damage. Establishing liability and ensuring appropriate compensation in such events are complicated, especially when multiple countries or jurisdictions are implicated.¹³ A clear and robust liability regime is imperative for fostering confidence in FNPP technology and facilitating its broader acceptance and deployment.

Nuclear Non-Proliferation Regime in the Context of FNPPs

The introduction of FNPPs into the global energy landscape presents unique challenges within the nuclear non-proliferation regime. This regime, primarily overseen by the IAEA, employs a suite of technical measures to monitor and verify the use of nuclear materials and technology. The goal is to ensure that nuclear energy is

⁷ M. A. Allenykh and A. I. Anisimova, "Risk Analysis and Innovative Product Management in Rosatom State Corporation: A Case Study of a Green Project Floating Nuclear Thermal Power Plant 'Akademik Lomonosov," Review of Business and Economics Studies 11, no. 2: 2023, p. 27–37, https://doi.org/10.26794/2308-944x-2023-11-2-27-37

⁸ D.T. Ingersoll, "Small Modular Reactors (Smrs) for Producing Nuclear Energy: International Developments," Handbook of Small Modular Nuclear Reactors, 2015, 27–60, https://doi.org/10.1533/9780857098535.1.27

⁹ Nuclear Power Plant Operating Experience, 2013, https://doi.org/10.1787/9789264991934-en.

^{10 &}quot;United Nations Convention on the Law of the Sea - Main Page," United Nations, accessed November 21, 2023, https://legal.un.org/avl/ha/uncls/uncls.html.

¹¹ Medley, George Julius, (Born 2 Aug. 1930), Director, WWF-UK (World Wide Fund for Nature) (Formerly World Wildlife Fund (UK)), 1978–93," Who's Who, 2007, https://doi.org/10.1093/ww/9780199540884.013.u27171.

¹² International Maritime Organization, accessed November 21, 2023, https://www.imo.org/en/.

^{13 &}quot;Resolutions on Protecting Global Climate, Eliminating Unilateral Economic Measures, among 16 Texts Approved as Second Committee Concludes Session | UN Press," United Nations, accessed November 21, 2023, https://press.un.org/en/2021/gaef3562.doc.htm.

used exclusively for peaceful purposes, such as power generation or medical applications, and not diverted to the production of nuclear weapons. This involves meticulous tracking of all nuclear materials and the facilities where they are processed.

The presence of a fuel handling machine on FNPPs significantly influences the safeguards approach necessary to ensure non-proliferation and safe operation.

FNPPs equipped with onboard fuel handling machines – such as the Akademik Lomonosov – offer the convenience of managing nuclear fuel directly on the vessel. This feature allows for the reloading and shuffling of fuel without the need to transport it to and from land-based facilities, potentially reducing the risks and complexities associated with fuel transportation. However, this self-contained approach introduces specific challenges for nuclear safeguards. Continuous, direct monitoring becomes imperative to ensure that the fuel is neither diverted nor manipulated for non-peaceful purposes. Advanced surveillance systems, robust tamper-proof seals, and secure data transmission technologies are essential for real-time monitoring and anomaly detection. Additionally, providing access to IAEA inspectors for regular and ad hoc inspections is crucial. The ability to conduct these activities in the unique environment of a floating vessel requires tailored technologies and procedures, making the safeguarding process more complex and demanding. These factors necessitate a high degree of vigilance and technological sophistication in safeguarding efforts.

In contrast, FNPPs without onboard fuel handling machines necessitate the transportation of nuclear fuel to and from the vessel for reloading or shuffling. This approach shifts some of the safeguarding focus to the transportation process itself. The movement of nuclear fuel involves securing the transport route, monitoring the fuel during transit, and ensuring the integrity of the fuel until it is safely loaded onto or off the vessel. While this eliminates the need for sophisticated onboard monitoring and inspection mechanisms, it introduces different challenges, such as ensuring the security of the fuel during transportation and managing the interfaces between marine and land-based safeguarding systems. Coordination among various national and international authorities becomes more critical, particularly when the FNPP operates across international waters or in different jurisdictions. Although this setup might reduce the complexity of onboard safeguards, it adds layers of logistical and coordination challenges, requiring robust international cooperation and well-defined protocols for fuel transport and handling. This pertains to the design of the RITM-200 model intended for export, which is the primary focus of the safeguards approach.

Assessing the feasibility of FNPPs for nuclear weapons material production involves several factors. FNPPs generally use low-enriched uranium (LEU), which is less suited for weapons production compared to highly enriched uranium (HEU) or plutonium-239. The conversion of LEU to HEU or plutonium extraction is technically demanding and highly visible, involving sophisticated enrichment facilities and significant power consumption. The IAEA's inspection regime, employing surveillance and verification measures, plays a crucial role in detecting any unauthorized enrichment activities. Moreover, the process of converting reactor-grade material to weapons-grade is neither straightforward nor quick, involving complex chemical processing and enrichment steps. However, Iran and North Korea have shown the regime is not infallible, requiring vigilance from the nuclear safeguards society.

The unique characteristics of FNPPs necessitate a reevaluation and enhancement of existing nuclear safe-guards. ¹⁴ Traditional safeguard measures designed for land-based nuclear facilities must adapt to the mobile nature and specific operational contexts of FNPPs. Key areas of improvement include:

The mobility of FNPPs calls for innovative verification mechanisms that can function effectively in a maritime environment. This includes the development of transportable containment and surveillance equipment robust enough to withstand harsh marine conditions. Continuous GPS tracking should be implemented for all FNPPs to monitor their real-time location, providing an additional layer of oversight.

Utilizing advanced remote monitoring technologies, such as satellite surveillance, is critical for overseeing activities onboard FNPPs. This includes data from cameras, sensors, and seals on nuclear material containers, which can provide real-time updates and early warning signs of any unauthorized activity.

Equipping FNPPs with automated data reporting systems that continuously update reactor parameters and fuel status to the IAEA can enhance transparency and accountability. Power monitoring systems could also be used to calculate the amount of plutonium present in the reactor core, adding another layer of safeguarding.

Developing advanced containment measures, including electronic and optical seals, that allow for remote data transmission and tamper detection is crucial. These measures should be designed to operate effectively in maritime conditions and provide reliable verification of the integrity of nuclear materials on board.

Given the diverse operational scenarios of FNPPs, a tailored approach to safeguards is necessary. This includes clear guidelines for different phases of FNPP operations, whether in international waters, exclusive economic zones, or foreign ports.¹⁵ A specialized reporting framework that considers the time at sea versus time docked and the activities undertaken in each state is essential.

¹⁴ James M. Skiba and Carolynn P. Scherer, Nuclear Security for Floating Nuclear Power Plants, 2015, https://doi.org/10.2172/1223744.

¹⁵ Elena Bernini, "Small Modular Reactors and Transportable Nuclear Power Plants," Emerging Technology and the Law of the Sea, 2022, 108–40, https://doi.org/10.1017/9781009042178.005.

Enhancing transparency through the public disclosure of routes, docking schedules, and maintenance activities can build trust and facilitate international cooperation. Collaborative efforts with global and regional bodies, including the IAEA and International Maritime Organization (IMO), are vital for developing unified standards and protocols specific to FNPPs.

Adopting the principle of Safeguard by Design (SBD) from the initial planning stage of FNPPs is vital. ¹⁶ This approach integrates safeguard considerations into the design and operational phases, ensuring that necessary measures are in place for effective IAEA inspections and compliance with international non-proliferation standards.

The export of FNPP technology involves complex geopolitical considerations. For Nuclear Weapon States (NWS), FNPPs can be seen as strategic assets with dual-use potential. The export dynamics could alter strategic dependencies, with recipient states becoming reliant on NWS for fuel supply and technical support. Ensuring stringent safeguard measures and oversight in bilateral agreements is crucial to mitigate inherent proliferation risks.

Ensuring the security and safety of FNPPs involves robust physical protection measures, emergency response protocols, and collaboration with international naval forces. Engaging international bodies like the IAEA and the IMO in developing specific regulations for FNPPs is essential. Harmonizing international standards for the design, operation, and decommissioning of FNPPs will ensure they meet the highest standards of security, safety, and safeguards.

China's FNPP Ambitions

The South China Sea is a critical region, not just geopolitically but also economically. It sees an estimated \$3.37 trillion in annual trade pass through its waters, emphasizing its role as a global trade artery. The region is also rich in natural resources, with significant reserves of oil and natural gas. China's plans to deploy up to 20 FNPPs in this area, particularly around the strategically significant Spratly and Paracel Islands, could significantly reshape the regional dynamics.

The origins of China's FNPP program date back to 2016, marking a shift towards indigenous development of nuclear technology. The first unit, an ACPR50S reactor with a thermal power capacity of 200 MWt, signified the start of China's ambitious plan. This was followed by the introduction of a more powerful 310 MWt ACP100S model by the China National Nuclear Corp. (CNNC). This progression towards more potent reactor models illustrates China's commitment to establishing a strong and self-reliant FNPP fleet.

These technological advancements, however, are not just about energy generation. The geopolitical implications are significant. The FNPPs, essentially mobile power stations, could be perceived as extensions of Chinese sovereignty, complicating the already intricate territorial claims in the South China Sea. This area is not only strategically crucial but also ecologically sensitive. The deployment of FNPPs in such a biodiverse marine environment raises environmental concerns, particularly considering the potential impact on marine ecosystems and the risk of nuclear accidents.

From a maritime security viewpoint, the presence of FNPPs introduces new risks. These installations could become targets in a region where territorial disputes often escalate into diplomatic confrontations and military posturing. The vulnerability of FNPPs to attacks and the navigational hazards they could pose in one of the world's busiest maritime regions are pressing concerns.

The safeguarding of nuclear material in such a politically charged environment is another significant issue. The challenge of ensuring the peaceful use of nuclear technology in a disputed zone complicates the already intricate task of international nuclear safeguards. The spread of nuclear technology in the South China Sea, without adequate oversight, could exacerbate proliferation risks.

In response to these challenges, comprehensive solutions are required. The establishment of an international regulatory framework specific to FNPPs in disputed waters could provide oversight and governance. This framework would need the backing of international bodies like the United Nations or IAEA and involve binding agreements on FNPP deployment and operation. Advanced security measures, including state-of-the-art surveil-lance systems and coordinated anti-piracy operations, are essential for protecting these installations.

Environmental strategies should include continuous monitoring of key indicators such as water quality and radiation levels. Collaborating with international environmental organizations to establish protocols for ecological protection is crucial, especially considering the region's rich biodiversity. Diplomatically, engaging all stakeholders in the South China Sea dispute in dialogue is necessary to address the wide-ranging implications of FNPP deployment.

Investing in next-generation FNPP designs with enhanced safety features, capable of withstanding natural disasters and reducing meltdown risks, is a prudent approach. Implementing redundant systems for critical operations can ensure fail-safe operations. Additionally, a regional energy cooperation framework could help balance the energy needs and economic interests of neighboring countries.

^{16 &}quot;Nord Stream Blast, Regional Tensions Halt China's Floating Nuclear Reactor Plans," South China Morning Post, May 31, 2023, https://www.scmp.com/news/china/science/article/3222289/china-suspends-plan-build-floating-nuclear-reactors-south-china-sea.

¹⁷ Yikai Yang, Lili Zeng, and Qiang Wang, "How Much Heat and Salt Are Transported into the South China Sea by Mesoscale Eddies?," Earth's Future 9, no. 7 (2021), https://doi.org/10.1029/2020ef001857.

Conclusion

In summary, China's move to deploy FNPPs in the South China Sea, a region critical for global trade and rich in natural resources, adds a new dimension to the already complex territorial disputes. The potential impact of these installations on regional geopolitical dynamics, maritime security, environmental integrity, and nuclear non-proliferation efforts necessitates a multifaceted and internationally coordinated response. This response should encompass regulatory, security, environmental, diplomatic, and technological strategies to address the challenges posed by this significant development. The plan can be expected to invoke caution among neighboring countries, and recent developments indicate that China's FNPP project has been put on hold indefinitely due to escalating security concerns.

The deployment of Floating Nuclear Power Plants (FNPPs) presents challenges that necessitate immediate and comprehensive action. These include regulatory gaps, environmental and seismic concerns, conflicts between pollution control and navigation rights, and inadequate liability frameworks. Addressing these issues requires harmonizing national and international regulations, proactively engaging with public concerns, and ensuring rigorous environmental and safety standards. The principle of Safeguards-by-Design is critical in this context, ensuring non-proliferation and safety in an increasingly complex global landscape. Success in integrating FNPPs into our energy infrastructure hinges on strong international cooperation, transparency, and a commitment to non-proliferation from NWS.

References

- Information Library World Nuclear Association, accessed November 21, 2023, https://www.world-nuclear.org/information-library.aspx
- United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR). (2017). "Sources and Effects of Ionizing Radiation." UNSCEAR 2017 Report.
- Schneider, M., Froggatt, A., Hazemann, J., Katsuta, T., Ramana, M. V., Stienne, A., ... & Wealer, B. (2020). "The World Nuclear Industry Status Report 2020."
- "Advanced Small Modular Reactors (Smrs)," Energy.gov, accessed November 21, 2023, https://www.energy.gov/ne/nuclear-reactor-technologies/small-modular-nuclear-reactors
- "Safeguards and Verification," IAEA, June 8, 2016, https://www.iaea.org/topics/safeguards-and-verification
- Author: Viet Phuong Nguyen|Nov. 21 et al., "China's Planned Floating Nuclear Power Facilities in South China Sea: Technical and Political Challenges," Belfer Center for Science and International Affairs, accessed November 21, 2023, https://www.belfercenter.org/publication/chinas-planned-floating-nuclear-power-facilities-south-china-sea-technical-and
- Allenykh M. A. and Anisimova A. I., "Risk Analysis and Innovative Product Management in Rosatom State Corporation: A Case Study of a Green Project Floating Nuclear Thermal Power Plant 'Akademik Lomonosov," Review of Business and Economics Studies 11, no. 2 (2023): 27–37, https://doi.org/10.26794/2308-944x-2023-11-2-27-37
- Ingersoll D.T., "Small Modular Reactors (Smrs) for Producing Nuclear Energy: International Developments," Handbook of Small Modular Nuclear Reactors, 2015, 27–60, https://doi.org/10.1533/9780857098535.1.27
- Nuclear Power Plant Operating Experience, 2013, https://doi.org/10.1787/9789264991934-en.
- "United Nations Convention on the Law of the Sea Main Page," United Nations, accessed November 21, 2023, https://legal.un.org/avl/ha/uncls/uncls.html
- Medley, George Julius, (Born 2 Aug. 1930), Director, WWF-UK (World Wide Fund for Nature) (Formerly World Wildlife Fund (UK)), 1978–93," Who's Who, 2007, https://doi.org/10.1093/ww/9780199540884.013.u27171 International Maritime Organization, accessed November 21, 2023, https://www.imo.org/en/.
- "Resolutions on Protecting Global Climate, Eliminating Unilateral Economic Measures, among 16 Texts Approved as Second Committee Concludes Session | UN Press," United Nations, accessed November 21, 2023, https://press.un.org/en/2021/gaef3562.doc.htm
- James M. Skiba and Carolynn P. Scherer, Nuclear Security for Floating Nuclear Power Plants, 2015, https://doi.org/10.2172/1223744
- Bernini Elena, "Small Modular Reactors and Transportable Nuclear Power Plants," Emerging Technology and the Law of the Sea, 2022, 108–40, https://doi.org/10.1017/9781009042178.005
- "Nord Stream Blast, Regional Tensions Halt China's Floating Nuclear Reactor Plans," South China Morning Post, May 31, 2023, https://www.scmp.com/news/china/science/article/3222289/china-suspends-plan-build-floating-nuclear-reactors-south-china-sea
- Yang Yikai, Zeng Lili, and Wang Qiang, "How Much Heat and Salt Are Transported into the South China Sea by Mesoscale Eddies?," Earth's Future 9, no. 7 (2021), https://doi.org/10.1029/2020ef001857

From the Gracchus Brothers to Modern Nuclear Powers

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Abstract

"From the Gracchus Brothers to Modern Nuclear Powers" offers a comparative exploration of leadership across time, drawing insights from ancient Rome's Gracchus brothers to contemporary leaders in nuclear-armed nations. The article emphasizes enduring leadership qualities like vision, commitment to social justice, and the ability to inspire. It highlights the leadership skills of the Gracchus brothers and how they continue to inspire leaders today. Furthermore, it delves into the ambitions and threats faced by modern nuclear leaders, underscoring the complex challenges of balancing national security with the pursuit of peace. Ultimately, this article underscores the timeless importance of leadership qualities in shaping history.

Keywords:

Leadership, Nuclear Powers, Nuclear Threats, Crisis Management.

Introduction

Throughout history, the world has frequently faced various crises, spanning the realms of social, economic, environmental, and more. These crises have manifested themselves both in ancient times and in the modern era. The causes behind these crises have varied greatly, depending on the circumstances of their time. In the past, they might have been influenced by factors such as leadership, resources, or natural disasters. Today, in an age where some countries possess nuclear capabilities, the nature of crises and their potential consequences has evolved significantly.

Main Part

The development of any society goes through the stages of crisis, when the traditional social or cultural system cannot respond to the challenges of the time and when the tradition of the old order conflicts with new trends. This is the content of the historical crisis.

Continuing on this theme, it's important to recognize that ancient civilizations often grappled with crises that were closely tied to their specific historical and geographical contexts. For instance, some ancient societies faced crises related to agricultural failures, invasions, or political conflicts. These crises could lead to the collapse of entire civilizations or prompt significant societal shifts.

In contrast, the modern world is marked by a different set of challenges. Globalization, climate change, and the rapid advancement of technology have created complex and interconnected crises. These contemporary crises can transcend national boundaries, affecting multiple nations simultaneously. Moreover, the presence of nuclear-armed countries adds a unique layer of complexity to global security and crisis management.

It should be mentioned that, the phenomenon of the political leader has become a concomitant event of public life since the creation of the state. If we look through the history, it is clear from the leaders' biographical portraits how decisive and important role the "firsts" play in the creation of history. The welfare of the state and the people essentially depends on the political leaders, in whose hands are the reins of management and who are aware of the importance of their activities for the country. The study of the phenomenon of the leader in antiquity, which is known to the world for its political figures, should not lack relevance.

We would like to show precisely what skills for leadership the statesmen possessed described in Plutarch's Parallel Lives¹ and what was the reason of their success or failure; to what extent Plutarch's and modern definitions of leadership agree; what qualities determine the success or failure of ancient statesmen; why they are still objects of imitation and admiration; how they behave in critical situations; how they interact with the masses; how they manage to influence the people and manage crisis situations; what is more important for them - the state and people or personal interests and ambitions; to what extent were the results of their activities reflected on the welfare of the state and people. And then we will discuss the political leaders of the nuclear states in the modern world, what threats they are facing, and on the other hand, what ambitions they have.

We have chosen the Gracchus brothers because we found their historical significance and leadership qualities to be quite compelling. They were known for their dedication to fairness and justice, which are qualities that we believe are essential for leaders in any time period. Their ability to advocate for the less fortunate and challenge powerful institutions offers valuable lessons. By examining their leadership in ancient Rome and comparing it to today's leaders in nuclear power countries, we gain insights into the consistency and evolution of leadership qualities over time.

Skills for Leadership in the Case of the Gracchus Brothers: Tiberius and Gaius Gracchus were Roman statesmen who lived during the 2nd century BC. They exhibited several leadership skills, including a deep concern for the welfare of the Roman plebeians, a willingness to challenge the Roman Senate, and the ability to rally popular support for their reforms. Tiberius was known for his land reform efforts, while Gaius pursued a broader social and political reform agenda.²

Reasons for Their Success and Failure: The success of the Gracchus brothers lay in their ability to connect with and advocate for the common people, who were suffering from economic hardships. Their land redistribution proposals and grain distribution initiatives garnered significant support. However, their reformist zeal also led to opposition from the Roman elite, resulting in their ultimate downfall.

Agreement with Modern Definitions of Leadership: Certain aspects of the Gracchus brothers' leadership, such as their commitment to social justice and addressing economic disparities, align with modern definitions of leadership that emphasize the importance of ethical leadership, social responsibility, and advocacy for marginalized groups.³

Determinants of Success or Failure: The success or failure of the Gracchus brothers was heavily influenced

¹ Plutarch, The Parallel Lives, The Life of Caius Gracchus, published in Vol. X of the Loeb Classical Library edition, 1921

² Plutarch, The Parallel Lives, The Life of Caius Gracchus, published in Vol. X of the Loeb Classical Library edition, 1921

³ Plutarch, The Parallel Lives by Plutarch, The Life of Tiberius Gracchus, published in Vol. X of the Loeb Classical Library edition, 1921

by their ability to navigate the complex and often polarized political landscape of ancient Rome. Their populist policies resonated with the Roman masses but antagonized the powerful senatorial class, leading to their eventual downfall.

Behavior in Critical Situations: In critical situations, the Gracchus brothers demonstrated resolve in pushing for their reformist agenda, even in the face of political opposition. Their ability to mobilize popular support and respond to social unrest was notable.

Interaction with the Masses: Tiberius and Gaius Gracchus excelled in interacting with the Roman plebeians. They used their oratory skills to effectively communicate their reform proposals and inspire the support of the common people.

Management of Crisis Situations: The Gracchus brothers managed crisis situations by addressing the economic hardships faced by the Roman plebeians through their proposed reforms. Their policies aimed to alleviate the socio-economic crises of their time.

Balancing State and Personal Interests: The Gracchus brothers prioritized the welfare of the Roman common people over personal interests and ambition. Their focus on social reform was driven by a commitment to addressing economic disparities and advocating for the less privileged.

Impact on the Welfare of the State and People: The Gracchus brothers' advocacy for land reform and other social policies had a significant impact on the welfare of the Roman plebeians. While their reforms faced opposition and were not always fully implemented, their legacy as champions of social justice endures in Roman history.

The ability to make the right political decision in a critical situation - Tiberius, when he was chosen as a public tribune, took into consideration the difficult situation created in the country. He made the most daring and necessary political movement, when he issued a law on the transfer of lands illegally appropriated by the rich to those citizens who needed help. Tiberius introduced a bill to restore the old agrarian law. Gaius also actively continued his brother's political course. The brothers took a risk when they decided to carry out such a reform that would strengthen the opposition, however, their move was determined by necessity. The risk they took was related to the fact that they wanted to achieve better results.

Country's cheerleading - which brought both brothers a lot of trouble - Caius Graccus says: "Tiberius was passing through Tuscany on his way to Numantia, and observed the dearth of inhabitants in the country, and that those who tilled its soil or tended its flocks there were barbarian slaves, he then first conceived the public policy which was the cause of countless ills to the two brothers"

Ability to take responsibility – "Tiberius, however, on being elected tribune of the people, took the matter directly in hand "regarding the redistribution of lands. Gaius, as soon as he became tribune, immediately "introduced two laws, one providing that if the people had deprived any magistrate of his office, such magistrate should not be allowed to hold office a second time; and another providing that if any magistrate had banished a citizen without trial, such magistrate should be liable to public prosecution"⁵

Self-control - Even in the most difficult situation, Tiberius could calmly talk to his opponent without using any obscene words or personal insults. When Tiberius introduced a new land law in the People's Tribune, he was opposed by the tribune Marcus Octavius. Despite the heated debate, Plutarch writes: "Tiberius and Octavius, in which, as we are told, although both strove together with the utmost earnestness and rivalry, neither abused the other or let fall a single word about the other which anger made unseemly "As for Caius, he sometimes found it difficult to express his emotions. He would get so upset while speaking. He started cursing and mixing things up, however, "therefore, to guard against such digressions, he employed an intelligent servant, Licinius, who stood behind him when he was speaking, with a sounding instrument for giving the tones of the voice their pitches. Whenever this servant noticed that the voice of Caius was getting harsh and broken with anger, he would give out a soft key-note, on hearing which Caius was at once remit the vehemence of his passion and of his speech, grow gentle, and show himself easy to recal.

The Gracchus brothers' leadership in advocating for social and economic reform left an indelible mark on Roman history and serves as a historical example of leaders who championed the interests of the common people.

This kind of comparative analysis can help readers understand how leadership has evolved and adapted to different historical contexts, political structures, and societal needs. It can also highlight the enduring qualities of leadership that transcend time, as well as the unique challenges faced by leaders in different eras.

Leadership is a very important and diverse concept that has always been a significant part of our history. It has influenced the way things happen throughout time. When we look at leaders from different times, it helps us understand how leadership has changed and how it's still important today. In addition, it's crucial to address the contemporary landscape of leadership within nuclear power nations. In today's world, many countries possess nuclear capabilities, and this presents unique challenges and ambitions. Leaders of these nations must navigate the complex arena of nuclear diplomacy, non-proliferation efforts, and security concerns. Analyzing how modern leaders handle these responsibilities sheds light on the evolving nature of leadership in the face of nuclear threats and aspirations.

⁴ Plutarch, The Parallel Lives by Plutarch, The Life of Tiberius Gracchus, published in Vol. X of the Loeb Classical Library edition, 1921

⁵ Plutarch, The Parallel Lives, The Life of Caius Gracchus, published in Vol. X of the Loeb Classical Library edition, 1921

The leadership of the Gracchus brothers has left a lasting impact on history. They provide an inspiring model of leadership that still resonates today. When we compare their qualities with those of leaders in our time, we see a complex and evolving picture of leadership. Even as society changes and politics shift, certain aspects of leadership, like having a vision, fighting for social justice, and motivating people, remain constant. Leadership is an ever-changing art, but these qualities endure.

On the other hand, the leaders of countries with nuclear weapons need to have certain qualities. They should understand how nuclear weapons work and how to use them safely. They need to be good at making decisions and thinking about the results of those decisions. They also have to be good at talking with other leaders and making deals to keep the peace. These leaders should have strong values and care about preventing nuclear war. They have to be flexible and able to handle problems in the world. Being a leader of a nuclear country is a big responsibility, and it requires many skills and a strong commitment to peace. Moreover, Leaders of nuclear power countries have a complex set of ambitions and face various threats. Their ambitions and concerns are often closely tied to the possession and potential use of nuclear weapons. Here are some of the ambitions and threats that leaders of nuclear power countries contend with:

Ambitions:

National Security: The primary ambition of leaders in nuclear power countries is to ensure the national security of their nation. Nuclear weapons serve as a deterrent against potential adversaries, and these leaders aim to protect their citizens from external threats. Notable authors who have explored this topic include Graham Allison, author of "Nuclear Terrorism: The Ultimate Preventable Catastrophe," and Scott Douglas Sagan, who has written extensively on nuclear deterrence. In his book "Nuclear Terrorism: The Ultimate Preventable Catastrophe," Graham Allison examines the looming threat of nuclear terrorism and the potentially catastrophic consequences it could entail. He emphasizes the urgency of taking measures to prevent terrorists from obtaining and using nuclear weapons. Allison's work explores the need for global cooperation, enhanced security measures, and international policies to mitigate the risk of nuclear terrorism. The book underscores the gravity of this threat and the critical importance of preventive actions to avert a nuclear catastrophe. Moreover, Scott Douglas Sagan's extensive work on nuclear deterrence and arms control delves into various aspects of nuclear security. His research often addresses the risk of accidental nuclear war, the complexities of managing nuclear arsenals, and the implications of emerging technologies for nuclear stability. Sagan emphasizes the importance of responsible nuclear policies and the need for vigilance in preventing unintended nuclear confrontations. His writings contribute to a comprehensive understanding of the challenges and risks associated with nuclear weapons and strategies for minimizing those risks

Regional Influence: Nuclear-armed nations often seek to exert influence in their regions. Possessing nuclear weapons can enhance their geopolitical leverage and enable them to pursue their interests and objectives more effectively. Possession of nuclear weapons can enhance a country's regional influence. Leaders aim to wield this influence to secure their interests and objectives within their geographic area. Kenneth Waltz, in his work "The Spread of Nuclear Weapons: A Debate Renewed," has discussed the regional dynamics of nuclear proliferation and their impact on global security. Waltz's central argument revolves around the notion that the spread of nuclear weapons can contribute to global stability by introducing a balance of power. He contends that newly nuclear-armed states may exercise restraint in conflicts to avoid the devastating consequences of nuclear warfare. Waltz's work has been a subject of extensive debate, challenging conventional perspectives on nuclear proliferation and its impact on international security.

Global Standing: These leaders aspire to maintain or elevate their nation's status on the global stage. Nuclear capabilities provide a seat at the table in international affairs and negotiations, allowing them to have a say in shaping global policies. Thomas Schelling, author of "Arms and Influence," has examined the role of nuclear weapons in shaping global politics, and Joseph Nye's writings, such as "The Paradox of American Power," discuss the concept of soft power in international relations. In "Arms and Influence," Thomas Schelling delves into the influential role of nuclear weapons in shaping global politics. Schelling's work emphasizes the strategic significance of these weapons in international relations. He explores the intricate dynamics of deterrence, coercion, and the use of military force in the context of nuclear arsenals, shedding light on the strategies employed by nations to achieve their objectives while avoiding catastrophic conflict. Joseph Nye, in his writings including "The Paradox of American Power," explores the concept of "soft power" and its pivotal role in international relations. Nye introduces the idea that power in the global arena is not solely defined by military strength but also by a nation's ability to shape the preferences and behaviors of others through non-coercive means. His work highlights the importance of diplomacy, cultural influence, and global relationships in an interconnected world, offering a nuanced understanding of how nations can project their influence beyond military might.

⁶ Graham, Allison. Nuclear Terrorism: The Ultimate Preventable Catastrophe. New York: Times Books, 2004.

⁷ Sagan, Scott Douglas, Waltz, Kenneth N. The Spread of Nuclear Weapons: An Enduring Debate. New York: W.W. Norton & Co 2013

⁸ Waltz, Kenneth. The Spread of nuclear weapons: A Debate Renewed, W.W. Norton. 2002

⁹ Schelling, Thomas. Arms and Influence, Yale University Press, 1966.

¹⁰ Nye, Joseph. The Paradox of American Power, Oxford University Press. 2002

Deterrence: They aim to deter potential aggressors from attacking their country. The credible threat of a devastating nuclear response is intended to dissuade others from considering military actions that could lead to a nuclear conflict. A credible nuclear threat serves as a deterrent.Bernard Brodie, in "The Absolute Weapon: Atomic Power and World Order," laid the groundwork for understanding the concept of nuclear deterrence. In "The Absolute Weapon: Atomic Power and World Order," Bernard Brodie laid the foundation for comprehending the concept of nuclear deterrence. Brodie's seminal work, published in 1946, was one of the earliest scholarly explorations of the strategic implications of atomic weapons. He emphasized the idea that the possession of nuclear weapons could serve as a deterrent against aggression, as the prospect of mutually assured destruction could dissuade nations from initiating a nuclear conflict. Brodie's groundbreaking insights in this book have profoundly influenced the discourse on nuclear strategy and security, setting the stage for subsequent developments in the field of deterrence theory.

Arms Control and Non-Proliferation: Some leaders aim to promote arms control agreements and non-proliferation efforts to prevent the spread of nuclear weapons. They may work towards disarmament or encourage other countries to forgo nuclear ambitions. Joseph Cirincione, in "Bomb Scare: The History and Future of Nuclear Weapons," delves into the challenges of nuclear proliferation and disarmament. Joseph Cirincione provides a comprehensive examination of the challenges associated with nuclear proliferation and disarmament. His work delves into the historical development of nuclear arsenals, the risks posed by the spread of nuclear weapons to additional states, and the complexities of achieving global disarmament. Cirincione's book underscores the urgent need to address the potential threats arising from the continued presence of nuclear weapons and advocates for effective non-proliferation and disarmament efforts to secure a safer global future. His work is highly regarded for its in-depth analysis of the historical, present, and future implications of nuclear weapons.

Peace and Stability: Ultimately, leaders of nuclear powers often aspire to contribute to global peace and stability by managing their nuclear arsenals responsibly and promoting diplomatic solutions to conflicts. Richard Rhodes, who wrote "The Making of the Atomic Bomb" and "Arsenals of Folly," explores the history and dynamics of nuclear weapons and their impact on peace. In "Arsenals of Folly," Rhodes delves into the complex and often perilous history of nuclear arms during the Cold War, shedding light on the dangers posed by the arms race between the United States and the Soviet Union.¹³ Through these works, Rhodes elucidates the challenges and ethical considerations surrounding nuclear weapons while emphasizing the imperative of diplomacy, arms control, and disarmament in fostering global peace. His writings are widely regarded for their authoritative insights into the multifaceted aspects of the nuclear age and its implications for international security.

These authors and their works provide valuable insights into the motivations, ambitions, and consequences associated with leaders in nuclear power countries and their management of nuclear arsenals.

Leaders of nuclear power countries face a range of significant threats and challenges associated with their possession of nuclear weapons;

Nuclear Conflict: The most immediate and catastrophic threat is the potential for a nuclear conflict, which could result from misunderstandings, miscalculations, or geopolitical tensions escalating to a nuclear threshold. Graham Allison the Author of "Nuclear Terrorism: The Ultimate Preventable Catastrophe," which explores the potential for nuclear conflict and the measures to prevent it, he focuses on the looming threat of nuclear terrorism and the measures needed to prevent it. In his work, Allison underscores the gravity of this threat, emphasizing the urgent need for global cooperation and enhanced security measures to mitigate the risk of nuclear terrorism. The book provides a sobering analysis of the potential consequences of terrorists obtaining and using nuclear weapons, making a compelling case for preventive actions and international policies to avert a catastrophic nuclear event. Graham Allison's work serves as a critical call to action, highlighting the imperative of safeguarding against nuclear conflict and maintaining global stability in an age of evolving security challenges.

Accidental Launch: Leaders must constantly guard against the accidental or unauthorized launch of nuclear weapons, ensuring that strict control measures are in place to prevent unintended detonations. Eric Schlosser in his book "Command and Control: Nuclear Weapons, the Damascus Accident, and the Illusion of Safety," examines incidents and accidents related to nuclear weapons, including accidental launches. Eric Schlosser undertakes a thorough examination of incidents and accidents related to nuclear weapons, with a particular focus on accidental launches. Schlosser's work sheds light on the vulnerabilities and risks associated with the management and security of nuclear arsenals. By scrutinizing real-life accounts of mishaps and near-catastrophic events, he underscores the complexity and potential dangers inherent in maintaining and controlling these immensely powerful weapons. The book challenges any illusion of infallibility and emphasizes the critical need for stringent safety measures and rigorous control systems to prevent accidental nuclear launches and the catastrophic consequences they could entail. Eric Schlosser's meticulous research and gripping narrative contribute significantly to the understanding of the intricate challenges and responsibilities in the realm of nuclear weapons security.

¹¹ Brodie, Bernard. The Absolute Weapon: Atomic Power and World Order, Harcourt, Brace and Company. 1946.

¹² Cirincione, Joseph Bomb Scare: The History and Future of Nuclear Weapons, Columbia University Press 2007.

¹³ Rhodes, Richard. Arsenals of Folly, Knopf Doubleday Publishing Group. 2007.

¹⁴ Schlosser, Eric. Command and Control: Nuclear Weapons, the Damascus Accident, and the Illusion of Safety. Penguin Press. 2013.

Terrorism: The risk of nuclear materials falling into the hands of terrorists is a grave concern. Securing these materials and technology is vital to prevent their use for malicious purposes. Joseph Cirincione in his work, "Bomb Scare: The History and Future of Nuclear Weapons," discusses the risk of nuclear materials falling into the hands of terrorists and the need for securing them. Joseph Cirincione delves into the grave risk of nuclear materials falling into the hands of terrorists and the imperative of securing them. Cirincione's work examines the historical development of nuclear weapons and the ongoing challenges posed by their proliferation. He underscores the urgent need for effective measures to prevent the theft or unauthorized access to nuclear materials, which could lead to potential acts of nuclear terrorism. The book advocates for comprehensive non-proliferation efforts, improved security protocols, and international cooperation to address this pressing threat. Joseph Cirincione's analysis contributes significantly to the understanding of nuclear security and the critical steps required to mitigate the risk of nuclear terrorism in the modern world.

Arms Race: The pursuit of nuclear capabilities by multiple nations in a region can lead to arms races, escalating tensions and increasing the likelihood of conflict. Kenneth Waltz in his work "The Spread of Nuclear Weapons: A Debate Renewed," analyzes the dynamics of nuclear proliferation and the potential for arms races. Kenneth Waltz provides a comprehensive analysis of the dynamics of nuclear proliferation and the potential for arms races. Waltz's work rekindles the debate surrounding the spread of nuclear weapons by examining its potential consequences and implications for global security. He contends that, counterintuitively, the acquisition of nuclear weapons by additional states can contribute to international stability by introducing a balance of power. This work offers a thought-provoking perspective on the strategic implications of nuclear proliferation, emphasizing the role it can play in preventing major conflicts. Kenneth Waltz's book has had a lasting impact on the discourse on nuclear weapons, influencing discussions about the potential benefits and drawbacks of multiple states possessing nuclear arsenals.

Deterrence Failure: The possibility of deterrence failure, where an adversary is not deterred by the threat of nuclear retaliation, poses a serious threat to the security of nuclear power countries. Bernard Brodie in "The Absolute Weapon: Atomic Power and World Order," explores the concept of nuclear deterrence, including the possibility of deterrence failure. Bernard Brodie explores the concept of nuclear deterrence and delves into the possibility of deterrence failure. Brodie's seminal work, published in 1946, was one of the earliest scholarly explorations of the strategic implications of atomic weapons. He emphasizes the idea that the possession of nuclear weapons can serve as a deterrent against aggression, as the prospect of mutually assured destruction could dissuade nations from initiating a nuclear conflict. Brodie's work offers valuable insights into the foundation of deterrence theory, which has had a profound influence on the discourse surrounding nuclear strategy and security. Moreover, he critically addresses the potential challenges and vulnerabilities that could lead to the failure of nuclear deterrence, highlighting the imperative of vigilant and responsible management of nuclear arsenals.

Geopolitical Instability: Leaders must navigate complex international relations, particularly in regions with multiple nuclear-armed nations, as geopolitical instability can lead to dangerous confrontations. Richard Rhodes the Author of "Arsenals of Folly," discusses the complex international relations and geopolitical dynamics surrounding nuclear weapons. In "Arsenals of Folly," authored by Richard Rhodes, a renowned writer, the complex international relations and geopolitical dynamics surrounding nuclear weapons are thoroughly examined. The book provides a detailed account of the intricate and often perilous interactions between nuclear-armed nations during the Cold War. Rhodes illuminates the dangers and challenges posed by the arms race between the United States and the Soviet Union, including the politics, strategies, and the inherent risks of mutual assured destruction. The work underscores the importance of responsible diplomacy, arms control, and disarmament in fostering global stability. Through his insightful narrative, Richard Rhodes contributes significantly to the understanding of the multifaceted aspects of the nuclear age and its profound implications for international security and peace.

International Pressure and Sanctions: Global pressure to disarm or limit nuclear arsenals can lead to economic sanctions and diplomatic isolation, influencing nuclear policies. Schelling's work, such as "Arms and Influence," touches on the influence of international pressure and sanctions in nuclear policy. In Thomas Schelling's work, including "Arms and Influence," he delves into the influence of international pressure and sanctions in nuclear policy. Schelling's insightful analysis examines the strategic implications of international dynamics, including how pressure and sanctions can impact the behavior of nations in the realm of nuclear weapons. He explores the use of coercive diplomacy and how the international community can employ various means to influence the nuclear decisions of states, shedding light on the multifaceted aspects of nuclear policy and the role of global pressures. Through his work, Schelling offers a nuanced understanding of the complex interactions between nations, international politics, and the pursuit of nuclear security.

Ethical and Moral Challenges: There are ongoing ethical and moral concerns about being associated with nuclear weapons, given their devastating potential. Leaders must grapple with the moral responsibility of possessing and potentially using these weapons. In "The Seventh Decade: The New Shape of Nuclear Danger," Schell addresses the ethical and moral dimensions of nuclear weapons and their consequences. In "The Seventh Decade: The New Shape of Nuclear Danger," Jonathan Schell addresses the ethical and moral dimensions of nuclear weapons and their profound consequences. Schell's work delves into the enduring questions of ethics and morality 15 Waltz, Kenneth. The Spread of Nuclear Weapons: A Debate Renewed, W.W. Norton. 2002

surrounding the existence and potential use of nuclear arms. He critically examines the ethical dilemmas faced by leaders and policymakers in nuclear-armed nations, exploring the responsibilities and choices associated with possessing these immensely destructive weapons. The book offers a thoughtful and reflective analysis of the moral challenges posed by nuclear weapons, emphasizing the need for ethical considerations in shaping nuclear policies and international security efforts. Jonathan Schell's work contributes significantly to the discourse on the ethical aspects of nuclear weapons and their implications for global peace and stability.

These threats underscore the need for leaders in nuclear power countries to balance their ambitions for national security with the imperative of preventing nuclear conflict and maintaining global stability.

Conclusion

In the grand story of history, leadership is a fundamental and ever-changing part. We've seen it in the past with people like the Gracchus brothers, who fought for fairness and justice in ancient Rome, and we see it today with leaders in countries that have nuclear weapons. What we've learned from them is that leadership always involves having a big vision, caring about fairness, and inspiring people, no matter when or where.

The Gracchus brothers from ancient times show us that good leadership means fighting for what's right and helping those who need it, even when it's tough. They inspire us to look for leaders who care about making the world a better place, no matter when they lived.

On the other hand, leaders in nuclear countries today have to balance big ambitions, like keeping their country safe and having a strong position in the world, with the very real risk of nuclear conflict. It's a complicated job, and they have to think carefully about what's right and what's safe.

So, when we look at the past and the present, we see that the most important qualities of leadership, like having a big vision and caring about fairness, stay the same. These qualities have guided us through history and continue to do so today.

As we move forward in time, let's learn from both the past and the present. The story of leadership is like a tapestry, woven with threads of wisdom and lessons from history. It's a reminder that leadership is a bridge connecting what people wanted in the past with the challenges we face today. Our leaders, just like those before them, are responsible for shaping the future. They encourage us to build a world that combines the wisdom of the past with the needs of today, ensuring that the legacy we leave behind is one of progress, peace, and hope for the generations yet to come.

References

Bracken, Paul. The Second Nuclear Age: Strategy, Danger, and the New Power Politics. Henry Holt and Company. 2012.

Brodie, Bernard. The Absolute Weapon: Atomic Power and World Order, Harcourt, Brace and Company. 1946.

Cirincione, Joseph Bomb Scare: The History and Future of Nuclear Weapons, Columbia University Press.2007.

Graham, Allison. Nuclear Terrorism: The Ultimate Preventable Catastrophe. New York: Times Books, 2004.

Nye, Joseph. The Paradox of American Power, Oxford University Press. 2002

Plutarch, The Parallel Lives By Plutarch, The Life of Tiberius Gracchus, published in Vol. X of the Loeb Classical Library edition, 1921

Plutarch, The Parallel Lives, The Life of Caius Gracchus, published in Vol. X of the Loeb Classical Library edition, 1921

Rhodes, Richard. Arsenals of Folly, Knopf Doubleday Publishing Group.2007.

Rhodes, Richard. The Making of the Atomic Bomb. Simon & Schuster. 1986.

Sagan, Scott Douglas, Waltz, Kenneth N. The Spread of Nuclear Weapons: An Enduring Debate. New York: W.W. Norton & Co.2013

Schell, Jonathan. The Seventh Decade: The New Shape of Nuclear Danger. Metropolitan Books. 2007.

Schelling, Thomas. Arms and Influence, Yale University Press, 1966.

Schlosser, Eric. Command and Control: Nuclear Weapons, the Damascus Accident, and the Illusion of Safety. Penguin Press. 2013.

Waltz, Kenneth. The Spread of Nuclear Weapons: A Debate Renewed, W.W. Norton. 2002

Revisiting Nuclear Deterrence in the 21St Century: The Case of Russian-Ukrainian War

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Abstract

Nuclear weapons were the key factors that shaped the Cold War. The period after 1945 was called Atomic Age. Threat and the experience of nuclear weapons brought about several theories and conflicting perspectives. The discussion around nuclear weapons were the trending topic among academics during the Cold War. With the outbreak of Russia-Ukraine war, the nuclear issue has come into world agenda again. As a nuclear power, Russian Federation, and nuclear free Ukraine are at war. Therefore nuclear side of the war must be addressed. Given the discussions about the history of nuclear weapons in especially Ukraine, it is important to remember the arguments about it. In this context, this paper aims to understand today's conflict RF and Ukraine in terms of nuclear weapons. To do so, we will first frame nuclear deterrence theories in historical context. Deterrence theories will be given in fourth waves. First wave covers 1945-1950, second wave covers 1950s-1970s, third wave 1970s-1990s, and fourth wave covers developments after 2000s. After building the theoretical ground and discussions Russian- Ukrainian War will be analyzed. In other words, how Russia's holding nuclear weapons shape the tension between Russia and Ukraine and how this effects international relations of big powers will be answered.

Keywords:

Nuclear Proliferation, Nuclear Weapons, Deterrence, Russian Federation, Ukraine, Russian-Ukrainian War.

Introduction

Nuclear weapons were the key factors that shape The Cold War. Some even claim that it was nuclear weapons behind the stability and peace during the Cold War. Their threat and the experience brought about several theories and conflicting perspectives. With the outbreak of Russia-Ukraine war, the nuclear issue has come into world agenda. In this context, this paper aims to understand today's conflict RF and Ukraine in terms of nuclear weapons. To do so, we frame nuclear deterrence theories in historical context. Deterrence theories are given in fourth waves. First wave covers 1945-1950, second wave covers 1950s-1970s, third wave 1970s-1990s, and fourth wave covers developments after 2000s. After building the theoretical ground and discussions Russian- Ukrainian War is analyzed. In other words, how Russia's holding nuclear weapons shape the tension between Russia and Ukraine and how this effects international relations of big powers is answered.

Main Part

Nuclear deterrence in historical context: Four waves of deterrence

Robert Jervis' study titled "Deterrence theory revisited" published in 1979, in which he discusses nuclear deterrence studies historically as three waves, plays a crucial role in understanding the historical context within the Cold War. First wave, covering the post-war period immediately following the first nuclear weapons experience in World War II was pioneered by Bernard Brodie, Arnold Wolfers, and Jacob Viner. In this period, although the impact was weak, the development in the nuclear field was followed by the scholars rapidly² and nuclear deterrence was conceptually described by Bernard Brodie in beginning this period as "Thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them".³

Second wave, dominantly contributed by RAND Corporation analysts such as Bernard Brodie, Thomas C. Schelling, Thoma M. Snyder and Albert Wohlstetter,⁴ started with the post-war nuclear superiority on the side of the United States being balanced on the United States-Soviet Union axis after the success of the Soviets' atomic bomb and hydrogen bomb tests respectively in 1949, 1957 and launch of Sputnik-1 satellite in 1957.⁵ This period, covering 1950s and late 1960s, early 1970s, was described as "the golden age of American strategic thought" by Colin Gray.⁶

Third wave, covering the late 1960s and early 1970s to the end of Cold War, mainly challenged the assumption of rational actor⁷ and focused on strategies related to the prevail in a nuclear war, rather than a nuclear balance.⁸

Studies focusing on threat perceptions, crises and tensions that diversified and (re)questioned with the end of the Cold War and the September 11 attacks, as Jeffrey W.Knopf emphasizes, has been "designated [as] the fourth wave", in the historical classification of the nuclear deterrence studies. Now it seems that we are in a new phase with the outbreak of Russian-Ukranian war.

Deterrence versus "assurance": A risky exchange of Ukraine

A new debate was sparked soon after the dissolution of Soviet Union: The fate of nuclear arsenal stationed in then-newly independent former Soviet countries. These countries that stood out regarding the weapons in question were Belarus, Kazakhstan and Ukraine. Because although the Soviet nuclear legacy remained largely within the borders of the Russian Federation, the remaining percentage of the structures within the nuclear complex including strategic nuclear weapons to power reactors, nuclear research centers to uranium mining was highly located in these three countries. The latter, Ukraine, as Potter stresses, had a "longest and most convoluted [denuclerization path] of any of the post-Soviet states". It

Ultimately, with the memorandum on security assurances in connection with Ukraine's accession to the "Treaty on the Non-Proliferation of Nuclear Weapons", known as the Budapest Referandum referring to the city

- 1 John J. Mearsheimer, "The case for a Ukrainian nuclear deterrent", Foreign Affairs, 72/1 (Summer 1993), p.57.
- 2 Robert Jervis, "Deterrence Theory Revisited", World Politics, 31/2 (1979), p.289-324.
- 3 Bernard Brodie, "The atomic bomb and American security", Yale Institute of International Studies, Occasional Paper No. 18 (Fall 1945), as cited in Thérèse Delpech, "Nuclear deterrence in the 21st century: Lessons from the Cold War for a new era of strategic piracy", RAND Corporation, (2012), p.25.
- 4 Jervis, "Deterrence Theory Revisited", p.291.
- 5 Hakan Mehmetcik, "21. Yüzyıl için Caydırıcılık: Teori ve Pratikte Neler Değişti? [Deterrence for 21st Century: Changes in Theory and Practice?], Güvenlik Stratejileri, 11/22 (2015), p.45.
- 6 Colin Gray, "The Case for a Theory of Victory", International Security, 4/1 (Summer 1979), p.75.
- 7 Jeffrey W. Knopf, "The fourth wave in deterrence research, Contemporary Security Policy, 31/1 (2010), p.1.
- 8 Cheryl M. Graham, "Deterrence Revalidated: An Investigation of the Practice and Application of Deterrence in the Post-Cold War World" (2010), Ph.D., University of Aberdeen, p.53–54 as cited in Hakan Mehmetcik, "21. Yüzyıl için Caydırıcılık: Teori ve Pratikte Neler Değişti? [Deterrence for 21st Century: Changes in Theory and Practice?], Güvenlik Stratejileri, 11/22 (2015), p.45. 9 Knopf, "The fourth wave in deterrence research", p.1
- 10 William C. Potter, "The Politics of Nuclear Renunciation: The Cases of Belarus, Kazakhstan, and Ukraine", Henry L. Stimson Center, Occasional Paper No. 22 (April 1995), p.1-2.

11 ibid, p.19.

hosted the Budapest Summit of Organization for Security and Cooperation in Europe, signed on 5 December 1994, and the Ukrainian renunciation from the former Soviet nuclear inheritance was concluded simultaneously with Belarus and Kazakhstan.

According to the memorandum, in recognition of Ukraine's relinquishment its existing nuclear weapons and accession to the Treaty on the Non-Proliferation of Nuclear Weapons, the United States, the Russian Federation, and the United Kingdom as signatory states ensured to provide an assurance to Ukraine's security under certain conditions. Signatories reaffirmed five issues regarding Ukraine's security which are respectively: commitment to 1) respect territorial integrity, independency and sovereignty of Ukraine, 2) no threat/use of force or use of weapons against territorial integrity, independency and sovereignty of Ukraine, with an exception of self-defense and any issues regarding the Charter of the United Nations, 3) "refrain from economic coercion" 4) "to seek immediate United Nations Security Council action to provide assistance to Ukraine...if Ukraine should become a victim of an act of aggression or an object of a threat of aggression in which nuclear weapons are used", 5) "not to use nuclear weapons...except in the case of an attack on themselves, their territories or dependent territories, their armed forces, or their allies, by such a state in association or alliance with a nuclear weapon state", 6) "consult in the event a situation arises which raises a question concerning these commitments". 12

From Ukraine's independence to Budapest Memorandum, the question of what path Ukraine would follow regarding the Soviet nuclear legacy had been answered differently by different schools of thought regarding nuclear proliferation. In other words, whether Ukraine should relinquish its existing nuclear arsenal or not was highly a matter of debate between proliferation optimists and pessimists in the international relations literature. Articles titled "The case for a Ukrainian nuclear deterrent" by John J. Mearsheimer and "The case against a Ukrainian nuclear deterrent" by Steven E. Miller in the summer 1993 issue of Foreign Affairs, can be given as a fundamental example of the then-current debate. These two articles, published in the same issue of Foreign Affairs magazine, contained diametrically opposed ideas regarding Ukraine's nuclear future, in which Mearsheimer advocated for "a nuclear Ukraine", while Miller did for non-nuclear Ukraine.

In his article, Steven E.Miller stressed "Ukraine should not become a nuclear power" in the context of the interests of both Ukraine and the West. According to Miller, the peace that operated between the United States and the Soviet Union on the axis of nuclear deterrence during the Cold War would not be guaranteed "in the Russian-Ukrainian context". Despite the argument that the deterrence of nuclear weapons would provide security in the case of Ukraine, Miller put forward the following counter arguments as follows: "the perils of exporpriating nuclear weapons", "the risks of "instant" proliferation", "custodial dangers", "nuclear instability between Russia and Ukraine" and "political instability in Ukraine". In this regard, to Miller's way of thinking, Ukraine's decision to relinquish its Soviet nuclear legacy "enables Kiev to avoid the great costs and risks of nuclear acquisition and leaves it financially better able to develop its conventional capabilities".

In stark contrast to Bill Clinton's remark of the possible role of the Russian Federation as the "only nuclear-armed successor to the Soviet Union" in the stability of Europe on April 1, 1993, Mearsheimer stated "President Clinton is wrong". According to Mearsheimer, who considers the Western world's hasty attitude towards the denuclearization of Ukraine as a "mistake", Ukraine should not have given up on its Soviet nuclear legacy for two main reasons. A nuclear Ukraine was crucial, firstly, because it would eliminate possible threats from Russia "the state [Ukraine] fear most" and facilitate peace between two states, and on the other hand, because it could neither protect itself against a nuclear Russia nor receive a sufficient security commitment from any state. 17

Mearsheimer listed the consequences of a possible war, which he described as a "disaster" between Russia and Ukraine, as follows: 1) possible invasion, in other words "Russian reconquest", of Ukraine, which could threaten European security with its wide scope and severe consequences. 2) "ethnic cleansing and mass murder" followed by heavy civilian and military losses, and as a result, the immigrant crisis 3) the possibility of a new Chernobyl, considering the nuclear reactors in Ukraine 4) expansion of the war as a result of a "reconquest" of Russia that would not only be limited to Ukraine but may also include the former Soviet countries 5) the possibility of use of nuclear weapons.¹⁸

Mearsheimer considered such a war as a high possibility due to reasons such as a security competition where the conditions are ready between parties, Russian and Ukrainian hypernationalism, various political, economic and military disputes and mixed populations. In this context, Mearsheimer claimed that Ukraine could not rely on traditional deterrence elements in such a possible turmoil, NATO expansion which most probably cause it to face a reaction from the Russians would not be a "wise" step, potential security commitments from the West

^{12 &}quot;Memorandum on Security Assurances in Connection with Ukraine's Accession to the Treaty on the Nonproliferation of Nuclear Weapons," (5 December 1994), https://treaties.un.org/Pages/showDetails.aspx?objid=0800000280401fbb, accessed 19 September 2023.

¹³ Steven E.Miller, "The case against a Ukrainian nuclear deterrent", Foreign Affairs, 72/3 (Summer 2023), p.67.

¹⁴ ibid, p.70.

¹⁵ ibid, p.72-74.

¹⁶ ibid, p.80

¹⁷ John J. Mearsheimer, "The case for a Ukrainian nuclear deterrent", p.50-51.

¹⁸ ibid, p.52-53.

or the United States would practically dysfunctional.¹⁹ In this regard, to Mearsheimer's way of thinking, the answer whether Ukraine should remain its existing nuclear arsenal or not would be, yes, "nuclear weapons are the answer".²⁰

The annexation of Crimea by the Russian Federation in 2014, as a situation arised which raises a question concerning abovementioned commitments and pessimistic views on proliferation, brought the Budapest Memorandum to the table first time in two decades. At the meeting held in Paris on March 5, 2014, with the participation of the United States, the United Kingdom and Ukraine, the obligations of the signatories of the Memorandum were renewedly reminded and underlined that Ukraine voluntarily renounced its "nuclear weapons arsenal in exchange for these assurances". While the support of the United States and the United Kingdom for the territorial integrity and sovereignty of Ukraine was reaffirmed, it was stated that Russia did not attend despite the invitation.²¹

Efforts made by United States and the United Kingdom in accordance with the clauses of memorandum, which forces to seek United Nations action against any kind of aggression to Ukraine and to consult arising situation on signatories were of little avail. The draft resolution regarding the results of referendum in Crimea was failed to adopt by Chinese abstention and Russian veto at the United Nations Security Council session, which took place one day before the referendum, on March 14, 2014.²²

When examining the Russian side, regarding its attitude in the context of the Budapest Memorandum is quite blurred and unclear. While Russian interpretation of Memorandum is apart, whether the memorandum in question is binding on the Russian Federation or not is on the other hand. On January 26, 2016, at a conference on Russia's diplomacy performance in 2015, a rhetorical question posed to Sergei Lavrov, Russian Federation's then-and-now minister of foreign affairs, about the degree to which Russia's violation of agreements and obligations may effect the sense of security of its neighbors, with the reference to the annexation of Crimea. "If you're referring to the Budapest memorandum, we have not violated it", Lavrov stated in response to the question, and added that:

"It contains only one obligation – i.e. not to use nuclear weapons against Ukraine. No one has made any threats to use nuclear weapons against Ukraine. A threat came from other opposite direction. Yulia Timoshenko said the "quilted jackets" [pro-Russian forces] in Donbass should be punished with a nuclear bomb." 23

Lavrov's interpretation of the Memorandum consists of an assessment which stuck on single assurance, the fourth clause of the memorandum that emphasizes on an act of aggression involving nuclear weapons. The rest, other security assurances reaffirmed by the signatories, including the Russian Federation, was not taken into account by the Russian side.

Whether the memorandum in question is binding on the Russian Federation or not is the another aspect of the Russian attitude in the context of the Budapest Memorandum. In 2023, Bill Clinton, former president of the United States, argued that Russian president Vladimir Putin had drew attention to the ratification process of the Budapest Memorandum by the State Duma of the Federal Assembly of the Russian Federation and emphasized his disagreement on the Memorandum:

""Putin told me in 2011, three years before he took Crimea, that he did not agree with the agreement I made with Boris Yeltsin, that they would respect Ukraine's territory if they gave up their nuclear weapons...Putin said to me: '... I know Boris agreed to go along with you and John Major and Nato, but he never got it through the Duma [Russian parliament]. We have our extreme nationalists too. I don't agree with it and I do not support it and I'm not bound by it."²⁴

Studies focusing on Russian-Ukranian war from nuclear perspective have different approaches. Edinger (2022) analyzes the war in terms of structural realism and classical realism. He concludes that the war cannot be reduced to geopolitics, domestic power struggles, ideology or personal whims. Instead, it stems from a combination of these and other factors.²⁵

Sinovets et al. (2022) explains the Ukraine's choice to get rid of nuclear weapons from different dimensions. They analyze the disarmament of Ukraine from legal framework, techinal side, political and industriakl groups. They put emphasis on the external actors' influence on the disarmament process.²⁶

- 19 ibid, p.54-56.
- 20 ibid, p.57.
- 21 U.S. Department of State, "U.S./U.K./Ukraine Press Statement on the Budapest Memorandum Meeting" (5 March 2014), https://2009-2017.state.gov/r/pa/prs/ps/2014/03/222949.htm, accessed 19 September 2023.
- 22 U.N News, "UN Security Council action on Crimea referendum blocked" (15 March 2014), https://news.un.org/en/story/2014/03/464002-un-security-council-action-crimea-referendum-blocked, accessed 19 September 2023.
- 23 Permanent Mission of the Russian Federation to the European Union, "Foreign Minister Sergey Lavrov's press conference" (26 January 2016), https://russiaeu.ru/en/news/foreign-minister-sergey-lavrovs-press-conference, accessed 19 September, 2023.
- 24 The Guardian, "We knew in 2011 Putin would attack Ukraine, says Bill Clinton" (5 May 2023), https://www.theguardian.com/world/2023/may/05/we-knew-putin-would-attack-ukraine-back-in-2011-says-bill-clinton, accessed 19 September 2023.
- 25 Harald Edinger, "Offensive ideas: structural realism, classical realism and Putin's war on Ukraine", International Affairs, 98/6 (November 2022), p.1873-1893.
- 26 Polina Sinovets, et al., "Nuclear Disarmament of Ukraine" in: Ukraine's Nuclear History: A Non-Proliferation Perspective, eds. Polina Sinovets, (Springer International Publishing), p.83-173.

Lanoszka (2023) approaches the war from the point of the NATO enlargement. He concludes that European security has benefited from the NATO enlargerment.²⁷

Tannenwald (2023) claims that the deterrence was benefited from Russia and imply that Mearsheimer was right to some extent in 1993. She also adds that NATO stepped back to intervene on Ukraine's behalf because of Russia's nuclear weapons.²⁸

Russian-Ukrainian war: The final straw for Russia?

The Russian-Ukrainian war, which started in February 2022 when Russia recognized the so-called "Donetsk People's Republic (DPR)" and "Luhansk People's Republic" (LPR) as independent states within the territory of Ukraine²⁹ and Vladimir Putin, the president of Russian Federation, subsequently declared a "special military operation" in Russia³⁰ has brought the nuclear issue into world agenda in terms of warring parties' disproportionality in the nuclear context. The war, which has been going on for more than a year and a half between Ukraine, which renounced its nuclear arsenal with the Budapest Memorandum, and Russian Federation, which has nuclear weapons.

With the continuation of Western support for Ukraine and the discussions about Ukraine's NATO membership, Russia draws nuclear disproportionality into the discourse dimension. On July 06, 2023, Dmitry Medvedev, then-president and prime minister, now-deputy chairman of the Security Council of Russia, implicitly pointed out the possibility of Russia resorting to the nuclear option in the Russian-Ukrainian war, referring to the twice but last usage of nuclear weapons by the United States to Hiroshima and Nagasaki during the World War II:

"In general, any war, even a world war, can be ended very quickly. Either if a peace treaty is signed, or if you do what the Americans did in 1945, when they used their nuclear weapons and bombed two Japanese cities Hiroshima and Nagasaki. They (the Japanese army), indeed, then curtailed the military campaign. The price is the life of almost 300,000 civilians" ³¹

Although the Russian Federation has become a party to a number of treaties aimed at limiting nuclear weapons, as a country has not yet signed or ratified the Treaty on the Prohibition of Nuclear Weapons (TPNW), going nuclear in response is an option in terms of Russian discourses. Putin, on September 21, 2022 implictly emphasizes the going over by any means, including nuclear is "not a bluff":

"If the territorial integrity of our country is threatened, we will without a doubt use all available means to protect Russia and our people. This is not a bluff." ³²

Thus, the Russian president announced that tactical nuclear weapons had been delivered to Belarus as of June 2023, stated that these weapons will only be used if Russian territory or state is under threat and as a tool of deterrence against his opponents that seek a defeat on Russians:

"...It is precisely as an element of deterrence so that all those who are thinking about inflicting a strategic defeat on us are not oblivious to this circumstance".³³

Conclusion

Following the end of the Cold War, Ukraine's pursuit of a policy prioritizing security assurance over deterrence resulted in the Soviets renouncing their nuclear legacy, in other words, the Budapest Memorandum. Although this memorandum, in theory, includes a commitment to provide certain guarantees to the signatory countries, the United States, the United Kingdom and Russia, regarding the security of Ukraine, it has been seen both with the annexation of Crimea in 2014 and the Russian-Ukrainian War started in 2022 that in practice it has not contributed to the security of Ukraine. On the other hand, for the Russian Federation, nuclear weapons still continue to be effective in terms of deterrence they offer in terms of rhetoric and practice, with the annexation of Crimea in 2014 and the Russian-Ukrainian War started in 2022. It is not wrong to claim that Mearsheimer was right at his claim in 1993. Nuclear free Ukraine could not prevent the Russian Federation from attacking. Also, the Russian Federation has both nuclear blackmail card and can deter the NATO from intervening directly.

- 27 Alexander Lanoszka, "Thank Goodness for NATO Enlargement" in: Evaluating NATO Enlargement, eds. James Goldgeier and Joshua R. Itzkowitz Shifrinson, (Palgrave Macmillan), 307-339.
- 28 Nina Tannenwald, "The Bomb in the Background", Foreign Affairs, (24 February 2023), https://www.foreignaffairs.com/ukraine/bomb-background-nuclear-weapons, accessed 19 September 2023.
- 29 Aljazeera, "Putin recognises independence of Ukraine breakaway regions" (21 February 2022), https://www.aljazeera.com/news/2022/2/21/russia-to-recognise-ukraine-breakaway-region-kremlin-confirms, accessed 19 September 2023.
- 30 Kremlin, "Address by the President of the Russian Federation" (24 February 2022), http://en.kremlin.ru/events/president/news/67843, accessed 19 September 2023.
- 31 Anadolu Agency, "War can be ended quickly either through peace treaty or nuclear weapons: Top Russian official" (05 July 2023), https://www.aa.com.tr/en/europe/war-can-be-ended-quickly-either-through-peace-treaty-or-nuclear-weapons-top-russian-official/2937713, accessed 19 September 2023.
- 32 BBC News, "Ukraine war: Could Russia use tactical nuclear weapons?" (25 September 2022), https://www.bbc.com/news/world-60664169, accessed 19 September 2023.
- 33 Andrew Osborn, "Putin says Russia put nuclear bombs in Belarus as warning to West", Reuters, (17 June 2023), https://www.reuters.com/world/europe/putin-says-russia-positions-nuclear-bombs-belarus-warning-west-2023-06-16/, accessed 19 September 2023.

References

- "Memorandum on Security Assurances in Connection with Ukraine's Accession to the Treaty on the Nonproliferation of Nuclear Weapons," (5 December 1994), https://treaties.un.org/Pages/showDetails.aspx?objid=0800000280401fbb, accessed 19 September 2023.
- Aljazeera. "Putin recognises independence of Ukraine breakaway regions" (21 February 2022). https://www.aljazeera.com/news/2022/2/21/russia-to-recognise-ukraine-breakaway-region-kremlin-confirms, accessed 19 September 2023.
- Anadolu Agency. "War can be ended quickly either through peace treaty or nuclear weapons: Top Russian official" (05 July 2023). https://www.aa.com.tr/en/europe/war-can-be-ended-quickly-either-through-peace-treaty-or-nuclear-weapons-top-russian-official/2937713, accessed 19 September 2023.
- BBC News. "Ukraine war: Could Russia use tactical nuclear weapons?" (25 September 2022). https://www.bbc.com/news/world-60664169, accessed 19 September 2023.
- Delpech, Thérèse. "Nuclear deterrence in the 21st century: Lessons from the Cold War for a new era of strategic piracy". RAND Corporation. (2012)
- Edinger, Harald. "Offensive ideas: structural realism, classical realism and Putin's war on Ukraine". International Affairs. 98/6 (November 2022): p.1873-1893.
- Gray, Colin. "The Case for a Theory of Victory". International Security. 4/1 (Summer 1979): 54-87.
- Jervis, Robert. "Deterrence Theory Revisited". World Politics. 31/2 (1979): 289-324...
- Knopf, Jeffrey W. "The fourth wave in deterrence research. Contemporary Security Policy. 31/1 (2010): 1-33.
- Kremlin, "Address by the President of the Russian Federation" (24 February 2022), http://en.kremlin.ru/events/president/news/67843, accessed 19 September 2023.
- Lanoszka, Alexander, "Thank Goodness for NATO Enlargement" In: Evaluating NATO Enlargement, edited by James Goldgeier and Joshua R. Itzkowitz Shifrinson, 307-339. Palgrave Macmillan, 2020.
- Mearsheimer, John J. "The case for a Ukrainian nuclear deterrent". Foreign Affairs. 72/1 (Summer 1993): 50-66. Mehmetcik, Hakan. "21. Yüzyıl için Caydırıcılık: Teori ve Pratikte Neler Değişti? [Deterrence for 21st Century: Changes in Theory and Practice?]. Güvenlik Stratejileri. 11/22 (2015): 31-60.
- Miller, Steven E. "The case against a Ukrainian nuclear deterrent". Foreign Affairs. 72/3 (Summer 2023): p.67. Osborn, Andrew. "Putin says Russia put nuclear bombs in Belarus as warning to West". Reuters. (17 June
- 2023). https://www.reuters.com/world/europe/putin-says-russia-positions-nuclear-bombs-belarus-warning-west-2023-06-16/, accessed 19 September 2023.
- Permanent Mission of the Russian Federation to the European Union. "Foreign Minister Sergey Lavrov's press conference" (26 January 2016), https://russiaeu.ru/en/news/foreign-minister-sergey-lavrovs-press-conference, accessed 19 September, 2023.
- Potter, William C. "The Politics of Nuclear Renunciation: The Cases of Belarus, Kazakhstan, and Ukraine". Henry L. Stimson Center. Occasional Paper No. 22. (April 1995)
- Sinovets, Polina, Oleksii Izhak, Sergiy Galaka, Iryna Maksymenko and Hryhorii Perepelytsa, "Nuclear Disarmament of Ukraine" In: Ukraine's Nuclear History: A Non-Proliferation Perspective, edited by Polina Sinovets, 83-173. Springer International Publishing), 2022.
- Tannenwald, Nina. "The Bomb in the Background", Foreign Affairs, (24 February 2023). https://www.foreignaffairs.com/ukraine/bomb-background-nuclear-weapons, accessed 19 September 2023.
- The Guardian. "We knew in 2011 Putin would attack Ukraine, says Bill Clinton" (5 May 2023). https://www.theguardian.com/world/2023/may/05/we-knew-putin-would-attack-ukraine-back-in-2011-says-bill-clinton, accessed 19 September 2023.
- U.N. News. "UN Security Council action on Crimea referendum blocked" (15 March 2014). https://news.un.org/en/story/2014/03/464002-un-security-council-action-crimea-referendum-blocked, accessed 19 September 2023.
- U.S. Department of State. "U.S./U.K./Ukraine Press Statement on the Budapest Memorandum Meeting" (5 March 2014). https://2009-2017.state.gov/r/pa/prs/ps/2014/03/222949.htm, accessed 19 September 2023.

Nuclear Proliferation Concerns in East Asia: Beyond North Korea

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Abstract

The North Korea nuclear challenge has gradually deteriorated in the past two decades and formed a significant threat to Northeast Asian regional security. Despite the United States' counter proliferation efforts and opposition from most regional states, North Korea managed to successfully finalize its nuclear program and join the nuclear club. Nuclearization of such an unpredictable international actor elevates security risks and negatively affects regional stability. Moreover, it creates the risk of spillover effect that will potentially open the Pandora box of nuclear arms race in the region. Japan and South Korea have long enjoyed U.S. provided security guarantees, which have served as an effective constraint in terms of their non-proliferation. The United States has provided extended nuclear deterrence and effective assurances for its Northeast Asian allies for decades. However, North Korea's nuclearization affects strategic calculus of Japan and South Korea and puts potency of the long existing status-quo under question.

This paper addresses emerging security challenges of the Northeast Asian region and focuses on analyzing the responses from Japan and South Korea. The paper suggests that mild policies by Tokyo and Seoul, even considered counterintuitive by many, are in line with the key tenets of defensive neorealism, since combination of U.S. nuclear assurances and status of nuclear threshold states equips them with an effective deterrent. These two factors work well in line with one another, since any possible deficiencies on the U.S. assurances side can easily be compensated with enhanced emphasis on acquiring independent deterrent, as both Japan and South Korea already possess latent nuclear capacity. This formula grants Northeast Asian actors with confidence to refrain themselves from directly addressing North Korean threat by developing their own nuclear weapons. Furthermore, they enjoy the flexibility of pursuing more active defensive measures, including considering independent deterrent in case of further escalation from Pyongyang.

Keywords:

Nuclear proliferation, Extended deterrence, Assurance, Nuclear umbrella, Nuclear threat, Tacit deterrent, Nuclear threshold states.

Introduction

North Korea continues to advance its nuclear potential and missile capabilities despite strong international opposition and counter proliferation measures by the United States. Pyongyang has performed six nuclear tests in almost ten years span (2006, 2009, 2013, 2016, 2016, 2017). Starting from testing its first less than 1-kiloton nuclear bomb in 2006, North Korea advanced to demonstrating more than 100-kiloton hydrogen bomb (thermonuclear) explosion in 2017. This meant to be a bold statement internationally not only because the bomb was around six times stronger than the two used by the United States in Hiroshima and Nagasaki back in the 1940s, but also because it was a second generation nuclear weapon design (thermonuclear) that makes it easier to fit it in the warhead of a missile.

At the same time, North Korea continues to develop the means of delivering its conventional and nuclear payloads. According to Congressional Research Service (CRS) report, in 2022 alone, Pyongyang conducted more than 60 ballistic missile test launches.³ The same source suggests that at the moment North Korea possesses medium- and long-range ballistic missiles (KN-15, KN-23, KN-25, Hwasong-14, Hwasong-15, Hwasong-17), most of which can easily carry nuclear warheads to the entire territories of South Korea and Japan, and even target continental United States. Pyongyang clearly demonstrates its determination to develop missile technologies towards enhancing range, precision, mobility and potency, thus increasing its chances to overcome key air defense systems stationed in Northeast Asia. Hence, North Korea has already been established as a capable nuclear power, with relatively limited but at the same time increasing nuclear potential.

North Korea's nuclear aspirations have met with key premises of realist theory, stating, it is only natural for any country to suspect the worst intentions of other actors and strive to aggregate power.⁴ It has been relatively harder though to provide cogent realist explanation for the responses of regional states, namely Japan and South Korea. Even before proliferation of the Democratic People's Republic of Korea (DPRK), Waltz raised a question of whether Japan would remain immune to nuclear blackmail on the face of rising neighbors, nevertheless held back from providing a potent explanation for Tokyo's mild policies from the balance of power theory perspective.5 Later on, Midford tried to explain Japan's pacifist approach from the balance of threat theory perspective, by introducing a reassurance concept as a factor that helps Tokyo to calm other Asian powers via refraining its ambitions and not invoking balancing behavior from regional states.⁶ The argument seems to work because of collective memory of Asian states on Japanese atrocities before and during the WWII; however, loses its credibility once applied to South Korea, which does not have the same reputation among its neighbors. Things have gone far harder after North Korea's nuclearization. Already in 2008, the United States recognized the potential magnitude of the development and considered possible domino effects in terms of nuclear proliferation within Northeast Asian region.⁷ Even strong supporters of liberal school of thought and the power of social, political and economic interdependency in international relations, have had no option but to admit that the security situation has rapidly changed in the Northeast Asia in recent years, and to consider the need for additional layers of security guarantees for regional states.8 According to realism tenets, Japan and South Korea should have either bandwagon, or balance against rising nuclear power. Bandwagoning with Pyongyang has not seem to be an option at this stage; however, balancing behavior has not actively been demonstrated either. Despite bold predictions from the realist school of thought, we can clearly see that none of the Northeast Asian states has pushed for developing nuclear weapons even after almost two decades since the first nuclear test by the DPRK. Could it be that realism cannot explain the course of major Northeast Asian actors when it comes to global politics and contemporary security matters? This would clearly question applicability of one of the most accepted international relations theory.

This paper focuses on analyzing the responses of Japan and South Korea to the proliferation of the DPRK and aims to identify the factors that have restrained them from going nuclear so far. The paper suggests that the U.S. provided extended deterrence and assurances, in combination with Tokyo and Seoul's capacity to develop nuclear weapons in a short period, already grants them effective deterrent without the need to actually possess the nukes and invoke the security dilemma in the region, thus perfectly fitting their behavior within the boundaries of defensive neorealism. The logic of their actions follow Waltz's analysis about the nature of state behavior, suggesting that states do not focus on maximizing power per se, but rather take into account retaliation risks from other actors and cultivate more moderate posture to maintain their position within the system and safeguard their

- 1 "Detecting Nuclear Tests," The Comprehensive Nuclear-Test-Ban Treaty Organization, accessed November 8, 2023, https://www.ctbto.org/our-work/detecting-nuclear-tests
- 2 "North Korea: What missiles does it have?" BBC, last modified 5 September, 2023, https://www.bbc.com/news/world-asia-41174689
- 3 CRS Report for Congress, North Korea's Nuclear Weapons and Missile Programs, (April 14, 2023), 1-3.
- 4 Michael A. Popoola, Deborah E. Oluwarada and Abiodun A. Adesegun, "North Korea Nuclear Proliferation in the Context of the Realist Theory: A Review," European Journal of Social Sciences 58, no.1 (May 2019): 75-77.
- 5 Kenneth Waltz, "Structural Realism after the Cold War," International Security 25, no.1 (summer, 2000): 32-33.
- 6 Paul Midford, "The Logic of Reassurance and Japan's Grand Strategy," Security Studies 11, no.3 (2002): 1-3.
- 7 CRS Report for Congress, Japan's Nuclear Future: Policy Debate, Prospects, and U.S. Interests (May 9, 2008), 1-
- 8 E. James Goodby and Peter Hayes, "Comprehensive Security and Multilateral Cooperation in Northeast Asia Overcoming North Korea's Nuclear Breakout," Korea Observer 47, no.4 (Winter 2016): 903-905.

interests. Therefore, not only the paper helps to fill the existing gap in the academic discussion about Japan and South Korea's approach towards proliferation from a realist perspective, but it also serves as a practical framework to assess the rationale behind their posture and determine key factors that affect their strategic calculus on preserving non-nuclear status in the foreseeable future.

Main Part

Scenarios of nuclear apocalypse and global annihilation were truly appealing during the Cold War period, when the ideological rivalry and ongoing nuclear arms almost induced the two superpowers to push the red button. The second strike capability and the concept of mutually assured destruction (MAD) was probably the only security guarantor that helped decrease the tensions and maintain superpower relations below the nuclear holocaust threshold. Nowadays, the probability of global annihilation has significantly reduced; however, the growing number of relatively unexperienced nuclear decision-making actors creates increasing risk of more limited nuclear war. North Korea's inclusion in the nuclear club only intensifies such dangers. Especially, taking into account that there is already little chances for hopes of Nuclear Free Zone (NWFZ) in Northeast Asia, since roll back of North Korean nuclear program is not a feasible option anytime soon.

Pyongyang has taken advantage of its extreme militarization and willingness to engage in fight if needed, thereby almost entirely removed the possibility of military action by the collective West during the developing phase of its nuclear program. Therefore, the United States primarily relied on economic and political sanctions, which affected North Korean economy, but clearly were not enough to alter their decision to follow the nuclear path. Due to its uniquely self-reliant political system (Juche) and extreme isolation from the outside world, North Korea managed to develop its nuclear program even under strong international sanctions and economic pressure.

Common sense would dictate Japan and South Korea to realize the growing threat and address it appropriately. As discussed in the introduction, key premises of realism in the international relations suggest that these powers should pursue a balancing path against North Korea. Yet, none of them have developed nuclear warheads so far. Why is that the case? What are the factors that create a sense of security for Tokyo and Seoul? Turns out, both countries practice a form of external balancing while enjoying security guarantees by the United States. Moreover, they display characteristics of moderate internal balancing behavior via possessing near-nuclear capabilities and being on the verge of a nuclear threshold.

The United States has long provided security guarantees for its Asian allies: Japan and South Korea. U.S.-Japanese Security Treaty dates back to 1951 (updates in 1960), while U.S.-South Korean Mutual Defense Treaty was signed in 1953, right after the Korean War. After China developed its nuclear weapons in 1960s, Washington put efforts to counter possible nuclear proliferation in the region and provided nuclear-extended deterrent for Japan and South Korea to refrain their nuclear ambitions. Could these extended deterrence work in contemporary era against nuclear threats from North Korea? If so, Washington should demonstrate that not only it has credible options to deter North Korean nuclear threat, but also it is willing to answer such aggression against its allies. As Thomas Schelling puts it, deterrence is about intentions, not merely only about capabilities, inasmuch as states have to influence enemy intentions and communicate their own inclination to make deterrence work. Accordingly, the United States should offer strong assurances to Japan and South Korea on its extended deterrence. Setting up such assurances turns out to be relatively hard, since the process requires not only using its deterrence capabilities to prevent enemy aggression, but also demonstration of willingness to engage in nuclear escalation even if it does not directly target U.S. soil. Nevertheless, such assurances are critical element indeed in satisfying the security needs of allied nations.

Following North Korea's nuclearization, the United States has made some significant efforts to assure Japan and South Korea. Washington underlined its decision to deploy credible military force in the region in order to ensure the regional security and promised to use its nuclear arsenal to guarantee security of its allies in the region in its strategic documents. He United States also emphasized the importance of modernizing its ICBMs, submarine-launched BMs and nuclear-capable bombers, which are used to forward deploy nuclear arsenal in any region. In addition, the United States established formal negotiation platforms with its Asian allies: U.S.-Japan Extended Deterrence Dialogue (EDD) and U.S.-South Korea Extended Deterrence Policy Committee (EDPC) later renamed

⁹ Kenneth Waltz, Theory of International Politics (Reading, Massachusetts: Addison-Wesley Publishing Company, 1979), 126-128

¹⁰ David Santoro and John K. Warden, "Assuring Japan and South Korea in the Second Nuclear Age," The Washington Quarterly 38, no.1, (2015): 148.

¹¹ Exequiel Lacovsky, "A Nuclear Weapon Free Zone in Northeast Asia: Prospects and Insights from Other Regions," Journal for Peace and Nuclear Disarmament 6, no.1 (2023): 148-153.

¹² Thomas C. Schelling, Arms and Influence (New Haven and London: Yale University Press, 2020), 35-36.

¹³ David Santoro and John K. Warden, "Assuring Japan and South Korea in the Second Nuclear Age," The Washington Quarterly 38, no.1, (2015): 148-149.

¹⁴ Department of Defense, Nuclear Posture Review Report (Washington, DC: Department of Defense, April 2010); Office of the Press Secretary, The White House, "Fact Sheet: Nuclear Weapons Employment Strategy of the United States," June 19, 2013.

to Deterrence Strategy Committee (DSC).¹⁵ These platforms have increased assurance by providing institutionalized communication channels between the United States and its allies in terms of nuclear issues and policies. Furthermore, The United States moved beyond modernization of nuclear arsenal or working frameworks, as assurances require manifestation of the interest. Therefore, the Obama administration suggested to move the U.S. strategic focus towards East Asia declaring a Pivot to Asia, hence signaling it would not simply leave the region in case of possible escalation.

Despite such an impressive effort, providing fully functioning assurances is almost impossible, since there are critical questions from both theoretical and practical points of view. From a theoretical side, some believe that the effectiveness of extended deterrence has been exaggerated and there are few (if any) historical examples for proving otherwise, since testing the hypothesis and establishing causal relationships is challenging. This is a critical approach, demonstrating that it is almost impossible to prove anything in international relations when it comes to determining what prevented the action of a certain state. Others question the idea of the U.S. nuclear umbrella itself, suggesting that the United States does not have any special commitment for providing nuclear defense for its allies, neither does it have special nuclear weapons specifically designed or stationed for extended deterrence. Weird as it may sound, the United States rarely develops special equipment in addition to its already existing nuclear arsenal for the extended deterrence posture alone; however, this just reiterates the importance of political decision over the capabilities, rather than neglecting the idea of extended deterrence. For that reason, it is paramount for Japan and South Korea to evaluate political situation in Washington and assess the strategic willingness to provide a truly functioning nuclear umbrella.

From a practical side, some pay attention to downsized U.S. nuclear arsenal and nuclear posture worldwide, specifically emphasizing the importance of not having nuclear forward deployments in Northeast Asia. This logic strengthens considering continued increase of North Korean nuclear arsenal and long-range capabilities. Nevertheless, this phenomenon is obviously a result of the Soviet collapse and dismantling of a global annihilation threat, thus should not be taken as a demonstration of erosion of the U.S. nuclear umbrella. More appealing is the fact that U.S. nuclear deterrence is not solely based on the nuclear retaliation, but also encompasses conventional action and other means (diplomatic, economic), thus questioning viability of MAD in the context of external deterrence.

Indeed, nuclear assurances are heavily affected by the perceptions on the credibility of security guarantees and the fear of abandonment. If the security guarantees are not constantly provided for a long period in a stable manner, allies might start thinking about elaborating an independent deterrent. Washington has long focused on ensuring nonproliferation and providing external deterrence for its allies. The Trump administration changed that approach by decreasing the U.S. commitment to allies' security and increasing assertiveness towards nuclear adversaries. On the one hand, the Trump administration initiated talks with Japan and South Korea about increasing their burdens for their defense; while on the other hand, he practiced aggressive rhetoric against North Korea, especially in the nuclear domain. Developments such as leaving the Trans Pacific Partnership (TPP) agreement by the United States because of its own economic agenda also negatively affected allies' calculus. Obviously, TPP has just been an economic alliance, but it was also an important pillar of the Asian Pivot, thus abandoning the agreement sent a negative signal to the allies about the stability of the U.S. views towards the value of regional partnerships. These actions from the United States might have well signaled Japan and South Korea that developing their own nuclear deterrent might have been more assuring option.

Pyongyang is clearly determined to enhance its capacity to successfully target not only South Korea and Japan, but also mainland United States, thus acquiring the second strike capability. This would definitely change the strategic calculus of the United States. North Korea's aggressive actions against the regional countries might become slightly less important to the U.S. if it knew there would be a chance for North Korea to further escalate in case of U.S. involvement in the conflict. At the end of the day, decisions about using the nukes against North Korea in case of its potential nuclear aggression against Japan or South Korea will be made by the U.S. officials and some of them might not risk putting Los Angeles under direct threat of North Korean missiles, to save Tokyo and Seoul. These arguments clearly demonstrate that it is hard for the allies to be absolutely certain that the United States would not only act in case of an adversary attack, but it would also act decisively. This would of course deter any potential aggravation in the region; however, Japan and South Korea have to take into account

15 Michito Tsuruoka, "The NATO vs East Asian Models of Extended Nuclear Deterrence? Seeking a Synergy beyond Dichotomy," The ASAN Forum, June 30, 2016, https://theasanforum.org/the-nato-vs-east-asian-models-of-extended-nuclear-deterrence-seeking-a-synergy-beyond-dichotomy/

16 Andrew O'Neil, "Extended Nuclear Deterrence in East Asia: Redundant or Resurgent?" International Affairs 87, no.6 (2011): 1446-1447.

17 Jeffrey Lewis, "Rethinking Extended Deterrence in Northeast Asia," NAPSNet Policy Forum 10-054, November 03, 2010, https://nautilus.org/napsnet/napsnet-policy-forum/rethinking-extended-deterrence/?view=pdf

18 Richard Samuels and James Schoff, "Japan's Nuclear Hedge: Beyond 'Allergy' and Breakout," in Strategic Asia 2013-2014: Asia in the Second Nuclear Age, ed. Ashley J. Tellis, Abraham M. Denmark, Travis Tanner (Washington DC: National Bureau of Asian Research, October 2013), 235-236.

19 Alexandre Debs and Nuno P.Monteiro, "Cascading Chaos in Nuclear Northeast Asia," The Washington Quarterly 41, no.1 (2018): 97-98.

the fact that the United States is a global actor with global interests, where Northeast Asia is just another region. Escalation to nuclear conflict poses a significant cost that the U.S. might not be willing to pay for the security of its allies alone.

As a result of the limitations of extended nuclear deterrence, Japan and South Korea are destined to emphasize a moderate internal balancing option, to compensate for the possible deficiencies of external assurances. There are historical examples that suggest that Northeast Asian states have been willing to provide their own security before, whenever the United States failed to provide effective assurances. One such example would be the development of Guam Doctrine by Nixon administration in late 1960s for significantly reducing the U.S. military posture in East Asia. Such shift in U.S. policies pushed South Korea to announce for its aspirations on creating its own nuclear program to provide independent security guarantees. Consequently, South Korea was active in terms of acquiring nuclear weapons in 1970s; until the aspirations were set aside because of U.S. counter proliferation pressure and reassurance to Seoul against the nuclear threats. Unlike South Korea, Japan has not tried to develop nuclear weapons in the past. It has enjoyed the security guarantees by the United States under the Yoshida Doctrine, while focusing on economic development - a rather unique posture - result of WWII atrocities and the following peace constitution. These unique limitations, in combination with the Hiroshima and Nagasaki bombing experience, developed a "nuclear allergy" in Japanese society, so that even though Prime Minister Eisaku Sato himself supported nuclearization option, he had to declare Three Non-Nuclear Principles in the 1960s, suggesting Japan would never produce, possess or permit the introduction of nuclear weapons.²⁰ However, despite the anti-militaristic attitudes in the Japanese society and counter proliferation pressure from the U.S., Tokyo has still conducted relevant research and considered costs and benefits of developing nuclear weapons both during and after the Cold War.²¹ This suggests that Japan has always seen the possibility and weighed the opportunity of developing an independent deterrent.

Despite never officially declaring its interest in developing nuclear weapons, Japan already possesses a nuclear energy program and space program, giving it capability to not only develop a nuclear bomb in a relatively short period of time, but to also acquire missiles for carrying the nuclear warheads on the long distances. Experts suggest that Japan would be able to develop nuclear weapons in six months, while some even argue that Japan already has a "bomb in the basement," emphasizing its developed stockpiles and technical ability. According to open data, Tokyo could create more than 6,000 nuclear warheads with already existing materials if only it decided to do so. Therefore, Japan earns the status of nuclear threshold state, as it possess the knowhow, as well as required infrastructure and materials to produce nuclear weapons in a relatively short time. Consequently, as a former Japanese Defense Minister Shigeru Ishiba put it, Japan already practices tacit nuclear deterrence even without actually possessing nuclear weapons, just by having the potential to produce a nuclear warhead in a short time. Importantly, Japan is not alone in such a stance: experts suggest that with the current economic and technological capabilities, South Korea has the ability to acquire nuclear weapons in around six months if it demonstrates enough political will to do so. Therefore, both Japan and South Korea should be considered as nuclear threshold states, practicing tacit nuclear deterrence without actually having nukes at the moment.

If Japan and South Korea possess latent nuclear capacity for decades, why have not they gone nuclear yet? States usually develop nuclear weapons when they are under direct threat and their calculus suggests that nuclear capability will mitigate the threat; however, there are cases, where it is sufficient for states to acquire the nuclear full cycle to increase their security to a preferable margin without ever going further.²⁷ Japan and South Korea have enjoyed U.S. provided external deterrence, thus have not experienced a direct imminent threat. On the other hand, the potential to manufacture nuclear warheads if needed has provided them with confidence, thus improving their perceptions about the existing security environment.

There are two more straightforward explanations two the abovementioned question: the U.S. non-proliferation efforts and assessment of regional responses from neighboring states. Both are worth discussing. The United

²⁰ Fintan Hoey, "Japan and Extended Nuclear Deterrence: Security and Non-Proliferation," Journal of Strategic Studies 39, no.4 (2016): 491-493.

²¹ Jefrey Lewis, "How Long For Japan to Build a Deterrent?" Arms Control Wonk, December 28, 2006, https://www.armscontrolwonk.com/archive/201339/japans-nuclear-status/

²² Robert Windrem, "Japan Has Nuclear 'Bomb in the Basement,' and China Isn't Happy," NBC News, March 11, 2014, https://www.nbcnews.com/storyline/fukushima-anniversary/japan-has-nuclear-bomb-basement-china-isnt-happy-n48976

 $^{23\ \} Patrick\ Winn, "Japan\ has\ Plutonium,\ Rockets\ and\ Rivals.\ Will\ it\ Ever\ Build\ a\ Nuke?"\ PRI,\ March\ 14,\ 2019,\ https://interactive.pri.org/2019/03/japan-nuclear/index.html$

²⁴ Maria Rost Rublee, "The Nuclear Threshold States: Challenges and Opportunities Posed by Brazil and Japan," The Nonproliferation Review 17, no.1 (2010): 49-70.

²⁵ Chester Dawson, "In Japan, Provocative Case for Staying Nuclear," The Wall Street Journal, October 28, 2011, https://www.wsj.com/articles/SB10001424052970203658804576638392537430156

²⁶ David E. Sanger, Choe Sang-Hun and Motoko Rich, "North Korea Rouses Neighbors to Reconsider Nuclear Weapons," New York Times, October 28, 2017, https://www.nytimes.com/2017/10/28/world/asia/north-korea-nuclear-weapons-japan-south-korea.html

²⁷ Alexandre Debs and Nuno P.Monteiro, "Cascading Chaos in Nuclear Northeast Asia," The Washington Quarterly 41, no.1 (2018): 99-100.

States has put strong emphasis on counter proliferation efforts for a long time and has applied both extended assurances as well as political pressure over its Asian allies to prevent regional proliferation. Consequently, it has been rational of Japan and South Korea not to risk abandonment from the United States even after China's nuclearization, since states with weak conventional capabilities (compared to their potential adversaries) are keener to follow counter proliferation pressure from their ally, because they will fear not to alienate and lose the ally support as a result of their actions.²⁸ On the other hand, if states are stronger conventionally than their adversaries are (which is roughly a case with North Korean nuclearization), allies have relatively less leverage and are keen to provide nuclear assurances rather than using political pressure. In contemporary situation though, China still has to be considered as an actor, making Japan and South Korea more vulnerable in the face of U.S. counter-proliferation pressure.

From the defensive neorealism perspective, it is also rational for Japan and South Korea to assess the possible turmoil in the region if they were to declare their nuclear aspirations. Most probably, some serious provocations are to be witnessed from North Korea during the development phase. Such a decision would also trigger China and might invoke a security dilemma in the region in the form of a new arms race. China might well use increased threat of military action, especially in case of Japanese nuclearization. Moreover, China might change its recently worsened relations with North Korea, which was significantly deteriorated with DPRK as a result of its proliferation policies.²⁹ Undeniably, these factors will become of less importance if Tokyo and Seoul decide that U.S. provided assurances are not effective anymore, since their tacit deterrence works best in combination with extended deterrence guarantees. Accordingly, if the U.S. assurances decline, or North Korean nuclear coercion intensifies, both Japan and South Korea would promote an independent deterrent. Both have recently demonstrated their willingness to pursue such policies. Japan has declared to initiate dramatic transformation of its approach to national security policy and has recently released three strategic documents: the National Security Strategy (NSS), the National Defense Strategy (NDS) and Defense Buildup Program, underscoring that it is planning to overcome the civil-military divide in Japanese society and push for increasing defense budget to boost counterstrike capabilities.³⁰ While South Korea has got even further by directly bringing up the discussion on the highest level on acquiring nuclear weapons if North Korean threat increases.³¹

The question Japan and South Korea need to answer is whether their existing tacit deterrence is enough to counter possible nuclear coercion from the DPRK. Pyongyang is known for its aggressive rhetoric and coercive policies, thus suspicions over the effectiveness of latent nuclear capability against such a belligerent actor is fully legitimate. Nevertheless, we must acknowledge that nuclear weapons are primarily defensive in nature, since they are almost exclusively used to practice deterrence, rather than offensive action. North Korea has often employed its military potential to intimidate and coerce its neighbors with a threat of military action; however, it is still less likely that the DPRK uses nuclear warheads against its neighbors. Even Japanese academic circles acknowledge that North Korea's strategy is defensive in nature and serves more as an existential deterrence vis-à-vis the United States.³² According to RAND analysis, North Korea is perfectly capable of a rational calculus on the national level strategic issues and regarding their own survival.³³ The fact that they have never even tried to engage in a second offensive campaign against South Korea demonstrates Pyongyang's pragmatism and their emphasis on regime survival. Therefore, combination of US extended assurances and status of nuclear threshold states, might truly be sufficient for both Japan and South Korea to overcome any possible North Korean nuclear coercion in the near future.

Conclusion

North Korea has successfully realized its nuclear aspirations even under strong international pressure and counter proliferation efforts by the United States. Acquiring nuclear weapons by a rogue state that has often practiced military escalation blackmail against its neighbors has substantially worsened the security environment in the region. The rising threat has clearly been evident since the second half of the 2000s, thus creating an atmosphere for elaborating balancing behavior from regional states. Yet, neither Japan nor South Korea have acquired

²⁸ Alexandre Debs and Nuno P.Monteiro, "Cascading Chaos in Nuclear Northeast Asia," The Washington Quarterly 41, no.1 (2018): 100-101.

²⁹ Ren Xiao, "Towards a Normal State-to-State Relationship? China and the DPRK in Changing Northeast Asia," North Korean Review 11, no.2 (Fall, 2015): 64-69.

³⁰ Yuka Koshino, "Japan's Transformational National-Security Documents," IISS, December 21, 2022, https://www.iiss.org/online-analysis/online-analysis//2022/12/japans-transformational-national-security-documents

³¹ Dasl Yoon, "South Korean President Says Country Could Develop Nuclear Weapons," The Wall Street Journal, January 12, 2023, https://www.wsj.com/articles/south-korean-president-says-country-could-develop-nuclear-weapons-11673544196

³² Hirofumi Tosaki, "The North Korean Nuclear Issue and Japan's Deterrence Posture," The Japan Institute of International Affairs Report on the Korean Peninsula (March, 2016), 4-5, https://www2.jiia.or.jp/en/pdf/digital_library/world/170314_tosaki. pdf

³³ David A. Shlapak, "How Not to Dismantle an Atomic Bomb," Rand Corporation, November, 2021, https://www.rand.org/content/dam/rand/pubs/perspectives/PEA1400/PEA1495-1/RAND_PEA1495-1.pdf

nuclear weapons yet, challenging scholars and decision makers from a realist school of thought to provide a reasonable explanation.

The paper analyzed this phenomenon, perceived by many as counterintuitive, and suggested that Japanese and South Korean behavior falls well under the key premises of defensive neorealism. The U.S. provided nuclear assurances, in combination with being nuclear threshold states, provide Tokyo and Seoul with effective deterrent without even possessing nuclear weapons. This in turn lets them avoid deterioration of relations with neighboring states that would otherwise be inevitable. Japan and South Korea have long enjoyed security guarantees by the United States and have received U.S. extended deterrence from around 1960s, however this alone would probably not be enough to satisfy their security needs. What they have also accomplished is developing a nuclear capacity up to the point to possess latent nuclear deterrent, so that they can materialize it in a short time in case of increasing threats. The combination of these two factors have secured Japan and South Korean an effective nuclear deterrent and served them well for several decades. This formula turns out to be functional even in the face of North Korea's proliferation.

Nevertheless, the research demonstrates that Japan and South Korean nuclear stance is by no means constant, and can easily be modified if needed so. This is precisely the idea behind possessing these two components to balance any possible deficiencies in terms of each. In case the situation changed in Washington and U.S. assurances decline in the future, or even if North Korean threat escalates, Tokyo and Seoul preserve the option of materialize independent nuclear deterrent in a short time.

References

- BBC. "North Korea: What missiles does it have?". Last modified 5 September, 2023. https://www.bbc.com/news/world-asia-41174689
- CRS Report for Congress, Japan's Nuclear Future: Policy Debate, Prospects, and U.S. Interests, May 9, 2008.
- CRS Report for Congress, North Korea's Nuclear Weapons and Missile Programs, April 14, 2023.
- Dawson, Chester. "In Japan, Provocative Case for Staying Nuclear." The Wall Street Journal. October 28, 2011. https://www.wsj.com/articles/SB10001424052970203658804576638392537430156
- Debs, Alexandre and Nuno P.Monteiro. "Cascading Chaos in Nuclear Northeast Asia." The Washington Quarterly 41, no.1 2018, p. 97-113.
- Department of Defense, Nuclear Posture Review Report (Washington, DC: Department of Defense, April 2010).
- Goodby, James E. and Peter Hayes, "Comprehensive Security and Multilateral Cooperation in Northeast Asia Overcoming North Korea's Nuclear Breakout," Korea Observer 47, no.4, Winter 2016, p. 903-938.
- Hoey, Fintan. "Japan and Extended Nuclear Deterrence: Security and Non-Proliferation." Journal of Strategic Studies 39, no.4, 2016, p. 484-501.
- Koshino, Yuka. "Japan's Transformational National-Security Documents." IISS. December 21, 2022. https://www.iiss.org/online-analysis/online-analysis/2022/12/japans-transformational-national-security-documents
- Lacovsky, Exequiel. "A Nuclear Weapon Free Zone in Northeast Asia: Prospects and Insights from Other Regions." Journal for Peace and Nuclear Disarmament 6, no.1, 2023, p. 148-164.
- Lewis, Jefrey. "How Long For Japan to Build a Deterrent?" Arms Control Wonk. December 28, 2006. https://www.armscontrolwonk.com/archive/201339/japans-nuclear-status/
- Lewis, Jeffrey. "Rethinking Extended Deterrence in Northeast Asia." NAPSNet Policy Forum 10-054. November 03, 2010. https://nautilus.org/napsnet/policy-forum/rethinking-extended-deterrence/?view=pdf
- Midford, Paul. "The Logic of Reassurance and Japan's Grand Strategy." Security Studies 11, no.3, 2002, p. 1-43.
- Office of the Press Secretary, The White House, "Fact Sheet: Nuclear Weapons Employment Strategy of the United States," June 19, 2013.
- O'Neil, Andrew. "Extended Nuclear Deterrence in East Asia: Redundant or Resurgent?" International Affairs 87, no.6, 2011, p. 1439-1457.
- Popoola, Michael A., Deborah E. Oluwarada and Abiodun A. Adesegun. "North Korea Nuclear Proliferation in the Context of the Realist Theory: A Review." European Journal of Social Sciences 58, no.1, May 2019, p. 75-82.
- Rublee, Maria Rost. "The Nuclear Threshold States: Challenges and Opportunities Posed by Brazil and Japan." The Nonproliferation Review 17, no.1, 2010, p. 49-70.
- Samuels, Richard and James Schoff, "Japan's Nuclear Hedge: Beyond 'Allergy' and Breakout," in Strategic Asia 2013-2014: Asia in the Second Nuclear Age, edited by Ashley J. Tellis, Abraham M. Denmark, Travis Tanner, 235-236. Washington DC: National Bureau of Asian Research, October 2013.
- Sanger, David E., Choe Sang-Hun and Motoko Rich. "North Korea Rouses Neighbors to Reconsider Nuclear Weapons." New York Times, October 28, 2017. https://www.nytimes.com/2017/10/28/world/asia/north-korea-nuclear-weapons-japan-south-korea.html
- Santoro, David and John K. Warden. "Assuring Japan and South Korea in the Second Nuclear Age." The Washington Quarterly 38, no.1, 2015, p. 147-165.
- Schelling, Thomas C. Arms and Influence. New Haven and London: Yale University Press, 2020.

- Shlapak, David A. "How Not to Dismantle an Atomic Bomb." Rand Corporation. November, 2021. https://www.rand.org/content/dam/rand/pubs/perspectives/PEA1400/PEA1495-1/RAND_PEA1495-1.pdf
- The Comprehensive Nuclear-Test-Ban Treaty Organization. "Detecting Nuclear Tests." Accessed November 8, 2023. https://www.ctbto.org/our-work/detecting-nuclear-tests
- Tosaki, Hirofumi. "The North Korean Nuclear Issue and Japan's Deterrence Posture." The Japan Institute of International Affairs. Report on the Korean Peninsula. March, 2016. https://www2.jiia.or.jp/en/pdf/digital_library/world/170314_tosaki.pdf
- Tsuruoka, Michito. "The NATO vs East Asian Models of Extended Nuclear Deterrence? Seeking a Synergy beyond Dichotomy." The ASAN Forum. June 30, 2016. https://theasanforum.org/the-nato-vs-east-asian-models-of-extended-nuclear-deterrence-seeking-a-synergy-beyond-dichotomy/
- Waltz, Kenneth. "Structural Realism after the Cold War." International Security 25, no.1, summer, 2000, p. 5-41. Waltz, Kenneth. Theory of International Politics. Reading, Massachusetts: Addison-Wesley Publishing Company, 1979
- Windrem, Robert. "Japan Has Nuclear 'Bomb in the Basement,' and China Isn't Happy." NBC News. March 11, 2014. https://www.nbcnews.com/storyline/fukushima-anniversary/japan-has-nuclear-bomb-basement-china-isnt-happy-n48976
- Winn, Patrick. "Japan has Plutonium, Rockets and Rivals. Will it Ever Build a Nuke?" PRI. March 14, 2019. https://interactive.pri.org/2019/03/japan-nuclear/index.html
- Xiao, Ren. "Towards a Normal State-to-State Relationship? China and the DPRK in Changing Northeast Asia." North Korean Review 11, no.2, Fall, 2015, p. 63-78.
- Yoon, Dasl. "South Korean President Says Country Could Develop Nuclear Weapons." The Wall Street Journal. January 12, 2023. https://www.wsj.com/articles/south-korean-president-says-country-could-develop-nucle-ar-weapons-11673544196

Nuclear Weapons and the Concept of "Tradition"

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Abstract

Putin recently threatened the West with atomic warheads and the picture of nuclear annihilation and Stanley Kubrick's Dr. Strangelove momentarily populated my consciousness. The question is why would a leader of a country provided the leader was rational even threaten a leader of another country with nuclear extinction. What is the gain if both go extinct? What is the point of threatening with extinction? nuclear extinction? During the Cold War the US and Soviet Union developed second strike capabilities to deter each other from even considering the use of their deadly weapon against each other, that is to strike first. Yet, here we have Putin, seemingly irrationally brandishing his power weapon. Deterrence explains just one purpose nuclear weapons can serve, which as mentioned can be to prevent your enemy from using the deadly weapon against you. But the use of nuclear weapons could serve other purposes too like offense, scaring, bullying or among other things as mentioned above outright annihilation of your rival. For the few decades that nuclear weapons have existed nuclear states have behaved responsibly with their nuclear arsenals. This study is exploratory research which is inspired by a groundbreaking work of Thomas C. Schelling, The Strategy of Conflict to research what determines the purposes of the use of nuclear weapons. Like Schelling I am inclined to see that in strategic settings rivals not just calculate but they also follow tradition, especially so when it comes to the use of nuclear weapons.

Keywords:

Leader, Soviet Union, Cold war, Nuclear weapon.

Introduction

Nature of nuclear weapons:

It is necessary to categorize nuclear weapons. Are they different from any other weapons? Now it is clear that they have tremendous power, but does this make them qualitatively different from other weapons? Other weapons extinguish life, and in massive quantities; other weapons can annihilate life irreversibly like for example biological, chemical or even conventional weapons. So, at a deeper analysis "it may be necessary to recognize that a distinction can exist between nuclear and other weapons even though the distinction is not physical but is psychic, perceptual, legalistic, or symbolic."

Some view nuclear weapons as just another weapon, meaning that small nuclear weapons hitting a potential enemy can be considered as a form of artillery. Such an argument suggests that the whole issue is about the effect of weapons. If states produce small nuclear weapons that can hit their enemies with precision and damage just a small part of their territory or population such weapons can be used safely during war. The advocates of this thesis claim that there is no difference between nuclear weapons of limited effect and other weapons and as such no line can be and should be drawn between them.

Main Part

But Schelling's answer to such claims was very interesting. There was no difference between British and Russians during Cold War yet Americans treated them differently. The point is we are all people yet because of history, convention, tradition, norms, and etc., something happens at some point in time and we start to treat each other differently or we behave differently or we do something differently. The same thing Schelling suggested goes with nuclear weapons too. They might not be very different from other weapons. Other weapons are deadly too, but we simply have historically/traditionally used them differently. Schelling suggests that when we talk about certain things what matters is tradition, precedent, convention, and the force of suggestion.² Here all parties understand very well that they are dealing with an unwritten law where it is important to abstain from destructive action, otherwise the whole framework of rules may collapse or it might even end fatally.

According to Schelling traditions and conventions are an essential part of the limited war too. What is important here is that sides recognize common ground. There is sort of unwritten law which suggests mutual abstention for the sake of avoiding mutual destruction. Participating sides understand very well that if they violate the rule the outcome is going to be much worse, thus they choose to abide by them.

In international relations there is a tradition that atomic weapons are different. For other weapons there is no such tradition. There is "a tradition for their nonuse – a jointly recognized expectation that they may not be used in spite of declarations of readiness to use them, even in spite of tactical advantages in their use." Tradition and convention establish the limits of war. The fundamental characteristic of any limit is psychic, intellectual or social characteristic recognized by all sides. A limit of war is chosen simply because both sides can agree that there is no alternative; the choice is legalistic/casuistic; however, it will correspond to as mentioned above and for the sake of convenience to legal, moral, or physical properties.

The limits of nuclear war are made even more difficult because of the versatility of nuclear weapons. There are so many different sizes of such weapons, and different effects of them, different ways of their conveyance, and so on. So, when it comes to drawing a line where we want to limit the use of nuclear weapons, the answer is purely technical. Such technical terms do not make it possible to establish stable limits because such limits have an "evident symbolic character, such that to breach it is an overt and dramatic act that exposes both sides to the danger that alternative limits will not easily be found."

An important consequence of the abovementioned reasoning is that there is an important difference between ordinary and nuclear weapons when it comes to limiting war. We can clarify this difference or blur. We can solidify the tradition and act like nuclear weapons are special kind of weapons, that have unique significance; we can act and talk to support the tradition. Or we can erase, water down the tradition, like Putin does, by acting as though we do not believe in it, pretending that we do not care about it, and threaten other countries to use nuclear weapons against them.

What countries do will have important consequences. For decades now nuclear powers have had shared expectations regarding the use of nuclear weapons. In the interests of limiting war, nuclear powers agreed that nuclear weapons are a class apart from other weapons and should be treated distinctly. But if Putin, and other revisionist nuclear powers want maximum freedom in their use of atomic weapons, they should realize that either they establish new limits to their use or risk global annihilation through their irresponsible behavior.

¹ Thomas C. Schelling, Strategy of Conflict (London: Harvard University, 1997), 260.

² Ibid., 260.

³ Ibid., 260.

⁴ Ibid., 261

⁵ Ibid., 262

Another important detail Putin should keep in mind is that the tradition of nonuse of atomic weapons in limited war or nonuse of atomic weapons at all in international politics will disappear with their first use. It is very difficult to think that nuclear powers are going to abstain from using their nuclear arsenal anymore once the precedent of the use of nuclear weapons has been set. So once nuclear weapons are used in the future war the tradition of nonuse will probably be shattered forever.

Conclusion

Now, while it is true that Russia's and North Korea's dictators are just babbling, when they threaten the world with their nuclear arsenal, nevertheless, there is one important consequence to their irresponsible gibberish. They are hollowing the nuclear tradition of mutual respect that the USA, the Soviet Union and other nuclear nations took decades to build. Kenneth Waltz believes that Putin is rational not to use those weapons, and he even believes that should every nation have a nuclear potential the world would be more peaceful; well because we are rational to use weapons properly. But Waltz does not see that Putin is undermining the tradition that his predecessors took time to build by brandishing flagrantly the weaponry, the behavior which is not apropos of nuclear powers and might even be dangerous. Imagine every foul beast that was cornered frowned likewise.

References

Fukuyama, Francis. The end of history and the last man. Francis Fukuyama. New York: Perennial, 1992. Mearsheimer, John J. The tragedy of great power politics. New York: W. W. Norton & Company, 2014. Schelling, Thomas C. Strategy of conflict. London: Harvard University, 1997. Waltz, Kenneth N. "Nuclear Myths and Political Realities." American Political Science Review 84, no. 3, 1990, p. 730–45. https://doi.org/10.2307/1962764

Nuclear Weapons as a Guarantor of State Security

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Abstract

The article "Nuclear Weapons as a Guarantor of State Security" examines the prerequisites and reasons for the creation of nuclear weapons, the processes of their creation and development, advantages and disadvantages of creation of a nuclear weapon; It is also a topic of confrontation between states and world political circles. Attention is also focused on the development of nuclear weapons in Russia, the re-armament of its strategic nuclear forces and the implementation of the Iranian nuclear program, also, on the description of the events associated with these processes, aimed at the dangers of possible uncontrolled growth of Russian nuclear weapons and materials necessary for their production.

In accordance with the interests and ambitions of the states, the use of nuclear weapons in relation to other states, in particular to prevent threats, as a guarantee of their own security and as a lever of intimidation and pressure, is discussed in different ways. In the article, the emphasis on the creation of nuclear weapons is mainly aimed at the realization of their own physical security and ambitious intentions of the nuclear states, as well as establishment of themselves on the world political arena and finally, the creation of guarantees of inviolability.

Keywords:

Nuclear weapons, Security, Non-proliferation treaty, North Atlantic Alliance, Collective security, Demilitarization, Militarization, Nuclear program.

Introduction

In the history of human existence, the feeling of safety, stability and a peaceful environment has been the most important concern of people.

All this led to the development of internal institutions, which would be focused on public and state security. However, this was not enough, as individual defense could not provide complete protection. Based on this, it became necessary to develop a certain type of model of collective security, the necessity of which arose after the end of the Second World War and came to us in the form of the North Atlantic Treaty Organization. However, while the countries that are part of the above-mentioned collective security organization share their points of views, the US only shares certain views on security that is only theirs, which are not shared by other countries, because the above these countries perceive actions against the North Atlantic Treaty Organizations aimed at the collective security as a direct to their own.¹

Collective Security has certainly achieved its goal in terms of establishing long-term peace in Europe and has become a force to be reckoned with in the world, for the non-member states of the North Atlantic Treaty Organization, although it was not enough to expand the borders of world peace. That's why big and economically strong states, ambitious are not only focused on world peace, began to produce a more global fear-oriented security policy. The mentioned policy serves to prevent possible future military aggression against the states outside the North Atlantic Treaty Organization, which is manifested by the creation, improvement and their quantitative increase of nuclear weapons in specific countries of the world, which for certain reasons withdrew from the Treaty on the Non-Proliferation of nuclear weapons approved by the UN International Committee on Disarmament and the General Assembly on July 12,1968.

All this creates a prerequisite for production of weapons of mass destruction and its quantitative increase in the future to become uncontrollable power and pose a threat not only to specific states, but also to the global security of the world.

Main Part

If we consider the trends of armed conflicts since ancient times, we will realize that armed conflict, regardless of tis negative consequences, to a certain extent, the parties involved in the conflict were at a specific stage of development. The directions of development were different and mainly included various problems arising during the conflict, which were related to, for example, to combat weapons, tactical theories, material support of combat units, medical assistance on the battlefield and etc. At the initial stage of human development, such development processes continued for quite a long time, however, in the 18th and 19th centuries, the development of gunpowder and the formation of classic strategies radically changed the methodology of conducting armed conflicts.²

Of course, armed conflicts were not only defensive in nature, they were aimed at the occupation of new territories, the acquisition of spoils or simply the imperial intentions of powerful states. Military power has always been given great priority, which was a guarantee of the strength and security of the state, however, the number of manpower alone did not mean dominance on the battlefield, military strategy and armaments were of particular importance. All this led to the development of military sciences and the spending of colossal sums by the states on improving the military potential, which consists in improving the effectiveness of weapons, their refinement and reasonable/targeted use.

The development of armaments in the modern world has contributed to the hidden militarization of certain states, and despite the initiation of demilitarization processes by the world's leading countries, small and in many cases fruitless steps have been taken in terms of creating a balance of armaments. All of this has its own reasons, which are mainly the disagreements between the states regarding the imbalance of the armaments they own.

The most urgent issue in the current world is the increase on the number of nuclear weapons of mass destruction and the improvement of the materials needed for their production, which originates from the course of the Second World War, in particular from the use of atomic bombs by the United States of America in the Japanese cities of Hiroshima and Nagasaki in August in 1945. The use of nuclear weapons in Japan made it clear that the United States of America was state in terms of the latest weapons in the world at that time, which gave a clear impetus to the creation of nuclear weapons with a similar and arguably, more devastating effect, by other great powers of the world in order to create a balance of military power.

Naturally, the development process in this regard has been significantly accelerated, and clear examples of this are the first nuclear bomb test by the Soviet Union on August 22, 1949, after which Great Britain joined the cycle of nuclear weapons testing on October 3, 1953, France on February 13, 1960, and China on October 16,

¹ Nato, "The North Atlantic Treaty," NATO, accessed November 23, 2023, https://www.nato.int/cps/en/natohq/official_texts_17120.htm?selectedLocale=ka.

^{2 &}quot;ომის ევოლუცია - პოლექტიური აგრესიისა და შეიარაღების ისტორია," On.ge, April 7, 2022, https://on.ge/story/101875.

1964. During nineteen years, 5 nuclear states emerged, which faced the threat of uncontrolled proliferation of nuclear weapons in the world and became the initiators of the Nuclear Non-Proliferation Treaty approved on July 12, 1968, which was signed by 191 states. However, this process was not so easy to manage and control, because, despite the Non-Proliferation Treaty, nuclear weapons were tested on May 18, 1974 by India, on May 30, 1998 by Pakistan, on October 9, 2006 by the Democratic People's Republic of North Korea and Israel (the date of the official nuclear weapons test is unknown). Israel has never acknowledged the existence of nuclear weapons in the sources), which refused to sign the Nuclear Non-Proliferation Treaty at the time.

This is how 5 legitimate and 4 illegitimate states with nuclear weapons arose on the basis of the Nuclear Non-Proliferation Treaty, because according to Article 9, Subchapter 3 of the Non-Proliferation Treaty document. the legitimate representatives of the "nuclear club" are only those states that have created or tested a nuclear bomb before January 1, 1967.³

This kind of nuclear militarization on the part of the illegitimate states of the Nuclear Non-Proliferation Treaty can be attributed to the expectations of different types of threats from the legitimate representatives of the treaty, to the prevention of economic or military pressure on them in the future. This can be caused by disagreements between big states on certain issues, from the point of view of the distribution of power and influence in one or another region, which may turn the process of disagreement at the political level into an open armed conflict. As of now, there is not a favorable situation among the legitimate representatives either, because the United States of America, France and Great Britain are members of the North Atlantic Alliance, and Russia perceives their policy of expansion to the east of Europe as a direct threat. The North Atlantic Alliance countries did not consider the agreement on security guarantees proposed by Russia and take them into account, which implied certain restrictions on the US and the North Atlantic Alliance on the one hand, in terms of the eastward expansion of the alliance.4 The North Atlantic Alliance countries did not consider the agreement on security guarantees proposed by Russia and take them into account, which implied certain restrictions on the US and the North Atlantic Alliance on the one hand, in terms of the eastward expansion of the alliance.⁵ Of course, the ambitions of the Russian Federation, like the Soviet Union, extend to maintaining influence over the post-Soviet countries, which it failed to realize after the collapse of the Soviet Union. Therefore, it uses forceful methods of influencing them and confronts the West and the North Atlantic Alliance, which increases the threat of Russia's nuclear militarization, namely:

According to the existing trends in the strategic nuclear forces of the Russian Federation, the ground component is planned to: - Continuation of production of RS-24 "Yars" (mining and mobile bases). Complete replacement of existing "Topols" - rearmament (in essence);

- Start of serial production of RS-28 "Sarmat" (mining bases). Complete replacement of P-36M2 "Voevoda" - rearmament (with Sarmats).

Currently, the re-armament of ballistic missiles of mobile bases with "Yars" is underway. Britain's International Institute for Strategic Studies estimates that as of January 2022, 14 missile regiments have been fully rearmed.

To replace the RS-36 launchers, work is underway to complete the creation of a new missile "Sarmat" and start its serial production. In August 2022, a contract was signed for the purchase of the Sarmats, but it is believed that the design of the Sarmats has not yet been completed.

The Soviet military doctrines were actually based on the use of nuclear weapons and all large-scale military operations envisaged fighting under the conditions of nuclear impact, while the new Russian military doctrines are categorized and, according to the Russian perception, nuclear weapons have different loads in a war of different scales. In the Russian view, due to the sharp negative imbalance of other non-nuclear capabilities with NATO in a large-scale war, strategic nuclear weapons are the only balance of power, and Russia, like the US, considers it a means of deterring a large-scale war.

In a regional war, in the event of a confrontation with a regional superpower (Turkey, Japan), due to inevitable large losses, the Russians consider the use of tactical nuclear weapons inevitable.

According to the same classification, before the war, the Russians sharply underestimated the capabilities of Ukraine and made it into a regional war in the category of a local conflict, and considered that there was no need to use nuclear weapons in a local war, although the new Russian military doctrine envisages a noteworthy action, in particular, tactical nuclear weapons in a local conflict. Russia considers the weapon "a means of conflict de-escalation". According to the military doctrine, during an offensive military operation, Russia can use the

³ www.anrs.gov.ge, accessed November 23, 2023, https://www.anrs.gov.ge/Files/ShowFiles?id=f8be421d-ef55-4701-9a3c-50da1fbd9c6f.

^{4 &}quot;რას სთხოვს რუსეთი ნატოს და როგორ უნდა უპასუხოს საქართველომ – ინტერვიუ," NETGAZETI.ge, accessed November 23, 2023, https://netgazeti.ge/opinion/583197/.

^{5 &}quot;Digital Repository of Georgian Scientific Works," Home | Digital Repository of Georgian Scientific Works, accessed November 23, 2023, https://openscience.ge/.

^{6 &}quot;რუსეთის ახალი თაობის ბალისტიკური რაკეტები უახლოეს პერიოდში განლაგდება საბრძოლო მოქმედებებისთვის," HeretiFM, accessed November 23, 2023, https://heretifm.com/rusethis-akhali-thaobis-balistikuri-raketebi-uakhloes-periodshiganlagdeba-sabrdzolo-moqmedebebisthvis/.

threat of tactical nuclear weapons to force the adversary to stop resistance and start negotiations according to the conditions dictated by the Russian Federation.

It should also be noted that the issue of the implementation of Iran's nuclear program is probably the most relevant today, which is very opposed by the dominant states of the modern world.

Iran's aspiration to become the leading state in the Middle East region required the creation of appropriate levers. The nuclear missile program, which was started during the Shah's period, and successfully developed after the Islamic revolution in Iran, was considered as such. Tehran's officially stated goal of developing a nuclear program is peaceful, serving electrical energy and medical needs, although the US, Israel and European countries accuse Iran of trying to develop nuclear weapons. Iran does not share the "accusation" of the West, although it believes that it has the right to create and maintain nuclear weapons.

Iran's nuclear ambitions have been perceived as a threat in the West. Due to the growing pace of development of the nuclear program, international sanctions were imposed against Iran, due to which economic problems appeared in Iran. In 2015, the Islamic regime had to make a number of concessions, which led to the signing of the "nuclear agreement" in Vienna, the capital of Austria. The United States, Russia, China, Great Britain, France and Germany participated in the agreement, which was officially called the "Comprehensive Action Plan". The agreement provided for the reduction of the percentage of enriched uranium and nuclear stocks, monitoring by international inspectors for 25 years on the nuclear facilities on the territory of Iran, the extension of the embargo on conventional weapons for 5 years and missile technologies for 8 years, and after the entry into force of the agreement, economic sanctions against Iran would be imposed from January 2016.

The implementation of the joint document was literally stopped in May 2018 by the withdrawal of the US President D. Trump's administration from the agreement and Israeli attacks on Iranian personnel and infrastructure, which prompted Tehran to violate the agreement and accelerate nuclear activities. Iran's growing nuclear activities have become a cause of concern for the West, prompting the signatories of the agreement to resume negotiations with Iran to restore the "nuclear deal". After April 2021, 8 rounds of negotiations were held in Vienna, which lasted until March 2022, although tangible results could not be achieved between the parties. In the course of the current negotiations, the American side demanded to discuss the issue of ending support for the missile program and "proxy forces" in the region, which Iran categorically opposed.

On the other hand, Tehran's goal is to restore the 2015 agreement under the original conditions, which is why it continues to periodically violate the terms of the agreement. Initially, the Islamic Republic began enriching uranium to 5%, and later to 20% (according to the agreement, the percentage of uranium enriched by Iran should not exceed 3.67%). At the end of August 2021, the "International Atomic Energy Agency" (IAEA) confirmed the information that Iran produced 20% pure metal uranium for the first time and significantly increased its production volume to enrich uranium to 60%. In addition, according to the AES report of September 7, 2021, the problematic environment created for the agency's activities in Iran was strictly formulated.

Currently, Iran has various nuclear facilities, including:

Radioactive waste storage

- Heavy water production plant
- Uranium enrichment center
- Nuclear fuel production plant
- Nuclear power station (under construction)
- Uranium mining deposit
- Research center
- Research center with reactor
- Nuclear weapons production (estimated)

The main locations of Iran's nuclear arsenal are: Bonab, Karaj, Arak, Darkovani, Ardakhan, Bushir, Tehran, Sohre Hesar, Farchin, Qum, Natanz, Sakand, Gachin, Anarakh.

In addition, Iran has nuclear facilities on the territory of military bases in various locations.

As for the peaceful atomic sphere, Iran actively cooperates with the Russian Federation. With the help of Russian specialists, 2 units of nuclear power plant were built in Iran's Bushir province.

Therefore, there are certain types of relations between Iran and Russia in the nuclear arms race, which indicates Russia's interests in the presence of Iran as a nuclear-armed ally in the Middle East and aims to weaken the West's position in the region.

7 The implementation of Iran's nuclear program began in 1967, when the US gave a 5 megawatt nuclear reactor to Shah Mohammad Rezaf Ehlevi of Mayran. Germany and France later provided technological assistance to Iran in the construction of reactors. Iran signed the Nuclear Non-Proliferation Treaty in 1968 and ratified it in 1970. Regarding the direct nuclear program, Iran has set a goal of creating 23 nuclear reactors and has started negotiations with several Western countries. It was also significant that in 1974 Tehran signed the Nuclear Non-Proliferation Treaty Safeguards Agreement, which meant that it agreed to allow foreign experts to inspect its nuclear facilities. While the United States—a staunch ally of the Shah—has supported Iran's nuclear ambitions, it has been unenthusiastic, to say the least, about plans to build nuclear fuel in Iran. However, Washington and Tehran reached an agreement in 1978 that allowed Iran to reprocess nuclear fuel it received from the United States in exchange for compliance with safeguards, but this agreement was not enforced. The Islamic Revolution in Iran in 1979 ended the Shah's rule, his dream of a nuclear program, and his cooperation with the United States.

Conclusion

Such nuclear militarization of certain states, against the background of demilitarization of the world and the reduction and balance of nuclear weapons, significantly hinders the effectiveness of the work of organizations working in this direction and makes the quantitative increase of nuclear weapons in the world uncontrollable. In the modern world, hidden nuclear militarization has become to some extent a means of arranging relations between large and ambitious states and a certain guarantee of refraining from open and large-scale armed conflicts between states.

Such approaches to the creation of nuclear weapons may also be perceived positively due to the fact that states with nuclear ambitions are trying to establish themselves on the world political level arena as important actors in current processes in order to increase the country's security and create a relatively stable environment for the implementation of their own interests. However, the reasons for its creation are unfortunately aimed only at expanding the sphere of influence of the world's dominant states, which in many cases creates a pretext for confrontation, and the confrontations are certainly caused by the states' fear of the uncontrolled development of nuclear weapons in the future and the use of these weapons.

Despite the negative events caused by the appearance of nuclear weapons in the world, if we look at the history of world wars, it can be said that nuclear weapons brought a certain balance between states in the world in terms of diplomacy and by reducing armed conflicts.

References

- Nato, "The North Atlantic Treaty," NATO, accessed November 23, 2023, https://www.nato.int/cps/en/natohq/official_texts_17120.htm?selectedLocale=ka
- "ომის ევოლუცია პოლექტიური აგრესიისა და შეიარაღების ისტორია," On.ge, April 7, 2022, https://on.ge/story/101875
- Www.anrs.gov.ge, accessed November 23, 2023, https://www.anrs.gov.ge/Files/ShowFiles?id=f8be421d-ef55-4701-9a3c-50da1fbd9c6f
- "რას სთხოვს რუსეთი ნატოს და როგორ უნდა უპასუხოს საქართველომ ინტერვიუ," NETGAZETI.ge, accessed November 23, 2023, https://netgazeti.ge/opinion/583197/

Nuclear States and International System Stability

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Abstract

In the late 1980s and early 1990s, significant geopolitical upheavals, which led to the collapse of the Cold War's bipolar structure, reshaped the security architecture of the international system and ushered in the unipolar moment of the United States. However, the hegemony of the United States proved short-lived, and in the early 21st century, challengers to its dominance emerged. These newly emerging powers, as they often assert, are striving to establish a more multilateral international system than is proposed by the West. The situation is further complicated by the fact that these rising powers are nuclear states, much like the United States.

complicated by the fact that these rising powers are nuclear states, much like the United States.

Observing the dynamics of relations between states and the development of current processes in the world, it becomes clear that the spread of nuclear weapons and the strategies employed by nuclear-weaponised states have a significant impact on the stability of the international system and global security. To show more clarity to the understanding and perception of the current situation, this paper provides an overview of the emergence of nuclear forces and the contemporary dynamics of their development. It also delves into the ambitions, capabilities, and potential risks associated with nuclear powers.

The paper does not aim to present a comprehensive analysis of all the processes within the global system. However, through a combination of qualitative and quantitative research methods, including content analysis, case studies, and expert opinions, it explores and analyzes both the historical context of nuclear powers and their influence on the stability of the international system.

Keywords:

Global, International, Region, Nuclear, War, Conflict, Stability.

Introduction

The events that developed at the turn of the 20th and the 21st centuries, especially from the beginning of 2022, created a significant threat to the stability of the international system. All over the world, the number of military conflicts is increasing, resulting in large-scale destruction and high human casualties, principally among civilians. Military conflicts are not only raging within European territory but also in Asia and Africa. In hostilities, alongside the regular military forces of the states, armed groups of various types and origins are also involved: "private military companies", "separatist paramilitary units", "jihadist groups", "criminal armed gangs" and "insurgent armed squads". The 2023 data of the "Stockholm International Peace Research Institute" is worrying, according to which, by 2022, the number of states involved in armed conflict has reached 56.2

The stability of the international security architecture is significantly threatened by the ongoing processes in East Asia and the Indo-Pacific region, where the interests of the global players of the regional and international system do not coincide and collide rigidly with each other.³

International security architecture is significantly, one can say, decisively affected by the ongoing large-scale military conflict on the territory of Europe, which is taking place against the background of the intensified political confrontation of the nuclear states, and the threat of using tactical nuclear weapons causes a well-founded fear of the international community, which permanently accompanies the current conflict.⁴

The ongoing processes in West Africa are also important for the dynamics of international security, where the events in Niger in the summer of 2023 thoroughly shook the security architecture of "Fransafrica", disrupted the fragile processes of democratization in the region and paved the way for dictatorial regimes.⁵

A significant international security challenge is ongoing processes in the South Asian and Middle Eastern regions: the military-political confrontations between two nuclear states - Pakistan and India, where the fragile peace achieved in 2021 can be broken at any time and turn into a wide-reaching clash. With this, a considerable challenge is the last "Israeli-Hamas" military conflict, which may turn into a new large-scale "Israeli-Arab war" and cover the entire region.

In those mentioned conflicts, which are taking place in different parts of the world, the nuclear powers have a decisive role. Since one part of them is directly involved in all or almost all conflicts, and the other in some of them, accordingly, the dynamics of the development of the current processes and the stability of the international system will depend on the further behaviour of those nuclear states that are represented globally in the ongoing rivalry.

Main Part

The Emergence of Nuclear Forces and Their Capabilities

At the beginning of the 20th century, when Frederick Sod wrote about radium and the atomic structure, he noted that this energy could "transform a desert continent, thaw the frozen poles, and make the whole world one smiling Garden of Eden." However, his expectations were not met, and in the years that followed nuclear energy was associated with nuclear weapons, destruction and death rather than peace and prosperity. After humanity realized the catastrophic consequences of the two atomic bombs dropped by the United States on the Japanese cities of Hiroshima and Nagasaki on August 6 and 9, 1945, nuclear weapons spread became a global concern, and the efforts to limit tam were made through various international agreements and negotiations.

The international community permanently continued monitoring and actively discussed the threat of using nuclear weapons. However, despite the measures taken, the number of nuclear-weaponized states has increased, and as of 2023, 9 states currently possess nuclear weapons:

- 1. The United States since 1945 -currently has 5244 warheads;
- 2. Russia (USSR) since 1949 -currently has 5889 warheads;
- 3. Great Britain since 1952 -currently has 225 warheads;
- 4. France since 1960 -currently has 290 warheads;
- 5. China since 1964 -currently has 410 warheads;
- 6. India since 1974 -currently has 164 warheads;

¹ SIPRI Yearbook, Armaments, Disarmament and International Security, Summary, Stockholm International Peace Research Institute, 2023, p. 2.

² Ibid.

³ Liam Scott and Peh Hong Lim, "US-China Rivalry Increases Tension in Southeast Asia," Voice of America, January 4, 2023, https://www.voanews.com/a/us-china-rivalry-increases-tension-in-southeast-asia/6893464.html.

⁴ Malcolm Davis, "Will Putin Go Nuclear to Avoid Defeat in Ukraine?," The Strategist, May 4, 2022, https://www.aspistrategist.org.au/will-putin-go-nuclear-to-avoid-defeat-in-ukraine/.

⁵ Iiss, "The Coup in Niger," IISS, accessed November 21, 2023, https://www.iiss.org/publications/strategic-comments/2023/the-coup-in-niger/.

- 7. Pakistan since 1998 -currently has 170 warheads;
- 8. North Korea since 2006 -currently has 30 warheads;
- 9. Israel date of creation unknown -currently has 90 warheads.⁶

The United States and the Russian Federation have various ongoing complex programs to modernize nuclear warheads, missiles, aircraft and submarine delivery systems and to upgrade and replace existing atomic weapons production facilities. Also, China is expanding and modernizing its nuclear arsenal to equalize its potential with the nuclear capabilities of Russia and the United States. According to some experts, it is expected that "China will deploy as many intercontinental ballistic missiles in the next decade as Russia or the USA have in this period." However, according to them, "China's total number of nuclear warheads will remain less than that of Russia or the United States." As for Great Britain and France, they are also committed to modernizing and developing their nuclear arsenals. With that, India, Pakistan and North Korea are trying to increase both the number of nuclear warheads and the means of delivery and transportation. As for Israel, it to this day does not disclose information about its nuclear arsenal, and information about its capabilities remains a secret.⁷

Ambitions and Challenges of Nuclear States

The United States - When, in the early 1990s, the bipolar world collapsed and the "Soviet monster" disappeared from the political arena, despite the presence of other nuclear powers and economically powerful states in the international system, the United States turned out to be the only superpower in the system. Using this momentum, at the turn of the 20th and 21st centuries, the United States exerted a great influence on the "norms, rules and practices of the international community." In the 1990s, as the "global hegemon," the United States used its influence to several goals:

1.The spread of capitalism -the US government supported the creation of the "World Trade Organization", which replaced the "General Agreement on Trade and Tariffs".⁸

- 2. Eastern expansion of the "North Atlantic Treaty Organization" and the "European Union";9
- 3. The spread of democracy.¹⁰

The implementation of the objectives outlined above by the United States was also based on three main pillars:

- 1. "The unparalleled scale and many dimensions of the power of the United States;"
- 2. "Western dominant institutions and multilateral organizations;"
- 3. A close network of alliances and close bilateral relations in the Atlantic and Pacific region.

In the 1990s, the first successes were revealed in Europe, as illustrated by the "enlargement of NATO and the European Union". Institutions have bolstered capabilities and flexibility. The "western model" was believed to depict the approach the global world would take in the twenty-first century. However, the Western euphoria ended faster than expected, and rapidly developing and economically growing countries entered the arena: China was emerging as one of the dominant powers of the worldwide economy and the international system; In Latin America, Brazil has become more active and a significant carrier of regional influence; India strengthened its influence in South Asia; Both the South African Republic and Nigeria have expanded their impact on the African continent.¹¹

"Within the Global South, and around the world", social movements began in response to the spread of neoliberalism: - In 1999, in Seattle, in parallel with the ministerial meeting of the "World Trade Organization", protest demonstrations of the "World Social Forum" and "anti-globalization groups" were held;¹² The order proposed under the leadership of the United States was also unacceptable to anti-Western Islamic groups and terrorist organizations. The result was the brutal terrorist attack on the United States on 9/11, 2001, which led to military interventions by the US and its allies in the Middle East and undermined the efforts of the unipolar hegemony of the United States.

Policies aimed at changing "rules, norms and practices': new forms of liberal democratic expansion, economic development and intervention proved unacceptable to the developing world and forced them to act, led

⁶ SIPRI Yearbook 2023, Armaments, Disarmament and International Security, (Stockholm International Peace Research Institute, 2023) 247-248

^{7 2022} National Defence Strategy of The United States of America, (U.S. Department of Defence, 2022) 20-22; Jacob Cohn, Adam Lemon, Evan Braden Montgomery, Assessing the Arsenals: Past, Present, and Future, (Center for Strategic and Budgetary Assessments (CSBA) 2019) 18-20; SIPRI Yearbook (2023) 249-327.

⁸ Cathleen D. Cimino, World Trade Organization Overview and Future Direction, (Congressional Research Service 2021) 2-11.

^{9 &}quot;Address before a Joint Session of the Congress on the State of the Union," Address Before a Joint Session of the Congress on the State of the Union | The American Presidency Project, January 25, 1994, https://www.presidency.ucsb.edu/documents/address-before-joint-session-the-congress-the-state-the-union-12.

¹⁰ Ibid.

¹¹ John Baylis, Steve Smith, Patricia Owens, The Globalization of World Politics An Introduction to International Relations, (Oxford University Press 2014) 81-83;

by Brazil, China, India and South Africa. Various organizations were created to restrain the efforts of the United States and its European allies:

- 1. In 2003, based on the "Brazil Declaration" "India-Brazil-South Africa Dialogue Forum" (IBSA);
- 2. In 2009, a bloc of four new industrialized large countries "Brazil, South Africa, India and China (BA-SIC)".
- 3. In 2010, the Organization of the four largest economies Brazil, Russia, India and China (BRIC), which South Africa joined in the same year, was transformed into BRICS.

The processes taking place in the system were a challenge not only to United States hegemony but also to the dominant international order of the West, which had been formed for centuries under the conditions of European imperialism.

People's Republic of China -The implementation of domestic market reforms since the second half of the 1970s contributed to the strengthening of China's economic and military power. After the Cold War, it became one of the top producers of the world economy and one of the global forces of the international system.

China's rapid economic growth was facilitated by its accession to the World Trade Organization in 2001. And "by 2010, it had become the world's largest exporter, the largest recipient of investment, fastest-growing consumer market and leading supplier of manufactured goods." The 2008 financial crisis, amid turmoil in the United States and the European Union, further accelerated China's rise. At the same time, the number of Chinese experts participating and occupying key positions has increased in such influential international organizations as: "International Monetary Fund (IMF)"; "World Bank Group (WBG)"; 'World Trade Organization (WTO)". 13

In 2013, China launched the Belt and Road Initiative (BRI), further strengthening China's strategic interests in the Indo-Pacific region and across Eurasia. In addition, in 2016, China established the "Asian Infrastructure Investment Bank (AIIB)." Despite the negative attitude of the United States (which considers the new bank a threat to its hegemony in the international system), the "Asian Infrastructure Investment Bank" financed 15 new projects in 2017, for which it provided a loan of 1.9 billion dollars. By the end of 2018, the number of its members increased to 87.14

As China rises as a global power, so do its ambitions to establish control over disputed island territories in the South and East China Seas, following which relations with neighbouring states are not infrequently strained. However, the issue of Taiwan is the most acute, where the interests of the United States and China intersect. The Chinese government considers Taiwan an integral part of China, while the Taiwanese government considers the island nation a sovereign state, which the United States is determined to protect. To the question, will the United States protect Taiwan? The American President gave a short and comprehensive answer – "Yes", said Joe Biden. 15

China's rise is widely seen in expert groups as a challenge to the hegemony of the United States in the international system and a tendency to shift the centre of military-political and economic power from the West to the East. However, China is in no hurry to replace the hegemony of the United States. It seeks to establish a flexible policy of inclusion in global economic governance and to create new global logistics and market connections as a mechanism for deepening relations with the rest of the world and for its tranquil absorption.

Russian Federation -After the catastrophic decline of the 90s, the Russian Federation, the legal successor of the Soviet Union, took less than 20 years to rise again. Russia resolved its domestic political and economic difficulties faster than expected, and at the 2007 Munich Security Conference, President Putin openly stated Russia's ambitions. He strongly criticized the rules of the game proposed by the West, noting that "the unipolar model is not only unacceptable but also impossible in today's world." ¹⁶

Putin believes that "the collapse of the Soviet Union was the greatest geopolitical catastrophe of the century." From the first day he came to power, he sought to replace the "Soviet Union" with the "Eurasian Union" and return Russia to its former glory. "Russia's main goal was no longer to go West. Putin had instead opted for his own Eurasian path, which he would develop further as a concept in the years ahead." noted Asmus. After Putin came to power, Russia's new geopolitical doctrine became particularly active, which was developed by the Russian philosopher, head of the socio-political movement "Eurasia" Alexander Dugin based on his predecessors (Trubetskoi, Savitsky, Gumilev) and called it "Eurasianism". "The alternative to unipolarity is multipolarity, and what it is can be read in my work on the theory of a multipolar world. From now on, this is the official doctrine of the Russian Federation," Dugin writes. According to the view of "Russian Eurasianism", "the absolute imperative of Russian geopolitics on the Black Sea coast is Moscow's total and unlimited control over the entire length, including the territories of Ukraine and Abkhazia. [...] Moscow's control implies the political and ethno-cultural

¹³ The Globalization of World Politics An Introduction to International Relations, (Oxford University Press 2014) 255

¹⁴ John Baylis, Steve Smith, Patricia Owens, The Globalization of World Politics An Introduction to International Relations, (Oxford University Press 2020) 332

^{15 &}quot;რადიო თავისუფლება," რადიო თავისუფლება, accessed November 21, 2023, https://www.radiotavisupleba.ge/.

¹⁶ Speech and the following discussion at the Munich Conference on security policy, accessed November 21, 2023, http://en.kremlin.ru/events/president/transcripts/copy/24034.

¹⁷ Ronald Asmus, The Little War That Shook the World: Georgia, Russia, and the Future of the West, (the United States, New York, Palgrave Macmillan 2010) 69

¹⁸ Accessed November 21, 2023, http://evrazia.org/article/2505.

disintegration of this entire zone. [...]these sectors must be radically separated from the thalassocratic influence coming both from the West and from Turkey (or even Greece). The northern coast of the Black Sea should be Eurasian and centrally subordinated to Moscow."¹⁹

In October 2011, Vladimir Putin openly stated about the creation of the "Eurasian Union". On May 29, 2014, "the Eurasian Economic Union" was founded in Astana (Kazakhstan). Members of which are Belarus, Kazakhstan, Kyrgyzstan, Russia and Armenia.²⁰

Concerning the implementation of the "Russian Eurasian Union Project", the Black Sea region is a core place, not only geopolitically but also economic and geostrategic points of view. With that, the issues of Ukraine and Georgia are crucial. Since the declared goals of Ukraine and Georgia are integration in the Euro-Atlantic space, not joining the Eurasian Union. However, their aspirations will most likely be decisively influenced by the results of the current Russia-Ukraine war.

Russia confronts the interests of the West not only in the Black Sea region and Europe but also on the African continent, in the so-called "Fransafrica region". For this, it uses propaganda networks and a private military company. Also, in 2019, the President of Russia initiated a direct dialogue with African leaders, thereby emphasizing the Kremlin's relationship with African countries based on the principle of equality and non-interference in the internal affairs of sovereign states and indirectly criticizing the "Western approach".

No one has directly accused Russia of organizing the military coup in Niger on July 26, 2023. However, experts of the "European Parliamentary Research Service" claim that "Jihadist attacks [...] have risen since Russia-and "Wagner-affiliated" media continue to exploit and exacerbate anti-French feelings." The ongoing processes on the African continent are especially aggravated by the fact that the so-called "belt of authoritarian regimes" supported by the military has been formed in the south of the Arab countries of North Africa, from the Red Sea to the eastern coast of the Atlantic Ocean. The mentioned geopolitical situation will, with a high probability, further strengthen the influence of Russia on the continent.

Russia's interests were also highlighted concerning the ongoing processes in the Middle East. In the armed conflict between Hamas and Israel, Russia initially seemed to try to maintain neutrality. However, the visit of the Hamas delegation to Moscow revealed Russia's sympathy for them. It became known that, among other issues, the parties also discussed "ways to stop the crimes of Israel supported by the West." In addition, regarding the conflict, "the Hamas delegation highly appreciated the position of Russian President Vladimir Putin, as well as the active efforts of Russian diplomacy."²²

Today it is difficult to prove whether the Russian special services were involved in provoking the new conflict between Hamas and Israel. However, one thing is clear, after the invasion of Ukraine in February 2022, in order to avoid international isolation, Russia became especially close to the Islamic Republic of Iran, which in turn is closely related to the "Palestinian Sunni-Islamist Resistance Movement Hamas." In any case, whatever role Russia may play in the current conflict, given that Israel is the core pillar of the United States in the Middle East and the United States is the key sponsor and supplier of weapons to Ukraine in the Russo-Ukraine war, its involvement in the Middle East conflict is highly likely that it will add to Russia some momentum to the Ukrainian front. Therefore, the best outcome for Russia would be to prolong the Gaza Strip conflict.

France -After the Cold War, France, which had a strong position in Europe, tried to restore the role of a prominent player in the international system. On June 29, 1991, the Council of Ministers of the European Community, which later following the Maastricht Treaty of 1992, was transformed into the European Union, adopted a resolution that reflected that "from now on, the protection of human rights will become one of the foundations of relations between the European Community and other states." Based on this decision, "the French government declared the right to intervene in the internal affairs of those states, which would be involved in massive violation of the humanitarian principle." With this, France claimed to extend its influence on the ongoing processes in Eastern Europe and tried to assert its impact on West Africa and its former colonies. However, after the appearance of a Russian private military company organized by the Kremlin, the situation took a turn for the worse for the French.

Russia began to spread its influence on the African continent with the support of Faustin Archange touadera, president of the Central African Republic. Supporting became more intensive in 2018-19, including bribing leaders of local paramilitary groups, providing protection for the president, participating in combat operations, and involving Russian diplomats in peace negotiations between the government of the Republic and armed groups.

- 19 Алек Александр Дугин. Основи геополитики. Книга 1, (Москва, Арктогея, 2000) 199.
- 20 Путин: евразийский союз путь к успеху и процветанию, accessed November 21, 2023, https://er.ru/activity/news/putin-evrazijskij-soyuz-put-k-uspehu-i-procvetaniyu.
- 21 The coup in Niger Europarl.europa.eu, accessed November 21, 2023, https://www.europarl.europa.eu/RegData/etudes/BRIE/2023/753951/EPRS_BRI(2023)753951_EN.pdf
- 22 РИА Новости, "Представители ХАМАС Встретились с Российскими Дипломатами в Москве," РИА Новости, October 26, 2023, https://ria.ru/20231026/khamas-1905438005.html
- 23 VOA News, "Britain: Invasion Forcing Russia to Partner with 'previously Less Desirable' Entities," Voice of America, October 9, 2023, https://www.voanews.com/a/zelenskyy-ukrainians-sensitive-to-attacks-on-israel-/7301608.html
- 24 სენარკლენი პ. არიფენი ი. მთარგმნელი -ცქიტიშვილი ნ. საერთაშორისო პოლიტიკა" თანამედროვე თეორიები და ამოცანები. (ილიას სახ. უნივ. თბილისი. 2014) 152.

Also, it created information networks and undermined France's reputation in the "Fransafrica region", which was accused of neo-colonial intervention.²⁵

The combination of Russian hard and soft power seems to have paid off, and today, the influence of France and the West on the African continent is declining. While in the recent past, African countries: Mali, Burkina-Faso and Niger cooperated closely with Paris in the "Sahal Alliance" (against jihadists), now protest demonstrations are being held in all three countries, accompanied by Russian flags and banners, demanding the withdrawal of French military forces and diplomatic missions.²⁶

The developments in West Africa not only challenge the African interests of France but also confront the interests of the United States because Niger has been seen as a base and supporter of United States counterterrorism efforts in the Sahel.

The Threat of Nuclear War

Military-political conflict in Europe -After February 24, 2022, following the Russian invasion of Ukraine, the discussion about the threat of using nuclear weapons amongst international relations experts, politicians and journalists intensified. On April 14, 2022, the director of the "United States Central Intelligence Agency," William Burns, stated that "Given the potential desperation of President Putin and the Russian leadership, given the setbacks that they've faced so far, militarily, none of us can take lightly the threat posed by a potential resort to tactical nuclear weapons or low-yield nuclear weapons."

On October 26, 2022, after Russia conducted exercises of strategic nuclear forces, the threat of using nuclear weapons was discussed again. Due to the permanent rhetoric related to the use of nuclear weapons by the Russian President, the Polish President announced on October 6, 2022, his desire to participate in the "Nuclear Sharing Program". Vladimir Putin denied the possibility of using nuclear weapons the next day, but despite the reassuring statement, he continued to manipulate the topic of nuclear weapons: -in the summer of 2023, he announced that "the first batch of Russian tactical nuclear weapons is located in Belarus"; On September 2, 2023, Russia commissioned and deployed an advanced intercontinental ballistic missile, the Sarmat, about which Putin said in the summer of 2022 that "it (the Sarmat) will make those who try to intimidate Russia with aggressive rhetoric think twice."

East Asia and the Indo-Pacific region - The threat of nuclear confrontation from time to time reaches a high point in the East Asia and Indo-Pacific region, where the interests of several nuclear-weaponised states collide with each other. Especially the interests of the international system global players - China and the United States intersect.

Along with the rapid economic growth, China attempts to form itself as the East Asian hegemon and take complete control of the region. Against this background, with regional powers such as Japan, Taiwan (officially the Republic of China), Malaysia, Vietnam, and the Philippines, periodically, China face both geopolitical and geoeconomic problems, which are forcing regional small powers to seek security through cooperation with the United States.²⁸

The United States perceives the rise of modern China and its attempt to dominate the global system as a principal challenge. It relies mainly on Japan and the Republic of Korea to contain China's regional expansion. However, the military-political tension between China and the United States mostly are related to the issue of Taiwan. In the latest period, in early June 2021, the situation became tense after China accused the Taipei government of strengthening relations with the United States. The Chinese government has sent 28 fighter jets to put pressure on Taiwan. At the same time, he urged the United States to be careful regarding the issue of Taiwan. Similar tensions were created on August 2, 2022, when "the Speaker of the United States House of Representatives", Nancy Pelosi, visited Taiwan.

Another source of nuclear threat in the East Asian region is North Korea, which poses a critical challenge to global security. Along with testing weapons and missiles, Kim Jong-un threatens that his available missiles can reach the United States. It is worth noting that in 2022, North Korea tested more than 90 different types of missiles, including in Japanese airspace. At the same time, North Korean leader Kim Jong-un is trying to establish new political relations to strengthen his position. In July 2023, high-ranking delegations from Russia and China visited North Korea, which indicated the deepening of the trilateral relationship.²⁹

In the East Asia and Indo-Pacific region, the United States is taking productive steps to contain not only

²⁵ Global Public Policy Institute (GPPi), "Russia's Growing Influence in Africa," GPPi, accessed November 21, 2023, https://gppi.net/2022/07/14/russias-growing-influence-in-africa.

²⁶ Lisa Bryant, "France Struggles to Reshape Relations in Africa," Voice of America, September 6, 2023, https://www.voanews.com/a/france-struggles-to-reshape-relations-in-africa-/7257057.html

²⁷ Bartosz Sieniawski, "Poland Wants NATO Nuclear Weapons at Home," www.euractiv.com, October 6, 2022, https://www.euractiv.com/section/all/short_news/poland-wants-nato-nuclear-weapons-at-home/.

²⁸ The Globalization of World Politics an Introduction to International Relations, (Oxford University Press 2014) 239.

²⁹ Missile Defense Project, "North Korean Missile Launches & Nuclear Tests: 1984-Present," Missile Threat, June 1, 2023, https://missilethreat.csis.org/north-korea-missile-launches-1984-present/.

China but also North Korea. On September 15, 2021, the "Tripartite Security Partnership AUKUS" was established, in which Australia, the United Kingdom and the United States joined. As part of the partnership, the United States and the United Kingdom will help Australia acquire nuclear submarines for its navy. Also, on August 18, 2023, a tripartite Cooperation was formed. The three countries -Japan, South Korea and the United States, agreed to increase cooperation in the Defense sector, mainly aimed at monitoring North Korean missile launches and preventing cyber activities.³⁰

The South Asian region -The Indo-Pakistani conflict has its origin in 1947 and continues to this day, which includes three wars (1965, 1971, 1999.), numerous skirmishes and armed border conflicts. The leading causes of the antagonism are the Kashmir region and the disputed border area near the Siachen Glacier. In 2019-2021, the situation between the countries in the Kashmir region became extremely tense, especially in 2019, when the parties used aviation and air defence systems. Also, the parties even reached the limit of using missiles. However, in February 2021, everything ended peacefully, and the Pakistani and Indian militaries issued a joint armistice statement, and the fire ceased. Given that the parties have numerous experiences violating ceasefire agreements, including the 2003 one, it is difficult to predict how long the fragile peace will last.

The Middle East - Another significant issue of nuclear danger is the Israeli-Arab conflict, which began in 1948, the day Israel declared its independence (1948-49; 1956; 1967; 1973; 1982; 2006.) and continues to this day. The latest conflict, which began on October 7, 2023, with a brutal terrorist attack on Israel by the "Palestinian resistance movement Hamas", has drawn a strong response from the international community and is taking place amid severe tensions between Israel and Hamas supporters. The probability that the conflict will grow into a large-scale war between Israel and the Arab countries and that Israel will use its nuclear arsenal to save its state is very low. However, the danger still exists.³¹

Against the backdrop of regional and global conflicts in the modern international system, is there a real threat of using nuclear weapons in the 21st century? It is impossible to give a direct and comprehensive answer to this question. However, judging by the experience from the last century, we will find both positive and negative responses to this question. In conditions where the "inevitable retaliation factor" did not exist, the United States used nuclear weapons. But when the "Mutually assured destruction (MAD)" factor appeared in the bipolar international system, the parties refrained from using nuclear weapons, which indicates the tendency of decision-makers to make rational choices.

Kenneth N. Waltz, as early as the 1970s, argued that "states armed with nuclear weapons may have stronger incentives to avoid war than states armed conventionally." He also believed that "Decisions to use nuclear weapons may be decisions to commit suicide." From his standpoint, "Nuclear forces are useful, and their usefulness is reinforced by the extent to which their use is forestalled." Consequently, he concluded that "nuclear weapons deter nuclear weapons; They also serve to limit escalation." 32

It is clear that "nuclear deterrence" and the "mutually assured destruction" factor ensured the stability of the global system in the bipolar world. However, it is difficult to say what role nuclear weapons will have in the conditions of the Russia-China multipolarity attempt and the struggle for hegemony of the United States. Taking into account the statement of Vladimir Putin on 18.10.2018 that "we will go to heaven and they will just die", once again, it shows that the threat of using nuclear weapons is actual.³³

Conclusion

Based on the study and analysis of the available materials related to nuclear forces and the current dynamics in the global system, observation of the development of events and the statements of people involved in global politics, it becomes clear that the nuclear states play a crucial role in the stability of the international system. For the reason that the states attempted to strengthen their positions in the international system, after the appearance of the first nuclear state at the end of World War II, atomic weaponry spread rapidly until the end of the 20th century, with these tendencies being maintained at the beginning of the 21st century: -The fact that Australia, in cooperation with the United States and Great Britain, is legally trying to acquire a nuclear arsenal once again indicates the role of nuclear weapons in global politics.

The ultimate challenge to the stability of the international system is the ambitions of almost all nuclear states, which include more or less all the explosive regions of the world such as Europe, East Asia and the Indo-Pacific, South Asia, the Middle East and West Africa. With this, it is worth noting the ongoing processes on

^{30 &}quot;Joint Leaders Statement on AUKUS," The White House, September 15, 2021, https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/15/joint-leaders-statement-on-aukus/.

^{31 &}quot;Israeli Official Calls for Use of 'Doomsday Weapons' against Gaza," Hindustan Times, October 11, 2023, https://www.hindustantimes.com/world-news/israelpalestine-latest-israeli-official-calls-for-use-of-doomsday-weapons-against-gaza-101697032521334.html

³² Kenneth N. Waltz, Theory of International Politics, (University of California, Berkeley, Addison-Wesley Publishing Company, Inc. 1979) 74-175; 182; 187; 188.

³³ Kenneth N. Waltz, Theory of International Politics, (University of California, Berkeley, Addison-Wesley Publishing Company, Inc. 1979) 74-175; 182; 187; 188.

the African continent, where there is a tendency for the decline of French-backed democratic powers and the rise of Russian-supported authoritarian regimes.

Analyzing the ambitions of the nuclear states, it is clear that the three major players -The United States, China and Russia represent a challenge to the stability of the international system since these forces are more or less involved in all the military-political confrontations mentioned above. However, The security architecture of the global system will most likely be decisively influenced by the results of the ongoing Russia-Ukraine war in Europe, as this conflict is directly related to the tension between the idea of "Russian Eurasianism" and "the Western order" proposed under the leadership of the United States.

Against the background of the ongoing regional and global conflict in the international system, several centres of nuclear escalation are emerging: Europe, East Asia and the Indo-Pacific region, South Asia and the Middle East. However, as has already been mentioned more than once, based on the nuclear rhetoric, a significant threat is related to the ongoing Russia-Ukraine war in Europe and comes from the Russian Federation.

To summarize, nuclear proliferation and nuclear forces play a significant role in the global political system. However, the stability of the international system is vitally influenced by such nuclear powers, which are widely represented in the international system. With this, the "nuclear deterrence theory" and the "mutually assured destruction" factor still work. However, the threat of using nuclear weapons has existed in the past and will exist in the future. Finally, the global players in the international system are: - the United States, China and Russia. Consequently, the stability of the international system will depend on the future behaviour of these three global players, especially the United States and the Russian Federation.

References

- სენარკლენი პიერ დე, არიფენი ი. მთარგმნელი -ცქიტიშვილი ნ. საერთაშორისო პოლიტიკა" თანამედროვე თეორიები და ამოცანები. ილიას სახ. უნივ. თბილისი. 2014.
- Cathleen D. Cimino, World Trade Organization Overview and Future Direction, Congressional Research Service 2021.
- Frederick Soddy, M.A., F.R.S., The Interpretation of radium and the structure of the atom, New York 1922.
- Cohn Jacob, Lemon Adam, Montgomery Evan Braden, "Assessing the Arsenals", Past, Present, and Future, Center for Strategic and Budgetary Assessments (CSBA) 2019, p. 18-20, SIPRI Yearbook 2023.
- Baylis John, Smith Steve, Owens Patricia, "The Globalization of World Politics An Introduction to International Relations", Oxford University Press 2014.
- Kenneth N. Waltz, Theory of International Politics, University of California, Berkeley, Addison-Wesley Publishing Company, Inc. 1979.
- Asmus Ronald, The Little War That Shook the World: Georgia, Russia, and the Future of the West, the United States, New York, Palgrave Macmillan 2010.
- SIPRI Yearbook 2023, Armaments, Disarmament and International Security, Stockholm International Peace Research Institute, 2023.
- 2022 National Defence Strategy of The United States of America, U.S. Department of Defence, 2022.
- Дугин Александр, Основи геополитики, Книга 1, Москва, Арктогея, 2000.

Architecture of a New Nuclear Reality: Lessons Learned From The Russo-Ukrainian War

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Abstract

Modern prognoses of important global events are mostly based on one common assumption that the nuclear status-quo that was set after the Cold War is still maintained. In this paper I argue that assumption to be outdated since the architecture of the nuclear reality has changed after the emergence of the Hypersonic Missiles that compromised defense systems that were effective against Inter Continental Ballistic Missiles. Understanding this new reality could be helpful in explaining global events such as Russian-Ukrainian War.

One of the most important prerequisites for the Russo-Ukrainian war is the different way Russians think the international relations work. It is absolutely bizarre that this tremendous difference can be explained by the simple theory that almost all graduates learn in the political science class in college – Realism. Realism is a theory that stresses the state survival as an ultimate goal for the state-actors and evaluates their actions through the lens of responsibility, not taking the moral obligations into account.¹ Two of the most important ideas that are relevant to Realism and help us to get a hold of the Russian actions are "no one to call" and the "zero sum game".² The first one incorporates the proposal that because there is no such thing as a world government, there is not a higher power that states can turn to to ask for help. This concept basically means that states are all by themselves and there is no one coming to help them. This explains why Russian officials act shocked and betrayed when the West supplies weapons to Ukraine: while the civilized world agrees that this is the right thing to do, Russians think it is none of their business. The second idea called "the zero sum game" in simple words means that no state can get stronger without making the other state(s) weak. The process of state-strengthening happens at the expense of the other states.³ When matched with the reality of the Russo-Ukrainian war it is perspicuous why Ukraine joining NATO is perceived as a threat by Russia: even if Ukraine just by itself might not be getting stronger it helps NATO to take steps to be more impregnable. By definition of the zero-sum game, this must mean that Russia is inevitably getting weaker.

Keywords:

Russian-Ukrainian War, Nuclear Threat, Realism, Hypersonic Missile, Inter Continental Ballistic Missle.

 $^{1 \ \} Antunes. \ "Introducing \ Realism \ in \ International \ Relations \ Theory."$

² Antunes. "Introducing Realism in International Relations Theory."

³ Hillison. . "The Potential and Pitfalls of a Zero-Sum Grand Strategy."

"If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle."

- Sun Tzu, The Art of War

Introduction

Almost everyone in the civilized world agrees that Russian aggression in Ukraine is Unjustified. A full-scale war that Russian officials still refer to as a Special Operation⁴ has been going on for more than a year and a half. Since the very first day of this war it earned non-stop critique from the international community; financial, technological, industrial and military sanctions against Russia; political isolation of Russian officials;⁵ arrest warrant for the President of Russia⁶ and many other actions that have one common goal amongst them: to weaken Russia to the point where it can no longer continue the war. We can blame the Russian stubbornness for them not giving up, or maybe we can berate the Western leaders for not being as categorical as they need to be, but the main goal of the war coming to a halt has yet to be achieved. Even if the idea that weakened Russia will not have the ability to continue the war sounds good at first, it sounds terrible after considering their nuclear abilities. As Winston Churchill once said "Beware of driving men to desperation. Even a cornered rat is dangerous", so it could be that the West wants to weaken Russia, but it is aware of what could possibly happen if Russians feel cornered. If we consider what has been going on at the Russian border since the collapse of the Soviet Union from the Russian perspective, we might think that Russians feeling cornered is exactly the case: Lithuania, Latvia and Estonia have already joined NATO,7 Ukraine and Georgia are promised to be8 and their influence on the Nagorno-Karabakh region is decreasing rapidly after Azerbaijan gained full control over it. Occupied regions in Georgia, Ukraine and Moldova are the last remaining drops of their ocean of influence in that region. At the same time, we should draw attention to the role of Turkey, which is a powerful state neighboring our region, which has made a significant contribution to Azerbaijan's victory over Armenia. Once a restless enemy of Russia is now taking over the Russian sphere of influence.

The facts mentioned above undoubtedly indicate that Russia's image as a global power is weakening. However, the prognoses of upcoming events are contradictory: some think that Ukraine will win the war with the Western military and financial aid; some think that Russians will be able to dig in deep into their defensive positions which could possibly prolong the war indefinitely. Either way, both types of prognoses are based on the fact that the nuclear 'environment' stays the same. But the way of thinking that no one can win the nuclear war is now outdated.

Main Part

Was an Unwritten Agreement Between Russia And NATO Breached by Western and USA Leaders?

When asked about the most hideous failures of the twentieth century politics one would expect an average person to answer one of two things: World War I or World War II. But as one would also expect the President of the Russian Federation does not think like the average person and that is why he thinks that the fall of the Soviet Union was "the greatest geopolitical catastrophe of the century." Ukraine (like other post-soviet countries) dissociated from previously powerful Russia's sphere of influence and became independent. That in theory meant that Ukraine was independent in making its political decisions. That was not exactly the case as there were occasions when Russia tried to interfere with Ukrainian political life. In fact, the Russo-Ukrainian war (both in 2014 and 2022) is itself an example of Russia not allowing Ukraine to make an independent political decision to join NATO.

Even if one has just trivial knowledge about international relations, they possibly know that NATO and Russia do not get along well. While this seems like a simple truth, when Russo-Ukrainian war is discussed parties struggle to incorporate it to understand that stronger NATO does not mean assured peace in Europe for everyone. From Western perspective powerful NATO indeed translates into tranquility since that means more democracy,

- 4 Osborn. "Russia's Putin authorizes 'special military operation' against Ukraine."
- 5 Barigazzi. "EU moves toward new official Russia policy: Isolation."
- 6 Beaumont. ""What does the ICC arrest warrant for Vladimir Putin mean in reality?"
- 7 Banka. "The Breakaways: a retrospective on the Baltic road to NATO."
- 8 Brunnstrom. "NATO promises Ukraine, Georgia entry one day."
- 9 Fukuyama. "Why Ukraine Will Win."
- $10\,$ Bartholomew. "Nato chief warns nations must prepare 'for a long war' as it happened."
- 11 Dlugy. "From Gorbachev to Putin."
- 12 Herbst. "Foreign interference in Ukraine's election."

more openness and more cooperation among states. However, for Russia that is just another wave of NATO expansion, which actually brings NATO unprecedentedly close to Russian borders. While it is true that the Baltic States joined NATO in 2004, they arguably did not pose an imminent threat to Russia back then. On the other hand, Ukraine's possible acceptance in NATO is a no-go for Russia: back in 2008, when on the Bucharest Summit it was announced that Ukraine and Georgia would eventually become NATO members, Russians sent a clear message: "Georgia's and Ukraine's membership in the alliance is a huge strategic mistake which will have most serious consequences for pan-European security." Russians were playing no games when they said NATO expansion was going to cause security issues in Europe and to make sure everyone understood how serious they were, they started a full-scale war against Georgia just after four months. Russia's actions in Ukraine have intrinsically the same goal as they had in Georgia: to make sure these countries do not join NATO.

From a practical point of view, the threat from Russia in the region is increasing and the West continues to take a cautious approach towards the integration of the Caucasian states into NATO and the European Union. Due to the nature of the Russian political system, even if Putin is not at the head of the government, he will most likely be replaced by someone who shares his visions. The growth of national chauvinism and revanchist ideas in Russian society also indicates that Russia's current policy towards neighboring regions will remain unchanged. Russia aims to reunify the former Soviet republics, and if it can't do that, it wants to at least take control over them. Also Russia's goal is to eliminate the "interference" of the West in their space. Therefore, Russia will not disappear anywhere in the nearest future.

Tensed Relations Between Nuclear Powers And Reasons Making The Conditions Even Tenser.

Nuclear weapons are the most power weapons that can bring destruction on an unparalleled level. Just by owning such weapon systems any country becomes a formidable force. But the influence that comes alongside to owning a nuclear weapon goes way beyond military power. One of the most important purposes of nuclear weapons is deterrence, which in International Relations is defined as a strategy to "prevent or discourage another state from taking an action that is considered undesirable or threatening. The goal of deterrence is to convince the other party that the costs of taking the undesirable action would outweigh the potential benefits." Nuclear states can deter their enemies by either showing them that their goals will never be achieved, or by illustrating possible costs that will come after their undesirable action. ¹⁶

Besides their ability to bring destruction on a colossal scale, nuclear weapons have one specific characteristic that makes them even more dangerous. Since the invention of the nuclear bomb nuclear countries have started to think about the ways to deliver them right into their enemy's backyard. The Soviets led the race with the R-7, which became the first operational Inter Continental Ballistic Missile by the end of 1950's.¹⁷ Since then the race has been non-stop. Nuclear states were trying to improve their missiles to deliver nukes faster and further than their enemies, but also realized that they needed new defense systems that could shoot down incoming Inter Continental Ballistic Missiles. Inter Continental Ballistic Missile is powerful mean to deliver nuclear weapons to a target, but it has its limitations: in order to hit target that is located thousands of Kilometers away, it needs to fly up into space where it spends 90% of its flight time.¹⁸ Being in space helps the missile to accelerate rapidly due to absence of oxygen in space and therefore it causes reduced drag.¹⁹

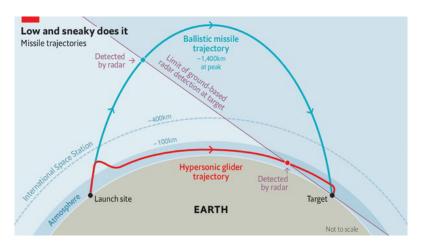


Figure 1 Comparison of Hypersonic and ICBM Trajectories

¹³ John. ""Russia criticizes NATO pledge to Ukraine, Georgia."

¹⁴ Dickinson. "The 2008 Russo-Georgian War: Putin's green light."

¹⁵ The Kootneeti Team. "What is Deterrence in International Relations?"

¹⁶ The Kootneeti Team. "What is Deterrence in International Relations?"

¹⁷ Johnson. "A History of Exceptional Service in the National Interest." P. 101

¹⁸ McFadden. "What are ICBMs and how do they work?"

¹⁹ McFadden. "What are ICBMs and how do they work?"

Since the first nuclear weapon was created, states have begun to work on systems that would counter them. Nike Hercules was the very first operational anti ballistic missile system was created by the United States of America in 1950s, which was able to intercept incoming short-range ballistic missiles. Missile flying in space is where the biggest drawback of the Inter Continental Ballistic Missile lies: while being in space the missile becomes susceptible to the enemy's radar, which gives the enemy a chance to calculate the speed, flight path, missile's target, and the remaining time to contact. With this information enemy can launch Anti-Ballistic Missile, which can successfully intercept the Inter Continental Ballistic Missile before it hits the target, cause premature detonation and therefore decrease the devastating effects that the missile would otherwise have caused. For decades this was the reality that the world lived in and in my opinion, one of the reasons why we took nuclear peace for granted.

The latest technological inventions make our ways of thinking about the nuclear weapons and defense systems obsolete. With the Hypersonic Missiles emerging on the horizon traditional defense systems are outdated. Anti-Ballistic Missiles primarily depend on the information control center gets from the radar. With Inter Continental Ballistic Missiles this works well, because when the missile crosses the radar beam, defense system has enough time to react, since the missile itself is still far away from the target. Even if earth's curvature leaves 'blind spots' for the radar since the radar beam follows a straight line and the earth is curved, there still is a good chance for a successful interception.²¹ On the other hand Hypersonic Missile works differently which compromises Anti-Ballistic defense systems for several reasons.

First of all the height from the ground level at which the Hypersonic Missile can operate at is much lower compared to the required height for the Ballistic Missile. Average flight height of an Inter Continental Ballistic Missile is around 1,200 km ~ 1,400 km, which is way above the atmosphere that ends at around 100 km above the Earth's surface. However, average flight height for Hypersonic Missile is around 30 km ~ 40 km above the ground level, which is much lower compared to the height of the Ballistic Missile. Second, Ballistic Missiles have flight path that can be determined by defense systems. This creates a chance to successfully intercept such missiles on their path of flight. On the contrary, Hypersonic Missile can be maneuvered, which makes its path of flight unpredictable. Combined with its enormous speeds that go up to 25 mach, or 30, 000 km/h, it is much problematic to intercept them with traditional defense systems. Third, detection point of a Ballistic Missile is further away from the target compared to Hypersonic Missile, which with today's defense systems can only be detected only seconds before it hits designated target.

With all of that being said, it is counterintuitive to think that older defense systems are capable of countering the Hypersonic Missiles, but according to the news Ukraine was able to shoot down Russian made Kinzhal Hypersonic Missile with the Patriot Missile System, which was manufactured in 1970s.²⁴ This could possibly mean two things: first, it was an isolated incident and we cannot draw conclusions from it since it cannot be applied to Hypersonic Missiles in general; and two, that Russians are lying and Kinzhal is not as good as Russians claim it to be. Since there is no concrete proof to prove or disprove one or the other, I will leave this topic open to my readers to decide.

Conclusion

The reasons mentioned above completely change the way we have to look at the nuclear reality. Hypersonic Missiles are developing much faster than the defense systems that can counter them. This means that the nuclear history is repeating and old status-quo is no longer in place. If there is no substantial way to counter the hypersonic threat, then everyone is going to try to have as much Hypersonic Missile as they can. This follows the Cold War era nuclear arms race step by step, and puts everyone under the greater risk. Risk is further increased when autocratic countries like Russia and China have that weapon and the Western countries do not. This imbalance gives Russia military leverage to negotiate its interests in the Russian-Ukrainian War with the West. Understanding Russian perspective helps us to know how they perceive this situation and with nuclear advantage on top of that it is naive to think that Russians plan on stepping down and accepting the West to dictate the terms of negotiations.

²⁰ Johnson. "A History of Exceptional Service in the National Interest."

²¹ Brain. "What is Radar?"

²² Mahshie. "Hypersonic Defense."

²³ Mahshie. "Hypersonic Defense."

²⁴ Tucker. "Ukraine downed a hypersonic missile with a Patriot. What that says about the future of weapons."

References

Antunes, Sandrina. "Introducing Realism in International Relations Theory". E-International Relations, 2018. Introducing Realism in International Relations Theory (e-ir.info)

Banka, Andris. "The Breakaways: a retrospective on the Baltic road to NATO". War On The Rocks, 2019.

https://warontherocks.com/2019/10/the-breakaways-a-retrospective-on-the-baltic-road-to-nato/

Barigazzi, Jacopo. "EU moves toward new official Russia policy: Isolation". Politico, 2022.

https://www.politico.eu/article/russia-isolation-european-union-policy/

Bartholomew, Jem. "Nato chief warns nations must prepare 'for a long war' – as it happened". The Guardian, 2023.

https://www.theguardian.com/world/live/2023/sep/17/russia-ukraine-war-live-nato-chief-warns-of-no-swift-end-to-war-russian-missiles-hit-agricultural-facility-in-odesa

Beaumont, Peter. "What does the ICC arrest warrant for Vladimir Putin mean in reality?". The Guardian, 2023.

https://www.theguardian.com/world/2023/mar/17/icc-arrest-warrant-vladimir-putin-explainer

Brain, Marshall. "What is Radar?" How Stuff Works, 2023.

https://science.howstuffworks.com/radar.htm

Brunnstrom, David. "NATO promises Ukraine, Georgia entry one day". Reuters, 2008.

https://www.reuters.com/article/news-nato-col-idCAL0179714620080403

Dickinson, Peter. "The 2008 Russo-Georgian War: Putin's green light". Atlantic council, 2021.

The 2008 Russo-Georgian War: Putin's green light - Atlantic Council

Dlugy, Yana. "From Gorbachev to Putin". New York Times, 2022.

https://www.nytimes.com/2022/08/31/briefing/russia-ukraine-war-gorbachev-military.html

Fukuyama, Francis. "Why Ukraine Will Win". Journal Of Democracy, 2022.

https://www.journalofdemocracy.org/why-ukraine-will-win/

Herbst, Jogh. "Foreign interference in Ukraine's election". Atlantic Council, 2019.

https://www.atlanticcouncil.org/in-depth-research-reports/report/foreign-interference-in-ukraine-s-election/

Hillison, Joel. "The Potential and Pitfalls of a Zero-Sum Grand Strategy". Science Direct, 2019.

The Potential and Pitfalls of a Zero-Sum Grand Strategy - ScienceDirect

John, Mark. "Russia criticizes NATO pledge to Ukraine, Georgia". Reuters, 2008.

Russia criticizes NATO pledge to Ukraine, Georgia | Reuters

Johnson, Leland. "A History of Exceptional Service in the National Interest". Sandia National Laboratories, 1997.

Mahshie, Abraham. "Hypersonic Defense". Air And Space Forces, 2022.

https://www.airandspaceforces.com/article/hypersonics-defense/

McFadden, Christopher. "What are ICBMs and how do they work?" Interesting Engineering, 2022.

https://interestingengineering.com/innovation/what-is-an-intercontinental-ballistic-missile-and-how-does-it-work

Osborn, Andrew. "Russia's Putin authorizes 'special military operation' against Ukraine". Reuters, 2022.

https://www.reuters.com/world/europe/russias-put in-authorises-military-operations-donbass-domestic-media-2022-02-24/

The Koonetneeti Team. "What is Deterrence in International Relations?". The Kootneeti, 2022.

https://thekootneeti.in/2022/09/15/what-is-deterrence-in-international-relations/#: ``:text=Deterrence%20 is %20 a %20 strategy %20 used, would %20 outweigh %20 the %20 potential %20 benefits.

Tucker, Patrick. "Ukraine downed a hypersonic missile with a Patriot. What that says about the future of weapons". Defense One, 2023.

https://www.defenseone.com/technology/2023/09/what-ukraines-shoot-down-hypersonic-missile-patriot-says-about-future-weapons/390498/

Russia – Ukrainian War Impacts On Social-Economic and Political Aspects

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Abstract

The Russia-Ukraine war and its impact on social, political, and economic aspects is a very relevant issue in academic literature. The authors look at the issue from different perspectives, however, they all agree that war can be described as an important challenge for the world. The impact of the war itself is manifested in various issues, the most important of which are geopolitical threats and the increase in food prices, which every citizen feels every day. As we read in the 2022 report of the World Bank Since the battle began, the price of coal has climbed by 60%, the price of natural gas in Europe by more than 30%, and the price of wheat has increased by almost 40%. The second issue is the increase in energy prices, which significantly affected the countries that depended on Russia. It should also be said that the business sector worldwide faced significant challenges and only individual companies survived the economic shock worldwide. During the war, disinformation from Russia and conspiracy theories were the issues that caused indignation among the residents of the neighboring states. Society at the beginning of the conflict became strongly prone to depression and fear. Some researchers, based on recent events, conclude that that would be a partial victory for the Ukrainians, but it would come at a heavy price.

There are no empirical studies in the part of Georgia, although we can rely on various sources, state infor-

There are no empirical studies in the part of Georgia, although we can rely on various sources, state information, and expert interviews, which were conducted under the conditions of this study. By 2022, 1.46 million Russian citizens entered Georgia, which was 5 times more than the figure of the previous year. The expert interview revealed that this was the basis of fear among the population. The increase in Russian migrants in the state raised fears that they might become permanent residents, raising the threat of another war. At the end of 2022, 112,733 Russian citizens remained in Georgia. It is important to note that 109,900 citizens opened accounts in Georgian banks in 2022, while 15,186 Russian companies were registered. Experts say that the increase in the rate of imports to Russia, which has increased by 79%

1.46 million in 2022, the number of bank accounts 109,000, 15,186 companies registered.

Tourism indicators increased by 490%, electricity import by 4 times, petroleum products by 280%,

compared to the previous year and amounts to 1.8 billion dollars, it is worrying. Remittances and tourism from Russia have also increased, which in the case of Russian tourists is 490% higher than the previous year. The interviewed experts say that the Georgian economy is growing because the Georgian authorities do not refuse the entry of Russian citizens, and it is also dangerous that the Georgian market is not diversified enough. Experts say that the Georgian authorities argue that they do not want to escalate the conflict and try to maintain peace inside the country, and they cite the argument that Georgia supports Ukraine and tries to help in humanitarian and international organizations. It should also be noted here that after the start of the war in Georgia, the import of oil products (fuel) from Russia increased the most - by 280% (by 118 million US dollars). Electricity imports increased 4 times (by 9 million US dollars). Coal and coke imports increased 3 times and totaled 23 million USD (Transparency, 2022)

State policy and martial law (war situation) are a kind of tool for the government to maintain its influence on the processes and stop the population in a dilemma - either war or peace.

Keywords:

Russia-Ukraine War, Social, Political, and Economic Aspects, Tourism Indicators State Policy and Martial Law.

Introduction

The Russia - Ukraine war and its impact on social, political, and economic aspects is a **very relevant** issue in academic literature. 12 3

The authors look at the issue from different perspectives, however, they all agree that war can be described as an important challenge for the world. The impact of the war itself is manifested in various issues, the most important of which are geopolitical threats and the increase in food prices,⁴ which every citizen feels every day. As we read in the 2022 report of the World Bank Since the battle began, the price of coal has climbed by 60%, the price of natural gas in Europe by more than 30%, and the price of wheat has increased by almost 40%.⁵ The second issue is the increase in energy prices, which significantly affected the countries that depended on Russia.⁶ It should also be said that the business sector worldwide faced significant challenges and only individual companies survived the economic shock worldwide.⁷ During the war, disinformation from Russia and conspiracy theories were the issues that caused indignation among the residents of the neighboring states. Society at the beginning of the conflict became strongly prone to depression and fear.⁸ Based on recent events, some researchers conclude that That would be a partial victory for the Ukrainians, but it would come at a heavy price.⁹

There are no empirical studies in the part of Georgia, although we can rely on various sources, state information, and expert interviews, which were conducted under the conditions of this study. The **novelty** of this study is the study of the peculiarities of the political, economic, and social situation of Georgia against the background of the Russia-Ukraine war.

By 2022, 1.46 million Russian citizens entered Georgia, which was 5 times more than the figure of the previous year.¹⁰ (The expert interview revealed that this was the basis of fear among the population. The increase in Russian migrants in the state raised fears that they might become permanent residents, raising the threat of another war.

The **purpose** of the research is to study the political, economic, and social changes in Georgia against the background of the Russia-Ukraine war. Based on the given goal, the task of the research is to review the academic literature related to the topic; Identification of challenges with the issue of state security in Georgia. Depending on the purpose of the research, we can identify the research question:

What kind of influence does the Russia-Ukraine war have on the political, economic, and social aspects of Georgia?

Considering the research design, we can determine the following assumption.

- 1. The Russia-Ukraine war may affect the European integration process of Georgia.
- 2. Incoming migration flows from Russia may pose a threat to the national security of Georgia.

The methodology of this research is based on qualitative research methods. Namely: document analysis and in-depth interviews. In the first case, the documents that are directly focused on the research issue are analyzed. And 3 in-depth interviews used in the paper were conducted with experts in the field in September 2023.

Therefore, the three aspects highlighted in the article are how and what kind of impact the Russian-Ukrainian war had on the current situation in Georgia, specifically in the political, economic, and social contexts.

Main Part

Political Context

- 1 Júlia Hamráková, "The Economic Costs of Conflict: A Case Study of the Russo-Ukrainian War." Published by Univerzita Karlova, Fakulta sociálních věd. 2022
- 2 M. Tárik, "The Russo-Ukrainian War Is A Threat To Food Security In The Arab World." Atlas Journal 8, no. 48 (2022): 2748–2755
- 3 Foued Saâdaoui, Sami Ben Jabeur, and John W. Goodell, "Causality of Geopolitical Risk on Food Prices: Considering the Russo–Ukrainian Conflict," Finance Research Letters 49 (2022).
- 4 Foued Saâdaoui, Sami Ben Jabeur, and John W. Goodell, "Causality of Geopolitical Risk on Food Prices: Considering the Russo–Ukrainian Conflict," (2022).
- 5 World Bank Commodities Price Data 2022
- 6 M. Tárik, "The Russo-Ukrainian War Is A Threat To Food Security In The Arab World." Atlas Journal 8, no. 48 (2022): 2748-2755.
- 7 E. Ndhlovu, & Dube, K. (2023). Restaurants Industry Recovery Challenges from COVID-19 Amidst the Russo-Ukrainian War. In COVID-19, Tourist Destinations and Prospects for Recovery: Volume One: A Global Perspective (pp. 337-356). Cham: Springer International Publishing.
- 8 A. Chudzicka-Czupała, H. N.apon, S. K. Chiang, M. Żywiołek-Szeja, L. Karamushka, C. T. Lee, .. & Y. L Chen,. "Depression, Anxiety, and Post-Traumatic Stress During the 2022 Russo-Ukrainian War: A Comparison Between Populations in Poland, Ukraine, and Taiwan." Scientific Reports 13, no. 1 (2023): 3602.
- 9 Y. Bauer, "The Russo-Ukrainian War Through a Historian's Eyes." Israel Journal of Foreign Affairs 16, no. 1, 2022, p. 15-18. doi: 10.1080/23739770.2022.2056376.
- 10 Geostat, Distribution of Statutory Immigrants and Emigrants by Citizenship, 2022

Euro-Atlantic integration is one of the priorities of Georgia's foreign policy, hence the country's goal is to become a full member of the European Union. Along with Central and Eastern European states, Georgia considers the Euro-Atlantic vector to be the only guarantee of its security, which will ensure its independence from Russia.

Georgia's National Security Concept identifies "occupation of Georgian territories by the Russian Federation and terrorist acts organized by the Russian Federation from the occupied territories" as the number one threat to Georgia's national security. Georgia, along with Ukraine and Moldova, signed an AA/DCFTA with the EU on 27 June 2014. The agreement was ratified in the Georgian Parliament on 18 July. Despite the frequent turbulence between the ruling Georgian Dream coalition and the opposition United National Movement (UNM), overall Tbilisi has been a committed partner. This can be put down to several reasons including political consensus, broad public support from society, and a strong desire for democratic change. (Amanda Paul 2015)

On March 3, 2022, Georgia applied to join the European Union. On June 23, 2022, the European Council recognized Georgia's European perspective and expressed its readiness to grant Georgia the status of a candidate country after the 12 priorities defined in the European Commission's conclusion regarding Georgia's application for EU membership were fulfilled. This important decision paved the way for Georgia to join the European Union, as it has already been recognized that Georgia has the prospect of joining the European Union. The European Union publishes annual reports on the implementation of the association process to reflect the steps taken by Georgia in this direction.¹²

From the twelve-point plan of the European Union, the priority is to discuss the issue of political polarization, to ensure the cooperation of political parties based on the April 19 agreement. It should be noted that after the start of the Russia-Ukraine war, the toxic political polarization between the parties has deepened in Georgia, which has a direct impact on democratic tendencies. Therefore, the current situation contradicts the implementation of the above-mentioned recommendation, therefore it is important to pay more attention to the implementation of the mentioned priority. Despite the differences of opinion, the government does not give up the declared pro-Western course and declares its readiness to fulfill the recommendations of the European Union, which are a prerequisite for recognition as a candidate for EU membership.¹³

According to the expert, under the conditions of the Russia-Ukraine war, there is a danger for Georgia, which is constantly growing. Georgia must firmly follow the 12-point plan of the European Union to establish itself in the European Union, otherwise, it has no guarantee of security. As for political polarization, the parties must separate their priorities in the background of differences of opinion. (Face-to-face interview on 30.09.2023)

Economical Context

Georgia has a short-term economic impact caused by Russia's invasion of Ukraine, Georgia's refusal to join international sanctions against Russia, and the influx of temporary migrants. The increase in imports and increased economic dependence on Russia, energy dependence, and decrease in the share of the European Union in exports are noticeable; Further growth in the volume of remittances in the economy – the total forecast of remittances in 2022 has increased to 4 billion USD; The double-digit inflation caused by this increased demand is caused by externalities that, on the one hand, make living more expensive for the local population, and on the other hand, create a rather unsustainable climate in the long run.¹⁴

Several indicators should be noted:

- Real estate prices according to the data of the National Statistical Service of Georgia, in the first nine months of 2022, real estate prices increased by 10.7% on average. Prices have also increased for movable items like cars etc.
- Economic growth and inflation according to preliminary estimates, the average rate of economic growth in the first eight months of 2022 is 10.3%. The consumer price index (inflation) increased by 11.9% compared to the corresponding period of last year. Inflation, the rate of price growth is higher than the rate of economic growth.
- Trade in January-September 2022, exports in Georgia increased by 37.4%, and imports by 34.4%. Compared to previous years, the share of the European Union in exports decreased significantly if in 2019 (before Covid), the share of the European Union in exports was 21.9%, in 2022 This year, the share of the European Union in the total export amounted to 14.9%.
- Increasing dependence on Russia, especially in the context of dependence on imports according to Sax-stat data, in January-September, Georgian exports to Russia increased by 11.5%, while imports increased from \$720 million to \$1,244 million, which means approximately 70%.
- Import the import of oil products from Russia increased by 352%. Due to the relatively low prices and high profit margins in the Russian market, oil importers have increased their imports of refined fuel from Russia. If Russia's share in the import of petroleum products was 16.6% in the same period last year, this year it exceeded 42%. The import of other products from Russia increased by 188 million dollars. It should be noted that Georgia's

¹¹ Paul Amanda, "The EU in the South Caucasus and the Impact of the Russia-Ukraine War." (2015)

¹² European Council Conclusions 23 June 2022

¹³ Nodia Ghia, "The Influence of the Russian Invasion in Ukraine on Georgian Politics" (Caucasus Institute for Peace and Democracy Development, 2022)

¹⁴ The Economic Policy Research Center (EPRC)- Economy of Georgia - Impact of the War

dependence on Russian wheat is still high.

In the first nine months of 2022, the volume of remittances increased by 175% compared to the same period last year. Shortage of labor force and jobs - Georgia has a paradoxical situation with high rates of unemployment and at the same time a shortage of labor force. This is mainly due to the outflow of the labor force (up to 100,000 people left the country in 2021 alone). The latter trend is explained by the country's increasing dependence on remittances, that is when a large part of the population depends on remittances sent by immigrants.¹⁵

Because the number of remittances has increased, and Russian businesses have registered on the local market, it is not allowed to evaluate this only positively. At this stage, positive dynamics are noted from the point of view of monetary policy, however, dependence from an economic point of view is increasing, therefore the situation is complex and it is wrong to talk only about advantages. (Face-to-face interview 30.09.2023)

Social Context

To determine how compatible the coexistence of two different cultures in one space is, it is appropriate to review the academic literature related to this topic.

Acculturation is a psycho-social process that results from the balancing of two cultures while adapting to the prevailing culture of society. During acculturation, an individual receives, acquires, and adapts/integrates into a new cultural environment, or when someone else brings the culture with them.¹⁶

The acculturation literature defines biculturalism as a behavioral strategy of a nation that has four dimensions. 1) Integration Strategy - involves involvement in both dominant and ethnic cultures, 2) Assimilation Strategy - integration only in the dominant culture, 3) Separation Strategy - is involvement only in the ethnic culture. 4) Marginalization Strategy - not being included in any culture. ¹⁷ (Berry, J.W. 2003)

Given the social context, if an isolationist strategy develops, it may turn into a significant societal challenge in the future. In the case of secession, a particular group tries to distance itself from the dominant group of the host country to preserve its identity.¹⁸

In the part of the relationship between local and immigrant groups, great importance is given to the historical perspective and the experience of inter-ethnic relations. When an immigrant group creates a certain autonomy within a society, and at the same time there are negative historical experiences and perceptions in the society, this may lead to an escalation of the existing situation and threaten the stability of the society.¹⁹

Taking into account all the above-mentioned risks it would be an appropriate approach because, according to the latest data, the population perceives the influx of Russian citizens to Georgia and their economic activity negatively. 79% of the population does not agree with the visa-free entry of Russian citizens into Georgia and their purchase of private property and business registration.²⁰

Due to the fact that Georgia has bad historical relations with Russia, the 90s, the Abkhazia war, the August war, the occupied territories, and the creeping occupation, Georgian citizens naturally do not support the migration of Russian citizens to Georgia. In addition to all above mentioned aspects, it's obvious that we can see how the "Operation to protect its citizens" is carried out in the example of Ukraine. In this case, uncontrolled migration from Russia is a threat that may appear on Georgia's agenda at any time. (Face-to-face interview 07.10.2023)

Conclusion

The Russia-Ukraine war is still ongoing. It is important to note that Georgia's pro-Western foreign policy vectors have not changed under certain political pressures. Georgia's goal was integration in the Euro-Atlantic space. The purpose of this study was to determine the impact of the Russian-Ukrainian war on the political, economic, and social aspects of Georgia. After defining the research task, research question, and methodology, three expert individual in-depth interviews were conducted, and various documents were analyzed including ratified documents, non-governmental reports, government data, and policy documents. After processing the received data, it became possible to analyze the changes in the political, economic, and social aspects of Georgia since the beginning of the war between Russia and Ukraine.

The assumption expressed in the paper - that the Russia-Ukraine war may affect the European integration process of Georgia - was confirmed, because after the conflict political polarization in Georgia intensified, and its elimination is in the state's interest since it is considered the priority of the twelve-point plan. Summarizing the opinion of experts, we can determine that Russian migration flows may turn into a significant challenge for the country.

¹⁵ The World Bank - Georgia's Economic Growth to Slow Amid Impacts of War in Ukraine

¹⁶ L. M. Jacob, "Acculturation." Salem Press Encyclopedia. 2020.

¹⁷ J. W. Berry, "Conceptual approaches to acculturation" In K. M. Chun, P. B. Organista, G. Marín (Eds.), Acculturation: Advances in theory, measurement, and applied research 2003, p. 17–37. Washington.

¹⁸ Silber, MD, A Bhatt, and SI Analysts. "Radicalization in the West: The Homegrown Threat." 2007

¹⁹ Understanding Ethnic Minority Demands: A New Typology, Nationalism and Ethnic Politics, 18:3, 2012, p. 358-379.

²⁰ Georgian Survey of Public Opinion by IRI, March 2023.

References

- Hamráková, Júlia. "The Economic Costs of Conflict: A Case Study of the Russo-Ukrainian War." Published by Univerzita Karlova, Fakulta sociálních věd. 2022
- Tárik, M. "The Russo-Ukrainian War Is A Threat To Food Security In The Arab World." Atlas Journal 8, no. 48 (2022): 2748–2755
- Foued Saâdaoui, Sami Ben Jabeur, and John W. Goodell, "Causality of Geopolitical Risk on Food Prices: Considering the Russo–Ukrainian Conflict," Finance Research Letters 49 (2022).
- World Bank Commodities Price Data 2022 checked on 17:24 23.10.2023- http://bit.ly/497Bftm
- Ndhlovu, E., & Dube, K. (2023). Restaurants Industry Recovery Challenges from COVID-19 Amidst the Russo-Ukrainian War. In COVID-19, Tourist Destinations and Prospects for Recovery: Volume One: A Global Perspective (pp. 337-356). Cham: Springer International Publishing
- Chudzicka-Czupała, A., Hapon, N., Chiang, S. K., Żywiołek-Szeja, M., Karamushka, L., Lee, C. T., ... & Chen, Y. L. "Depression, Anxiety, and Post-Traumatic Stress During the 2022 Russo-Ukrainian War: A Comparison Between Populations in Poland, Ukraine, and Taiwan." Scientific Reports 13, no. 1 (2023): 3602
- Bauer, Y. "The Russo–Ukrainian War Through a Historian's Eyes." Israel Journal of Foreign Affairs 16, no. 1 (2022): 15-18. doi: 10.1080/23739770.2022.2056376
- Geostat, Distribution of Statutory Immigrants and Emigrants by Citizenship, 2022 checked on 17:33 23.10.2023 https://bit.ly/406cQAq
- Paul Amanda, "The EU in the South Caucasus and the Impact of the Russia-Ukraine War." (2015)
- European Council Conclusions 23 June 2022 checked on 17:36, 23.10.2023 https://bit.ly/46EflMT
- Ghia Nodia, "The Influence of the Russian Invasion in Ukraine on Georgian Politics" (Caucasus Institute for Peace and Democracy Development, 2022)
- The Economic Policy Research Center (EPRC)- Economy of Georgia Impact of the War checked on 17:39 23.10.2023 https://bit.ly/3Q0nxzW
- The World Bank Georgia's Economic Growth to Slow Amid Impacts of War in Ukraine checked on 17:41 23.10.2023 https://bit.ly/48YQu89
- Jacob, L. M. "Acculturation." Salem Press Encyclopedia. 2020.
- Berry, J. W. (). Conceptual approaches to acculturation. In K. M. Chun, P. B. Organista, G. Marín(Eds.), Acculturation: Advances in theory, measurement, and applied research 2003. p. 17–37. Washington.
- Silber, MD, A Bhatt, and SI Analysts. "Radicalization in the West: The Homegrown Threat." 2007.
- Understanding Ethnic Minority Demands: A New Typology, Nationalism and Ethnic Politics, 18:3, 358-379 (2012)
- (Georgian Survey of Public Opinion by IRI, March 2023) checked on 17:46 23.10.2023 https://bit.ly/45CHAKA
- IDFI Russian capital and Russian connections in Georgian business checked on 17:47 23.10.2023 https://bit.ly/3QbBB9M
- IDFI რუსეთის მოქალაქეების შემოდინება საქართველოში და საზოგადოებრივი უსაფრთხოების გამოწვევები checked on 17:49 23.10.2023 https://bit.ly/3S9lNXE

Estimated Economic Consequences of the War Russia and Ukraine

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Abstract

The conflict between Russia and Ukraine has ignited a very complicated economic crisis that goes far beyond just those two countries, Russia and Ukraine it also affected global economy in many ways and it will need some time to rehabilitate. This essay looks closely at how this economic crisis is affecting Russia and Ukraine, and how it spreads into various sectors of the economy like: including energy markets, agriculture, metals, the automotive and transportation industries, the timber sector, and financial markets. By studying all these effects, this analysis tries to explain what will happen to the economy in the long term and how both countries and the world can get out of this crisis. This essay enlarges our view and makes everything easy to understand and This is crucial to understand and make moves. We need to understand importance of this knowledge how this long conflict affects the economy and how we can make things better for both involved sides and for the whole world.

The significance of this topic cannot be overstated. It is crucial to comprehend the economic dimensions of the Russia-Ukraine conflict as they have far-reaching implications for not only the nations directly involved but also for international trade, energy security, inflation rates, and supply chains. By gaining a profound understanding of these economic consequences, stakeholders across the world can make informed decisions and develop strategies to navigate the challenging economic landscape shaped by this war. The relevance of this work is underscored by the ongoing nature of the conflict and its profound impact on the global economy. As the situation continues to evolve, the need for a comprehensive analysis of its economic dimensions is evident. Decision-makers in governments, businesses, and financial institutions must have access to well-informed insights to navigate the turbulent economic waters created by this war.

Keywords:

Wide-Reaching Consequences, Economic Impact, Potential Consequences, Sanctions, Alternative Sources, Economic Consequences Of Sanctions.

Introduction

The war between Russia and Ukraine is an issue of critical importance and wide-reaching consequences. This conflict's economic impact is both substantial and intricate, transcending the national borders of the involved nations and having a ripple effect throughout the global economy. This essay seeks to provide an extensive examination of the economic ramifications of this war, focusing on its immediate implications for Russia and Ukraine, while also exploring the disruption of key sectors such as energy, agriculture, metals, automotive and transport, the wood industry, and financial markets. In light of this analysis, we aim to assess the long-term economic repercussions and the potential pathways to recovery for both nations and the global economy.

Main Part

This essay provides an opportunity for readers to become well-acquainted with the complexities of the Russia-Ukraine conflict and its economic fallout. It offers a comprehensive review of the analysis conducted on the topic, synthesizing information from diverse sources to present a holistic view of the situation. Readers will be equipped with a broad understanding of how this war is influencing industries, economies, and markets, both locally and globally. The analysis conducted in this essay covers a wide spectrum of economic aspects, focusing on sectors critically affected by the conflict. The information presented includes an assessment of inflationary pressures, the disruption of energy markets, the impact on the agriculture and metals industries, the challenges faced by the automotive and transport sectors, consequences for the wood industry, and the turbulence experienced in financial markets. The economic implications for both Russia and Ukraine are examined, as well as the potential consequences for the broader international community.

With this analysis, we endeavor to provide readers with a well-rounded understanding of the war's economic consequences. The aim is to equip individuals, institutions, and governments with the insights needed to navigate the ongoing economic challenges and contribute to effective decision-making in the face of an ever-evolving global landscape. Our hypothesis, based on the analysis conducted, is that the economic consequences of the Russia-Ukraine war are multilayered and extend far beyond the initial costs of warfare. We contend that the conflict will have enduring economic repercussions and that understanding these implications is vital for future economic planning and policymaking. The global community must remain vigilant as it navigates these turbulent economic waters and seeks strategies for economic stability and recovery.

The historical backdrop of the ongoing Ukraine-Russia conflict is instrumental in understanding the economic consequences that have unfolded. The roots of this protracted conflict can be traced back to the disintegration of the Soviet Union and the territorial disputes that sprouted in its wake. These disputes have created a complex and tumultuous backdrop, continuing to fuel the conflict in Eastern Europe. To grasp the economic intricacies of the ongoing crisis, it is essential to delve into the historical context. The dissolution of the Soviet Union in 1991 led to the emergence of newly independent states, including Ukraine. As the dust settled, territorial disputes and long-standing tensions began to surface. Notably, Crimea, a region with a complex ethnic and historical composition, became a focal point of contention. Ukraine's historical claims over Crimea and Russia's strategic interests in maintaining control over the Black Sea Fleet's access to the Crimean Peninsula created a recipe for conflict. One of the critical turning points in this conflict occurred in 2014 when Russia annexed Crimea following a controversial referendum. The annexation was met with international condemnation and economic repercussions. Western countries imposed sanctions on Russia, targeting key sectors of its economy. These sanctions aimed to punish Russia for its violation of Ukraine's territorial integrity and to deter further aggression. Another pivotal development in the conflict was the emergence of self-declared republics in the eastern Donbas region of Ukraine, specifically Donetsk and Luhansk. These regions declared their independence, leading to prolonged and violent clashes with Ukrainian armed forces. The creation of these self-proclaimed entities not only exacerbated the humanitarian crisis but also had significant economic implications. The conflict disrupted the functioning of industries, infrastructure, and trade in these areas, causing economic hardship for the local population and further complicating the resolution of the crisis. The historical context of the Ukraine-Russia conflict is vital in comprehending the economic complexities that have unfolded over the years. It sheds light on the deeply rooted issues, territorial disputes, and geopolitical motivations that continue to shape the economic landscape of both nations and influence international relations. This historical perspective serves as a foundation for exploring the multifaceted economic ramifications in following article.

The Ukraine-Russia conflict is not solely rooted in historical disputes but is deeply entwined with geopolitical motivations and strategic interests. Understanding Russia's objectives in the region is crucial for assessing the economic consequences of the ongoing conflict. Russia's strategic interests in Ukraine are multifaceted. Ukraine's geographical location, with its vast territory and proximity to Russia, has significant geopolitical importance. The strategic Black Sea region and access to warm-water ports have long been a focal point for Russian interests. Controlling Crimea allows Russia to maintain its vital naval base in Sevastopol, home to the Black Sea Fleet. This strategic asset grants Russia a significant military advantage and bolsters its influence in the Black Sea region. Furthermore, Ukraine serves as a buffer state between Russia and NATO-aligned countries, a fact that exacerbates Russia's security concerns. Moscow has been apprehensive about NATO's eastward expansion and views

a pro-Western Ukraine as a potential security threat. As such, Russia has pursued policies to maintain influence over Ukraine, including supporting separatist movements in the Donbas region.

The international community's response to Russia's actions in Ukraine has been characterized by a series of sanctions aimed at curbing Russian aggression and compelling a change in behavior. These sanctions have had significant economic implications for both Russia and the broader global economy. The economic repercussions of sanctions on Russia are notable. Western countries, including the United States and the European Union, have imposed sanctions targeting key sectors of the Russian economy. These measures include restrictions on Russian financial institutions, export controls on specific technologies, and asset freezes and travel bans on Russian officials and oligarchs. One of the most impactful moves was the exclusion of several Russian banks from the SWIFT international payment system, severely limiting their ability to engage in international financial transactions. The sanctions have had a stifling effect on Russia's economic growth. Reduced access to global financial markets, diminished foreign investment, and limitations on technology transfers have hindered Russia's economic development. The value of the Russian ruble has experienced sharp declines, contributing to inflationary pressures and reduced purchasing power for Russian consumers.

In response to Russia's actions in Ukraine, Western countries, led by the United States and the European Union, have shown support for Ukraine in various ways. This support extends beyond diplomatic and humanitarian aid and carries significant economic implications for both Ukraine and Russia. Western support for Ukraine has included financial assistance, military aid, and trade agreements. These measures are aimed at strengthening Ukraine's ability to withstand Russian aggression and promoting its economic development. Financial aid packages from Western countries, as well as loans from international financial institutions, have provided Ukraine with resources to stabilize its economy and invest in essential sectors. Moreover, military aid from Western nations has bolstered Ukraine's capacity to defend itself. The provision of lethal and non-lethal military equipment has been instrumental in Ukraine's efforts to resist Russian-backed separatists in the Donbas region. This support not only has military significance but also economic implications, as it has contributed to stabilizing the security situation in parts of Ukraine. The economic consequences of geopolitical motivations and international responses are complex. They reflect the intersection of strategic interests, sanctions, and international support, and are integral to understanding the economic ramifications of the ongoing Ukraine-Russia conflict.

To assess the economic consequences of the ongoing Ukraine-Russia conflict, it is essential to examine the state of the Russian economy prior to the outbreak of hostilities. Understanding the pre-war economic conditions provides a crucial baseline against which the impact of sanctions and other factors can be measured. Before the conflict, the Russian economy faced both challenges and opportunities. Russia is known for its vast reserves of natural resources, including oil and gas, which have historically been key drivers of economic growth. However, this heavy reliance on commodities made the Russian economy susceptible to fluctuations in global commodity prices. The Russian government had taken steps to reduce its dependence on the oil and gas sector and promote diversification. Efforts to develop other industries, including technology and agriculture, were underway. However, the pace of economic transformation remained slow, and oil and gas exports continued to play a central role in government revenue. Additionally, Russia had accumulated significant foreign reserves, including foreign exchange holdings and investments in sovereign wealth funds. These reserves served as a financial cushion, which, when combined with a relatively low level of public external debt, provided Russia with economic stability.

One of the most significant economic consequences of the Ukraine-Russia conflict has been the imposition of sanctions by Western countries. These sanctions have targeted various aspects of the Russian economy, including major banks, the central bank, and sovereign debt. Russian banks have been among the primary targets of sanctions. Several major Russian banks have been excluded from the SWIFT international payment system, limiting their ability to conduct international financial transactions. The sanctions have made it challenging for Russian banks to access global financial markets, which has hindered their operations and financial stability. The Russian central bank has not been spared from sanctions. The freezing of some of the central bank's foreign currency reserves, primarily held in Western accounts, has reduced the effectiveness of Russia's response to economic challenges. The central bank's ability to support the Russian ruble and manage inflation has been constrained by these limitations. Furthermore, restrictions on trading Russian sovereign debt have added to the economic pressures. Sanctions have made it difficult for Russia to refinance or issue new debt, raising concerns about the country's ability to service its existing obligations. This has created uncertainty in financial markets and contributed to Russia's economic struggles.

The economic consequences of sanctions and other factors have had a profound impact on Russia's exchange rate and inflation. The value of the Russian ruble has experienced significant fluctuations, with periods of sharp depreciation. These fluctuations have made it challenging for businesses and consumers to plan and make financial decisions. One of the most noticeable consequences of these economic challenges is surging inflation. The weakening ruble, combined with disruptions in supply chains due to sanctions and global events, has led to rising prices for goods and services. Consumers have faced reduced purchasing power as their wages struggle to keep pace with inflation. Russia's substantial foreign reserves, which included foreign exchange holdings and investments in sovereign wealth funds, were once considered a source of economic strength. However, these reserves have faced severe limitations due to sanctions imposed by Western depositary countries. These limitations have restricted the Russian government's ability to utilize its foreign reserves to mitigate economic challenges. In normal circumstances, these reserves could have been deployed to stabilize the ruble, support economic growth,

and address inflation. However, with much of these reserves effectively frozen, Russia's economic options have been constrained. the economic situation in Russia amid the ongoing Ukraine-Russia conflict is marked by a struggle against the backdrop of sanctions, exchange rate fluctuations, and surging inflation. While the country had some economic strengths prior to the conflict, these challenges have put significant pressure on its economic stability. The consequences of these economic struggles will continue to evolve as the conflict unfolds, impacting both Russia and the global economy.

Russia has long been a significant player in global energy markets. As the world's third-largest oil producer and the second-largest natural gas producer, the country plays a critical role in meeting global energy demand. Its energy exports have been a cornerstone of the Russian economy, contributing to government revenues and economic growth. The ongoing conflict between Russia and Ukraine has had profound implications for global energy markets. Russia's pivotal role as an energy producer has made energy prices highly susceptible to the conflict's developments. The price of Brent crude oil, for example, soared to levels not seen since 2014, as markets reacted to the heightened geopolitical tensions and concerns about potential supply disruptions. The conflict has also affected natural gas markets. Europe, in particular, heavily depends on Russian natural gas supplies, with approximately 40% of its consumption originating from Russia. The uncertainty surrounding these supplies has led to an increase in natural gas prices, impacting both consumers and industries.

Europe's heavy reliance on Russian natural gas has long been a point of concern. The conflict has highlighted the vulnerabilities associated with this dependence. While reducing this reliance is a strategic goal, replacing Russian natural gas with alternative sources in the short term is a complex challenge. Efforts to diversify the energy mix and reduce dependence on Russian supplies include exploring renewable energy sources and importing liquefied natural gas (LNG) from other regions. However, these transitions require significant investments and infrastructure development, and they cannot be achieved overnight. Several scenarios can unfold in the energy sector due to the conflict. First, if Russia decides to decrease or halt natural gas supplies to Europe as a counter-sanction measure, it would exacerbate the challenges faced by European nations. Reduced supplies would result in higher prices, strained resources, and potential disruptions to daily life. Second, the potential for increased conflict escalation could lead to more energy infrastructure damage, particularly in Ukraine. This would not only impact Ukraine but also disrupt the transit of Russian energy supplies to European markets. Lastly, the global energy sector could experience further turbulence if the international community takes more aggressive measures against Russia. These measures may include a complete embargo on Russian energy exports, which would lead to massive disruptions and higher prices worldwide.

Russia and Ukraine have historically played a significant role in global grain production. Russia, in particular, is the world's largest wheat exporter, accounting for nearly 20% of global trade. Ukraine is among the top ten producers of several agricultural commodities, including corn, wheat, sunflowers, sugar beet, barley, soybeans, and rapeseed. Together, they have contributed a substantial share of global grain exports, with notable implications for food security. The conflict has disrupted supply chains in the region, affecting the transportation and export of agricultural products. Ukraine's commercial shipping at its ports and Russia's closure of the Azov Sea to commercial vessels have resulted in significant supply disruptions. Leading grain traders like ADM, Cargill, and Bunge suspended their operations in Ukraine, causing concern for global grain supply. The disruptions in the agrifood sector are not limited to supply chains. Higher commodity prices, driven by the conflict and the disruption of grain exports, have a direct impact on consumer prices. Consumers may experience increased costs for products such as pasta, flour, and edible oils, including sunflower and safflower oil. Additionally, the higher cost of corn and coarse grains used in animal feed could lead to higher meat prices. the Ukraine-Russia conflict has far-reaching economic consequences in both global energy markets and the agriculture and metals industries. The reliance on Russian energy, disruptions in agricultural supply chains, and critical shortages of metals impact various sectors and can lead to increased global prices for essential commodities. These economic ramifications have far-reaching implications for global economic stability and food security, highlighting the interconnectedness of the modern global economy.

The cessation of hostilities in the Ukraine-Russia conflict will undoubtedly start in a new phase with significant economic consequences for both countries and the global economy. Russia is likely to face a challenging post-conflict economic landscape. The imposition of severe sanctions and restrictions on Russian financial institutions, energy exports, and key industries will continue to prevent economic growth. Exchange rate fluctuations and surging inflation, coupled with the freezing of foreign reserves, will pose significant obstacles. Economic forecasts suggest that Russia's GDP is set to contract significantly in the wake of the conflict. While the cessation of hostilities may bring an end to the immediate humanitarian crisis, Ukraine's economy is likely to remain uncertain. The war-torn regions in the east will require massive reconstruction efforts, posing a substantial financial burden. Meanwhile, Ukraine will continue to grapple with geopolitical tensions and a delicate relationship with Russia, which will influence its economic prospects. Rebuilding war-affected regions in Ukraine is a colossal task. The economic cost of reconstructing infrastructure, housing, and public services will be substantial. International assistance and funding will play a pivotal role in these efforts. The financial burden of reconstruction may strain Ukraine's already fragile economy, necessitating careful financial planning and investment. International support, including financial aid and expertise in post-conflict reconstruction, will be crucial for Ukraine. Multilateral organizations, as well as individual countries, are likely to provide funding for rebuilding efforts. This support can stimulate job creation, economic growth, and investment in the affected regions.

The reconstruction phase presents investment opportunities for both domestic and foreign investors. The revitalization of infrastructure, residential areas, and public services will require capital. This may attract investors interested in real estate, construction, and the development of industries related to reconstruction. Reconstruction efforts typically generate employment opportunities. Job creation will be essential for the affected regions to recover and for Ukraine to realize economic growth. The rebuilding phase has the potential to rejuvenate local economies, supporting communities and improving living standards.

The post-war economic scenarios will have implications for global energy markets. While the cessation of hostilities may bring more stability to energy prices, the global transition to renewable energy sources and efforts to diversify energy supplies will continue. These long-term energy trends can influence global economic stability. The geopolitical repercussions of the Ukraine-Russia conflict will persist in the long term. The relationship between Russia and Western nations, as well as regional security dynamics, will continue to shape global politics. These geopolitical factors can affect international trade, energy security, and investment decisions. The conflict has disrupted global supply chains, particularly in the agriculture and metals industries. Rebuilding these supply chains and ensuring their stability will be a priority. Additionally, the economic interdependence of nations in a globalized world means that disruptions in one region can have far-reaching consequences for economies worldwide. The long-term economic implications of the conflict will also impact food security and inflation. The disruptions in the agri-food industry, coupled with increased grain and energy prices, may lead to persistent inflation. Food security will remain a concern, influencing global agricultural policies and trade dynamics. the post-war economic scenarios for Russia and Ukraine are marked by challenges, opportunities, and uncertainty. While reconstruction and investment efforts can stimulate economic growth, the long-term global economic implications of the Ukraine-Russia conflict underscore the interconnectedness of economies on a global scale. The path to economic recovery and stability will be influenced by international cooperation, geopolitical factors, and the ability of affected nations to rebuild and diversify their economies.

Conclusion

The ongoing war between Russia and Ukraine has ignited significant economic challenges and uncertainties. The most significant aspect of these consequences is the economic strain, both on the involved nations and the global economy. In the post-war landscape, economic scenarios for Russia and Ukraine vary. Both nations will need to invest significantly in rebuilding infrastructure, economies, and societies. The cost of reconstruction will be substantial, requiring international support to restore stability, peace, and economic prosperity to the affected regions. While the war has exacted a heavy economic toll, there is also potential for positive economic developments in the aftermath. As nations rebuild, opportunities for investment, job creation, and economic growth may emerge, offering hope for economic recovery. In conclusion, the estimated economic consequences of the war between Russia and Ukraine are profound and multifaceted. It is crucial to address these economic challenges through diplomatic solutions and international cooperation, seeking to mitigate the economic aftershocks and promote long-term stability and prosperity.

References

- By the Coface Economic Research team, Economic consequences of the RussiaUkraine conflict: Stagflation ahead, 7th MARCH 2022, https://www.coface.com/News-Publications/News/Economic-consequences-of-the-Russia-Ukraine-conflict-Stagflation-ahead
- SHATAKISHVILI DAVIT, ECONOMIC CONSEQUENCES OF SANCTIONS ON RUSSIA, GEORGIAN FOUNDATION FOR STRATEGIC AND INTERNATIONAL STUDIES, 2022 https://gfsis.org.ge/files/library/opinion-papers/182-expert-opinion-eng.pdf
- SHATAKISHVILI DAVIT, MILITARY EFFECTS OF ECONOMIC SANCTIONS ON RUSSIA, GEORGIAN FOUNDATION FOR STRATEGIC AND INTERNATIONAL STUDIES, 2022 https://gfsis.org.ge/files/library/opin-ion-papers/184-expert-opinion-eng.pdf
- SHATAKISHVILI DAVIT, RUSSIA'S WAR AGAINST UKRAINE AND ITS IMPACT ON THE EUROPEAN UNION'S ECONOMY, GEORGIAN FOUNDATION FOR STRATEGIC AND INTERNATIONAL STUDIES, 2022 https://gfsis.org.ge/files/library/opinion-papers/189-expert-opinion-eng.pdf
- JAVAKHISHVILI EKA, ARE WESTERN SANCTIONS ON RUSSIA EFFECTIVE? GEORGIAN FOUNDATION FOR STRATEGIC AND INTERNATIONAL STUDIES, 2021 https://gfsis.org.ge/files/library/opinion-papers/169-expert-opinion-eng.pdf
- JAVAKHISHVILI EKA, PECULIARITIES OF RUSSIA'S OCCUPATION POLICY: ANNEXATION OF UKRAINE, GEORGIAN FOUNDATION FOR STRATEGIC AND INTERNATIONAL STUDIES, 2022 https://gfsis.org.ge/files/library/opinion-papers/187-expert-opinion-eng.pdf
- Russia and Ukraine conflict: economic implications, update from KPMG's chief economist in the UK https://kpmg.com/xx/en/home/insights/2022/03/russia-and-ukraine-conflict-chief-economist-team.html

War Returning to Europe and the Potential for Strengthening EU Defenses Capabilities

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Abstract

The article reviews the problems faced by the European Union in the field of defense and security in the context of the ongoing Russia-Ukraine war. The text emphasizes the weakness and lack of military components at the disposal of the European Union, as well as the fragmentation of the defense industry and the need for closer cooperation of member states in this area. The author emphasizes the importance of the EU's dependence on NATO and reviews the risks of possible threats and challenges in the post-war period. The importance of political will for defense development as a key factor for the EU to make significant progress in this regard is also emphasized.

A clear example of this was the deployment of Russian large battlegroups in Syria and the destruction of targets with long-range cruise missiles on the territory of a foreign country for the first time in the history of Russia. This is a clear demonstration that Russia possesses the appropriate capabilities to attack the territories of other countries with large military units and offensive means.

Keywords:

Russia, Russia-Ukraine War, Nuclear Weapons, Strategic Deterrence, Common Defense And Security Policy, Sanctions, Nato, Crimea, Military Industry Development.

Introduction

On February 24, 2022, the war started by Russia shocked the political decision-makers of democratic countries, especially the EU member states. After the end of the Second World War and then the Cold War, the international order and relations based on partnership and peace, built over the years, were devalued by this decision of Russia, and full-scale interstate war returned to the European continent as a means of clarifying the relationship between countries. It is also worth noting that at the global level, in the agenda of political debates and negotiations, Russia has returned nuclear weapons as a mechanism of pressure and blackmail, and the threat of their use has become a real dilemma for Russia's opponents and neighboring states. However, for the sake of justice, it should be noted that the basis of such a decision by Russia was the policy pursued by Western countries after the end of the Cold War, especially in the defense and security sectors. In particular, due to the fact that the threat from the communist bloc decreased and the threat of direct military aggression was removed for the NATO member states and the leading European states, they began to gradually reduce their defense capabilities. In addition to reductions in armies, air forces, fleets, and armaments, countries also began to close or minimize defense infrastructure, military supplies, and industries due to the absence of a major military threat in the near future. Accordingly, the funds freed from defense costs were directed to other sectors of the economy.

Main Part

and to investing in the economies of former rivals, including Russia. This allowed Russia to start modernizing the army and increasing its offensive potential, including the nuclear component, and its qualitative and quantitative growth since the beginning of the 2000s. However, Western countries did not see any danger in this. For example, by 2014, Europe's leading military and political leaders, Germany, France, and the United Kingdom, had significantly reduced the size and capabilities of their armies and military capabilities (Germany from 590,100 to 178,800,¹ the United Kingdom from 308,000 to 154,700,² and France from 550,000 to 312,350).³ up to), when the size of the Russian army, despite a 30-% decrease, counted 900,000 soldiers for the same period, and in parallel with the increasing funding every year, the army was rearmed and its offensive and expeditionary potential was increased.

The series of acts of aggression carried out by Russia in Europe was preceded by the famous speech delivered by Putin in Munich, which, as an act of demonstrating Russia's revanchist mood and declaring dissatisfaction with the existing international order, was not properly evaluated by the Western states. This resulted in Russia's aggression against Georgia in 2008, the annexation of Crimea in 2014, and the outbreak of war by Russian-backed separatist groups in eastern Ukraine. In response to the mentioned aggressive acts, the Western countries and the European Union did not seem to notice the growth of Russia's aggressive appetite, and as a result, Russia received only limited economic sanctions and certain diplomatic tensions with the North Atlantic Alliance and European countries, although the economic and strategic cooperation between the parties did not stop.

In response to Russia's increasingly aggressive foreign policy and actions, in parallel with the "policy of appeasement" carried out by Western countries and the European Union, by August 2021, when Russia began to form battle groups in the regions bordering Ukraine and in Crimea by deploing forces from all over the territory of Russia, public actions or political actions of EU countries or The decisions did not show that anyone was expecting a major war on the continent. The European Union and its member states have again tried to contain Russia and avoid a conflict between NATO and Russia using economic, diplomatic, and political mechanisms, since the European Common Security and Defense Policy (CSDP) and its mechanisms are aimed at a peaceful resolution of the conflict.

More than a year after the start of the war, the most important outcome that has emerged at this stage is that, instead of being confused and afraid of Russian pressure mechanisms, the EU member states managed to reach a consensus soon after the start of the war to deal with Russian aggression with more effective instruments and much more with more decisive actions. Against the backdrop of Russia's growing escalation, the "European Peace Facility" (EPF)⁴ created in March 2021 turned out to be one of the most effective means of financial support and arms supply to Ukraine. The EPF is a non-budgetary organization and is filled with funds donated by EU member states. And its disposal is done in accordance with the goals and principles of the European Common Foreign and Security Policy (CFSP).⁵ In addition to the fund, individual member countries also provide direct supplies or financing of purchases, and there is a unified European military and military logistics system that supplies <u>purchased goods</u> to Ukraine. However, in this process, another complex problem appeared: the supplies of West-

- 1 The Bundeswehr in the Cold War.
- 2 U.K. Military Size 1985-2023.
- 3 France Military Size 1985-2023.
- 4 Council Decision (CFSP) 2021/509 of 22 March 2021 establishing a European Peace Facility, and repealing Decision (CFSP) 2015/528 ST/5212/2021/INIT
- 5 Council Decision (CFSP) 2021/509 of 22 March 2021 establishing a European Peace Facility, and repealing Decision (CFSP) 2015/528 ST/5212/2021/INIT

ern countries were not enough to wage a long, full-scale war. Also, due to reduced production capacity after the Cold War, it proved impossible to replenish depleted stocks in the short term and to maintain a continuous supply rate due to the growing demands of the war.⁶

The main problem that the current war and the subsequent processes of the war have put before the European Union and Western countries is that the need for strategic deterrence and protection of territories has arisen in the world. This issue is particularly important for the European Union because, during these years, its military capabilities and crisis management system were mainly aimed at managing low-intensity crises outside the borders of the European Union, and Russia's aggression presented the European Union with the need to restrain a nuclear superpower, which only NATO can do at this stage. Despite the discussion that Article 42.7 of the Treaty of the European Union provides the basis for collective defense for the member states of the European Union, the accession of Sweden and Finland to NATO clearly proved that the European Union is no match to NATO at the strategic level.⁷ The dependence of the European Union on NATO and the United States of America was confirmed by the Commander of the French Defense Forces, General Thierry Burkhardt,⁸ in an interview published on the online portal of the European Defense Agency. He agreed that, given the context of this war, the EU needs a long-term military strategy to ensure its own security. The general shares the opinion that, in addition to investing in military industry and technology, a unified policy of military capabilities and procurement is necessary. that any weapon system or capability should not be just an exhibition exhibit and should be purposefully implemented in practice. However, he also notes that it all depends on a common political decision.⁹

After reaching a consensus on increasing defense and security capabilities, the European Union adopted the "Strategic Compass" in March 2022, a plan for strengthening and developing the security of the European Union in the next decade. 10 According to the mentioned plan, by strengthening the capabilities of the Common Security and Defense Policy (CSDP), the European Union will protect its interests abroad more effectively. This plan envisages investing in the development of technologies and the purchase of new systems and weapons, as well as strengthening the partnership with NATO and other allies within the framework of protecting common interests. It envisages the creation of important tools and the implementation of measures for the improvement of cyber security, the development of aerospace capabilities, the development of preemptive capabilities for hybrid warfare, and other areas of security. 11 However, Compass does not give the EU the most important thing — strategic autonomy and the possibility of strategic deterrence — and it does not reduce the degree of dependence on NATO and the USA. However, despite this, the potential of the European Union's production and economic capabilities is not less than that of the USA, and in the event of a proper political decision, it is possible to supply the defense and security areas with the necessary amount of equipment and facilities, which would improve the position of the European Union, but for years it has been under the security umbrella of the USA and NATO. The political will needed to transform a centralized system into an autonomous regime is not yet visible.¹² It is also critically important that the EU defense industry be extremely fragmented. Armaments, equipment, and other military equipment companies often do not see each other as friendly and engage in tough competition. For example, in March 2022, the German leadership announced its desire to replace 35 units of the outdated "Panavia Tornado" type multi-role attack aircraft with the F-35 type multi-role fighter (to purchase from the USA). This significantly strained relations with France and made cooperation in the field of industry difficult.¹³ A similar practice, when states put the interests of their own companies above the common interests of defense instead of partnership, has a negative impact on the common defense capabilities of the European Union.

The future of the EU's defense and security policy and capability development depends on many things, first of all on the various options for ending the war. Also about what state and mood Russia will have, because Russia, despite its aggressive foreign policy and hostile attitudes, is big enough and strong enough, due to its geographical position, for Western countries to ignore it.¹⁴ In this context, it is also significant that the architecture of the world order is changing. As a result, in the mega-regions of continental Eurasia and the Indo-Pacific, which, unlike the Western political order, are polycentric and consist of more authoritarian countries, the EU and its partners will have to protect their interests. Which is complicated in the context of the ongoing war.¹⁵

⁶ Jakes, Lara. Europe Made a Bold Pledge of Ammunition for Ukraine. Now Comes the Hard Part. 23 September 2023, The New York Tims.

⁷ Luis, Simon. "The Ukraine War and the Future of the European Union's Security and Defense Policy". January 30 2023

⁸ Gen. Tierry Burkhard. "Ukraine war confirms need to define a long-therm strategy to ensure the defence of Europe" GEN". 9 ibid.

^{10 ,} A Strategic Compass for Security and Defence" 7371/22, Brussels, 21 March 2023.

¹¹ Councile of the EU, Preess release "A Strategic Compass for a stronger EU security and defence in the next decade" 21 March 2022.

¹² Bergmann Max, Toygur Ilke, Svendsen Otto, "A Continent Forged in Crisis: Assessing Europe One Year into the War" 16 February 2023.

¹³ Alvarez-Couceiro, Paula. Europe at a strategic disadvantage: A fragmented defence industry. 18 April 2023.

¹⁴ Alina Polyakova, Edward Lucas, James Lamond, Bobo Lo and Lauren Speranza. What Does Europe Look Like 3-7 Years After Russia's War in Ukraine? 24 May 2022.

¹⁵ Paikin, Zachary and Katsioulis Christos. "European Security, Eurasian Crossroads? Keeping rules-based cooperation afloat on a war-torn continent" 11 July 2023.

Returning directly to the European continent and the future prospects of the European Union—what they will be, depending on the scenario in which the war ends—all of the three possible options contain considerable challenges and difficulties. In case of Ukraine's victory, the fate of the Russian ruling power and state may be unclear. If the process of breaking the unity of the Russian state begins, the Western countries may face a serious threat, both due to the flows of migrants and the probable civil war in Russia. The number of military contingents provided by the member states, according to the "strategic compass" is not enough to neutralize the threat from Russia.

If the conflict will be held/freeze, when both sides retain occupied territories, will be a serious threat to the European Union in the next decade because a frozen conflict does not mean its resolution. This was best demonstrated by the South Caucasus conflicts, when the Karabakh conflict was finally resolved as a result of the war. In a scenario like the one in Ukraine, the next decade will be a period of constant tension and anticipation of renewed war, with the prospect of hostilities spilling over into EU territory. Even in this case, the countries of the European Union will not have the necessary means of providing military aid and supplies to Ukraine because it will take years to manufacture and mobilize the necessary means to replenish their own supplies and protect security if they do not increase military spending and develop industry.

Conclusion

As for the most pessimistic scenario, the victory of Russia (both the full occupation of Ukraine and the occupation of the territory of the mentioned country), which Putin can present as a victory and take a pause to increase the weakened military potential, will pose serious risks to the EU in terms of defense and security. In this aspect, it becomes critically important for NATO's strategic deterrence factor and the possibility of an effective response to Russia's hybrid warfare means. However, in this process, it should be taken into account that, without overcoming the usual bureaucracy for European politics, an effective and timely response will be very difficult.

Since the war is still going on, one year after the conclusion of the "Strategic Compass", on May 29, 2023, the EU High Representative, Joseph Borrell, publicly posed the question on his blog: "Faced with the return of large-scale state-to-state conflict to Europe, what must our future military capabilities look like?" - is still relevant for the highest political decision-makers of the European Union. The future will tell how the European Union will deal with the old and new problems and challenges revealed by the war.

References

- "A Strategic Compass for Security and Defence" 7371/22, Brussels, 21 March 2023 https://data.consilium.europa.eu/doc/document/ST-7371-2022-INIT/en/pdf
- Jenkins, Brian Michael. "Consequences of the War in Ukraine: The End and Beyond" 8 March 2023 https://www.rand.org/blog/2023/03/consequences-of-the-war-in-ukraine-the-end-and-beyond.html
- Bergmann Max, Toygur Ilke, Svendsen Otto, "A Continent Forged in Crisis: Assessing Europe One Year into the War" 16 February 2023 https://www.csis.org/analysis/continent-forged-crisis-assessing-europe-one-year-war
- Borrell, Joseph. "Lessons from the war in Ukraine for the future of EU defence". 29 May 2023 https://www.eeas.europa.eu/eeas/lessons-war-ukraine-future-eu-defence_en
- Chatham House. "Seven ways Russia's war on Ukraine has changed the world" 20 February 2023 https://www.chathamhouse.org/2023/02/seven-ways-russias-war-ukraine-has-changed-world
- Councile of the EU, Preess release "A Strategic Compass for a stronger EU security and defence in the next decade" 21 March 2022 https://www.consilium.europa.eu/en/press/press-releases/2022/03/21/a-strategic-compass-for-a-stronger-eu-security-and-defence-in-the-next-decade/
- EU Rapid Deployment Capacity. EEAS press team. 15 November 2022. https://www.eeas.europa.eu/eeas/eu-rap-id-deployment-capacity_en
- Gen. Tierry Burkhard. "Ukraine war confirms need to define a long-therm strategy to ensure the defence of Europe" GEN". https://eda.europa.eu/webzine/issue23/interview/ukraine-war-confirms-need-define-long-term-strategy
- Heisbourg, Francoise. "How to End a War: Some Historical Lessons for Ukraine" 11 July 2023 https://www.iiss.org/online-analysis/survival-online/2023/07/how-to-end-a-war-some-historical-lessons-for-ukraine/
- Jenkins, Brian Michael. "Consequences of the War in Ukraine: A Bleak Outlook for Russia" 8 March 2023 https://

- www.rand.org/blog/2023/02/consequences-of-the-war-in-ukraine-a-bleak-outlook.html
- Luis, Simon. "The Ukraine War and the Future of the European Union's Security and Defense Policy". January 30 2023 https://www.csis.org/analysis/ukraine-war-and-future-european-unions-security-and-defense-policy
- Paikin, Zachary and Katsioulis Christos. "European Security, Eurasian Crossroads? Keeping rules-based cooperation afloat on a war-torn continent" 11 July 2023, https://cdn.ceps.eu/wp-content/uploads/2023/07/CEPS-Explainer-2023-11_Mega-Regions-Project-with-cover.pdf
- The Bundeswehr in the Cold War. https://www.bundeswehr.de/en/about-bundeswehr/history/cold-war U.K. Military Size 1985-2023. https://www.macrotrends.net/countries/GBR/united-kingdom/military-army-size France Military Size 1985-2023. https://www.macrotrends.net/countries/FRA/france/military-army-size
- Council Decision (CFSP) 2021/509 of 22 March 2021 establishing a European Peace Facility, and repealing Decision (CFSP) 2015/528 ST/5212/2021/INIT https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX-%3A32021D0509
- Jakes, Lara. Europe Made a Bold Pledge of Ammunition for Ukraine. Now Comes the Hard Part. 23 September 2023, The New York Tims. https://www.nytimes.com/2023/09/23/world/europe/eu-ukraine-war-ammunition.html
- Alina Polyakova, Edward Lucas, James Lamond, Bobo Lo and Lauren Speranza. What Does Europe Look Like 3-7 Years After Russia's War in Ukraine? 24 May 2022. https://cepa.org/comprehensive-reports/what-does-europe-look-like-3-7-years-after-russias-war-in-ukraine/
- Alvarez-Couceiro, Paula. Europe at a strategic disadvantage: A fragmented defence industry. 18 April 2023. https://warontherocks.com/2023/04/europe-at-a-strategic-disadvantage-a-fragmented-defense-industry/

Safeguarding the Black Sea Region Through Maritime Domain Security

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Abstract

Today's complex and ambiguous threats in the Black Sea region give an even greater advantage to knowledge about the maritime situation and a correct perception of the situation in the maritime domain. It is even more important to collect, integrate and interagency dissemination of maritime situational information and intelligence, joint efforts and cooperation of government agencies to implement a sustainable response to threats from maritime space, and simplified functioning of the state security architecture. This topic signifies the commitment to ensuring the safety and stability of the maritime domain in the Black Sea. Participants in this conference would engage in discussions and explore strategies, technologies, and collaborative approaches to enhance security measures, address challenges, and promote cooperation among stakeholders. By emphasizing the role of maritime domain security, this topic highlights the significance of safeguarding the Black Sea region and its maritime interests. Recently, NATO and the European Union have been particularly interested in issues related to the regional security of the Black Sea, which was reflected at both the 2016 NATO Warsaw Summit and the 2017 NATO Parliamentary Assembly in Bucharest, as well as in the "Black Sea Strategy" adopted by the European Parliament in 2011. Then the topic discusses a non-regional organization – NATO. Besides I want to underline the fact, that NATO has its own policy of penetration into the Black Sea region. Since the security of the mentioned region is one of the main tools for preventing the economic collapse of the West.

Keywords:

Black Sea Region, NATO, Maritime Domain Strategy, Intelligence Sharing, EU.

Introduction

The Black Sea Region has always borne a significant geopolitical burden, although throughout history, it has functioned more as a divider among various geographical spaces, countries, and civilizations rather than a unifier. Even today, the conflicting interests of powerful countries and other actors, such as NATO and the EU, are clashing in the Black Sea region. Significant differences exist between the countries of the region in terms of the quality of democracy and foreign policy priorities. All of these factors hinder the development of a common regional security vision. Furthermore, the regional policies of countries and international organizations (such as the EU and NATO) are often unclear and lacking coherence.

For NATO, the Black Sea Region has an extremely strategic importance as it plays a significant role in the European collective defense system from a military perspective. Simultaneously, it serves as one of the fronts for addressing issues related to Russia, posing a substantial challenge to the stability of the Euro-Atlantic region amid various conflicts and confrontations. In the Black Sea Region, Russia's militaristic and aggressive policies pose a threat to the smaller countries in the region, which have less developed maritime defense capabilities.

For Georgia, the Black Sea Region represents the only point of contact with the Euro-Atlantic region from a geographical perspective. The security situation in the Black Sea region significantly affects Georgia's trade, transit, and economic opportunities, causing particular concern. Following Georgia's expression of interest in joining the Silk Road project and becoming a crucial "transit hub," the security of the Black Sea Region has become an even more pressing priority for the country. The security importance of the Black Sea region for Georgia is underscored in the national defense and foreign policy documents.

In the national military strategy developed by the Ministry of Defense of Georgia, the Black Sea Region is singled out at the regional level. It is stated that Georgia aims to deepen its existing cooperation with countries in the region, especially NATO member countries and other friendly nations, in the field of defense and security. In Georgia's national security concept, ensuring regional stability is designated as a priority state interest, and it is noted that the developments occurring in the Black Sea region directly impact the national security of Georgia.

Main Part

Understanding the Black Sea region is essential not only from the perspective of the Black Sea coastal countries but also within the broader context of the extended Black Sea Region. This broader perspective encompasses geographical, political, socio-economic considerations, as well as countries connected to the Black Sea basin through transport corridors, including those related to energy resources.

Given the growing significance of international economic cooperation and the pivotal role of international maritime trade, enhancing the attractiveness and operational efficiency of Georgian ports becomes paramount. Achieving this goal requires the development of maritime transport infrastructure and an expansion of cargo circulation capacity. Moreover, in order to bolster the safety and security of Georgian ports, it is imperative to continuously enhance the safety and reliability of the maritime transport system.

In recent decades, amidst the growth of international economic opportunities and global trade in the Black Sea Region, the Russian Federation has sought to expand its influence through various means, including military, economic, and hybrid tactics. These efforts have contributed to a deteriorating security environment in the Black Sea Region.

A significant challenge in this context is the aggressive actions and extensive militarization pursued by the Russian Federation, as well as its large-scale military aggression against Ukraine. These actions have had a profoundly detrimental impact on the security landscape across the broader Black Sea Region. Consequently, there is a risk of delaying or constraining the implementation of crucial regional economic projects. Such delays could, in turn, adversely affect the development of Georgia's maritime transport and trade potential.

Considering the objectives of state border management, it is imperative for Georgia to take into account the developments occurring beyond the broader Black Sea Region. Given the escalating threats and challenges emanating from both state and non-state actors, the global security landscape is becoming increasingly fragile and unstable.

The instability in various regions and countries, compounded by deteriorating socio-economic conditions, heightens the risk of conflicts emerging or worsening. These factors can also elevate the risks associated with arms proliferation, drug trafficking, smuggling, human trafficking, illegal transportation of hazardous materials (such as chemical, biological, radioactive, and nuclear substances), and other forms of criminal activities.

As an illustrative example, when it comes to managing the border security of Georgia, it is vital to pay attention to the security environment in neighboring regions, particularly when 20% of the territory of Georgia is occupied. The Germany had Problem with it in 2016 the President of the German domestic intelligence agency (BfV), Dr Hans-Georg Maaßen, admitted in an interview that security authorities wrongly evaluated the so called "Islamic State" strategies to infiltrate Germany. Security officials initially believed it was unlikely that "Islamic State" terrorist were going to use the recent influx of refugees in order to enter the country and at that period the

risk was too high. Although they did not need to covertly insert their people among the refugees, they did, in fact, do this", referring to the strategy as "a show of force".

In situations marked by instability and conflict hotspots, there is a possibility of increased activity by terrorist and extremist groups in the occupied territory. These groups may attempt to use Georgia's territory as a transit point.

The above mentioned processes both have direct and indirect influence on Georgia's maritime security environment, introducing challenges in terms of state border management. This situation could negatively impact Georgia's role as a crucial participant in the Middle Corridor, an essential component of the Europe-Asia transport route

There is a significant interest in issues related to globalization, which has arisen as a result of changes in the global economic system. The modern world is undergoing profound and irreversible transformations, encompassing economic, political, and socio-cultural dimensions, and these changes are unfolding simultaneously at both global and regional levels.

Geoeconomics delves into the analysis of a country's strategic interests and the development of tools to enhance national competitiveness. In simpler terms, there has been a heightened interest in economic processes, including the establishment of bilateral and multilateral economic relationships among countries, regional economic integrations, the phenomenon of globalization, and various forms of economic cooperation.

For instance, the interplay between geopolitical and geo economic factors has positioned Georgia as a global sphere of interest. Consequently, international community have actively engaged with Georgia to maximize the realization of their superior geopolitical and geo economic significance. In this context, Georgia's transit potential plays a pivotal role in its competitiveness. The geographical location of Georgia, situated as a connecting region between the West and East, as well as the North and South (linking the Russian Federation and the Middle East. A key relative advantage for Georgia in the region lies in its strategic geographical location along the revived Great Silk Road, a vital transport corridor that connects Europe and Asia. This factor also defines the economic role of this Central Caucasus country. With access to the Black Sea, Georgia serves as the gateway of the South Caucasus to the West.

The Black Sea littoral states, and the Sea itself, lie between some of the world's most promising new hydrocarbon resources, and one of the largest markets. As Europe's demand for oil and natural gas continues to grow for the foreseeable future, it can ensure its energy security only by diversifying its suppliers and supply routes. The vagaries of geography, economics, and politics dictate that much of the Caspian Basin hydrocarbons destined for European markets will transit Georgia. Georgia also figures importantly in the integration of domestic electricity grids, around the Black Sea and with other regional networks. As integration proceeds, Georgia's own energy security also becomes a concern for Europe. A secure Georgia will be an asset to European energy security. A glance at a map suggests that the most direct routes for transporting oil and gas from the Caspian Basin to Europe pass through or around the Black Sea.²

The developments in the Black Sea Region have demonstrated that the processes occurring here directly impact security. Due to its strategic location, threats from the south converge with Russia, further exacerbating regional security concerns.

Now I would like to discuss how the Russian-Ukrainian war has influenced Black Sea Region security. As a result of the conflict situation in the Black Sea ports of Ukraine and Russia, the security measures for international ships and ports have been heightened in accordance with ISPS-2 (International Ship and Port Facility Security Code). Several Ukrainian ports have ceased receiving ships for operations.

Aside from the economic and security consequences of the Russia-Ukraine conflict, another formidable challenge facing countries in the Black Sea region is the increasing presence of sea mines and mine-like objects, which have strained the security situation in the Black Sea and deterred international shipping.

Furthermore, the NATO Navigation Center (NSC) has issued warnings about the elevated threat of mines in the north-west, west, and south-west of the Black Sea. The directive emphasizes the necessity to promptly report any discovery of mine-like objects to the authorities and transport them to a safe distance from the hazard. The NSC strongly advises ship captains to take comprehensive precautions to minimize their exposure to these risks. Also I would like to pay your attention on persisting high threats of GPS jamming, AIS signal spoofing, communication interference, electronic jamming, cyberattacks, as well as violence and sabotage against ships in the Black Sea region.

Georgia places a high priority on ensuring regional stability for its national security. The situation in the Black Sea region is particularly important to Georgia because it directly affects the country. The ongoing war in the region, along with territorial disputes and economic challenges, can lead to various security risks for Georgia.

¹ L., P. Feldt, Roell, and R. D. Thiele. "ISPSW Strategy Series: Focus on Defense and International Security Maritime Security-Perspectives for a Comprehensive Approach. 49 (222), 1–25." (2013).

² Daniel Sheldon Hamilton, , and Gerhard Mangott, eds. The wider Black Sea region in the 21st century: Strategic, economic and energy perspectives. Center for Transatlantic Relations, Paul H. Nitze School of Advanced International Studies, Johns Hopkins University, 2008.

These include terrorism, illegal arms and drug trade, smuggling, human trafficking, illegal migration, and the potential infiltration of armed groups into the country. These issues can also impact Georgia's trade, transit, and economic opportunities, especially since Georgia aims to become a key transit point in the Silk Road project. To effectively protect its state borders, Georgia coordinates with various entities and international partners. It's worth noting that many security threats originate from the maritime space and can have global consequences. If we aim to be more successful in our maritime safety, security, and stewardship efforts, we need to harness the abilities, authorities, time and efforts of all stakeholders. "Unity of command" is desirable and achievable only by mutual cooperation between various levels of local governments and partnership with foreign authorities and etc. We must foster "unity of effort" in pursuit of our mutual goals and interests through proactive, information exchange. Sharing data, analysis, operating pictures and the like as broadly as possible (given appropriate security and permissions) will provide multiple benefits. Georgia has established a security system to address these threats in its maritime domain.

Conclusion

In summary, the Black Sea Region and its security landscape represent a complex and multifaceted challenge that demands a unified and cooperative approach. The geopolitical significance of this region, its security challenges, and its economic importance underscore the need for collective action and international engagement.

Efforts to enhance maritime domain awareness, cooperation among littoral states, and diplomatic solutions are imperative in promoting stability and prosperity in the Black Sea Region. Georgia, as a pivotal player in the region, must carefully manage its role in this context, recognizing the opportunities and challenges it presents.

Furthermore, the centrality of Black Sea Region in global politics and economics necessitates still attracts attention and remains the most important object of observation for international community. Through open dialogue, cooperation, and conflict resolution mechanisms, we can work together to maintain peace and security in this vital area, benefitting all stakeholders involved.

References

- Feldt, L., P. Roell, and R. D. Thiele. "ISPSW Strategy Series: Focus on Defense and International Security Maritime Security-Perspectives for a Comprehensive Approach Maritime Security-Perspectives for a Comprehensive Approach. 49 (222), 1–25." (2013).
- Hamilton, Daniel Sheldon, and Gerhard Mangott, eds. The wider Black Sea region in the 21st century: Strategic, economic and energy perspectives. Center for Transatlantic Relations, Paul H. Nitze School of Advanced International Studies, Johns Hopkins University, 2008.
- Nimmich, Joseph L., and Dana A. Goward. "Maritime domain awareness: the key to maritime security." International Law Studies 83, no. 1 (2007): 6.

³ Joseph L Nimmich,., and Dana A. Goward. "Maritime domain awareness: the key to maritime security." International Law Studies 83, no. 1 (2007): 6.

Nuclear States as a Balance of Power and Prosperity, Their Capabilities, Economy and Implications For Global Security

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Abstract

In an ever-changing global political landscape, the nexus between nuclear capabilities and a nation's economic trajectory remains a pivotal but often underexplored facet of international relations. This comprehensive article delves into the intricate and multifaceted relationship between nuclear states and their economic dynamics, offering a thorough analysis of the direct and indirect economic consequences intricately associated with nuclear arsenals. Nuclear-armed nations possess a unique ability to exert influence not only over international security but also over their own economic well-being. The creation, maintenance, and advancement of nuclear weapons demand substantial financial investment, a highly skilled workforce, and access to advanced technology. These investments, though often shrouded in secrecy, have far-reaching effects on a state's economy. Directly, the financial costs of maintaining nuclear arsenals can be staggering. The resources allocated to the development, maintenance, and modernization of nuclear weapons programs can impose a significant burden on a nation's budget. This allocation, in turn, can have implications for other critical sectors, such as healthcare, education, and infrastructure.

Indirectly, the economic impacts of nuclear arsenals extend into areas such as innovation and job creation. The advanced research and development required for nuclear programs can stimulate technological innovation and drive economic growth in related industries. Moreover, the existence of a nuclear deterrent can have repercussions for a nation's economic security. By providing a perceived shield against external threats, nuclear arsenals may indirectly influence trade relationships, investment, and economic stability. Beyond these dimensions, the article uncovers the intricate network of economic processes that ripple far beyond the realm of nuclear capabilities. It explores how a nation's nuclear posture can significantly impact both global security and the complex process of economic development within these states themselves.

This analysis not only contributes to our understanding of the interplay between security and economics but also offers valuable insights for policymakers. The economic dimension of nuclear weapons warrants careful consideration in discussions surrounding disarmament, proliferation, and national security.

Keywords:

Nuclear States, Economic Dimension, Global Security, Economic Development, Innovation.

In the realm of international relations, the intricate interplay between a state's nuclear ambitions and its economic trajectory serves as a captivating prism through which to examine how countries navigate the complex nexus of security and prosperity. It is essential to acknowledge that the economic impact of nuclear arsenals extends far beyond the confines of domestic affairs. Instead, it radiates outward, casting a long shadow that influences international trade and diplomacy. The economic implications of nuclear states are not relegated to national borders; rather, they reverberate on the global stage, where they ultimately play a pivotal role in shaping the intricate web of international economic relations.

The world's nuclear powers, including the United States, Russia, India and Pakistan, collectively hold not only the keys to potential destruction but also wield powerful mechanisms for economic prosperity. This dual role, one that involves both the specter of devastating weaponry and the promise of economic advancement, forms the central focus of our study. It is this complex interaction between these dual aspects that we aim to unravel and analyze in the following pages.

By probing into this nexus, we strive to uncover the profound implications and complexities that define the relationship between nuclear capabilities and economic prosperity in these nations. As we navigate the historical context, policy choices, and global consequences of these countries' nuclear pursuits, our objective is to shed light on the dynamic forces that have shaped the contemporary landscape of international relations and economics.

In essence, this intersection between security and economic considerations underscores the critical need to understand the multifaceted relationship that exists in nuclear-armed states. Through this exploration, we hope to illuminate the intricate connection between the specter of potential destruction and the allure of economic gain in these nations.

Methodology

This research employs a hybrid methodology, combining quantitative analysis and the case study method, to provide a comprehensive understanding of the intricate relationship between a state's nuclear ambitions and its economic trajectory. These two research methods are integral in shedding light on the multifaceted dynamics at play.

One key aspect of the methodology involves quantitative analysis. This approach delves into economic indicators, such as GDP growth and military expenditures, to offer a quantitative perspective on the economic impact of nuclear capabilities. By quantifying these factors, the study reveals the financial costs associated with nuclear programs. It also uncovers the nuanced and multifaceted influence of nuclear arsenals on economic growth and trade dynamics.

The second cornerstone of our methodology is the case study method. This method allows for an in-depth exploration of the experiences of selected nuclear-armed states, namely the United States, Russia, India, and Pakistan. These case studies were carefully chosen due to their diverse approaches to managing nuclear programs and economic development. The case study method provides real-world examples that offer valuable insights into the challenges and opportunities faced by nuclear-armed states. By examining these cases, we gain a deeper understanding of how security and economic considerations intersect and inform policy choices.

Through this dual methodology of quantitative analysis and case studies, this research seeks to paint a holistic picture of the intricate connection between the specter of potential destruction and the allure of economic gain in nuclear-armed states. These methods, in conjunction, enrich our understanding of the complex nexus between security and prosperity within the realm of international relations.

Obtained Result

The research, based on the outlined methodology, has yielded a multifaceted understanding of the intricate relationship between a state's nuclear ambitions and its economic trajectory. The analysis of historical data revealed a complex interplay between the two aspects, with varying outcomes in different nuclear-armed states.

Quantitative analysis provided valuable insights into economic indicators, demonstrating that nuclear capabilities often come at a substantial financial cost, yet their impact on economic growth and trade dynamics is nuanced and depends on several factors.

Case studies of the United States, Russia, India, and Pakistan showcased the diverse ways in which these nations have managed their nuclear programs and economic development. These case studies offered real-world examples of the challenges and opportunities that nuclear-armed states face.

Collectively, these research methods provided a holistic view of the intricate connection between the specter of potential destruction and the allure of economic gain in nuclear-armed states, enriching our understanding of the complex nexus of security and prosperity in the realm of international relations.

Main Part

The Dual Role of Nuclear States in Global Security

Nuclear states and their arsenals constitute a major facet of global security and international politics. States that possess nuclear weapons play a dual role in shaping the contemporary geopolitical landscape. On one hand, their arsenals serve as powerful deterrents, preventing potential adversaries from engaging in conflicts, thus contributing to global stability. On the other hand, the development, maintenance, and modernization of these weapons require substantial economic investments. Resources allocated to nuclear programs could alternatively be directed toward pressing socioeconomic needs, including healthcare, education, and infrastructure development. This dilemma is closely tied to the theory of opportunity costs because the financial choices made by nuclear states impact both the security concerns of the countries and the welfare and development of their populations.

For example, when states allocate their financial resources to nuclear programs and security, this is often at the expense of social programs, including health, education, and infrastructure. And, the prioritization of social programs may limit the resources available for security and nuclear deterrence policies. This dilemma represents a difficult challenge facing nuclear-armed states. As they strengthen their security posture, they potentially reduce opportunities for prosperity and development for their populations. The choices made by these states require finding a delicate balance between security and socio-economic development, highlighting the important trade-offs associated with nuclear arsenals (Perlo-Freeman 2016).

It should be noted that the state of Pakistan, a country with nuclear capabilities, faced this dilemma. Pakistan's drive to develop a nuclear arsenal was set in the context of its rivalry with India (Siddiqui Zeba 2019). Possession of nuclear weapons undoubtedly served as a deterrent that helped prevent large-scale conflicts between two nuclear-armed neighbors. However, this process came at a significant economic cost. Pakistan has allocated a significant portion of its national budget to the development, maintenance and modernization of its nuclear arsenal. These resources, if diverted, could have been used to meet critical socio-economic needs such as health, education and infrastructure development to improve the living conditions of its citizens. According to a study published in "Defence and Peace Economics", if the funds spent by Pakistan on the development of nuclear weapons between 1973 and 1997 had been directed to the development of the country's economy, the state's gross domestic product per capita would have been 27.8% higher during this period (Anthony A. Mayberry 2022).

This example highlights the circumstances faced by nuclear armed states. While nuclear arsenals are vital to security, they also represent opportunity costs by diverting resources from domestic priorities. These complex dynamics continue to shape Pakistan's policy decisions, affecting both its security and the well-being of its people.

Economic Consequences of Nuclear Arsenal Development

The economic consequences of developing, maintaining, and modernizing a nuclear arsenal are substantial for a nation's economy. This financial investment spans various aspects, such as research and development, production and inventory management, the construction of nuclear laboratories and testing facilities, the establishment of supply chains, and the training of skilled personnel. The wide spectrum of direct economic expenditures demands significant financial resources, which are redirected from social development initiatives and allocated to the realm of national security.

When discussing the direct economic costs in terms of volume, attention is drawn to states that belong to the ranks of developed countries while also possessing nuclear weapons. The United States, maintaining one of the most significant nuclear arsenals globally, is a prime example. According to a 2022 report published by the Arms Control Association, the United States holds approximately 1,700 strategic nuclear warheads deployed on ICBMs, submarine-launched ballistic missiles, and strategic bombers. Additionally, around 100 tactical nuclear warheads are stationed in five European countries. As per the same source, in May 2021, the Congressional Budget Office announced that the United States had allocated \$634 billion to sustain its nuclear arsenal over the next decade. Notably, this amount represented a 28% increase from the forecast published in 2019. According to the Arms Control Association's report, the projected expenses designated for the modernization and maintenance of the United States' nuclear arsenal from 2021 to 2030 range from 6.0% to 8.5% of the total planned expenditures for the country's national defense. This implies that over the next three decades, the total maintenance and modernization costs for U.S. nuclear forces could reach \$2 trillion (Shannon Bugos 2022).

The Russian Federation, as another major nuclear power, is making substantial investments in its nuclear arsenal, including the costly modernization of intercontinental ballistic missiles. According to the 2018 SI-PRI report, expenditures by the Russian Federation on the modernization and maintenance of nuclear weapons constituted approximately 13% of its overall defense budget from 2010 to 2016, as reported on ICAN's website. However, in 2022, Russia's military budget experienced a significant increase, reaching \$65.9 billion for that year. Correspondingly, the costs associated with Russia's nuclear weapons stockpile also escalated, amounting to \$9.6 billion in 2022, or approximately 11% of Russia's total military spending for that year (International Campaign to Abolish Nuclear Weapons 2023).

In 2022, India, despite having a smaller nuclear arsenal compared to the two countries mentioned above, allocated a significant portion of its defense budget to nuclear programs. During that year, the country's expenditure on the maintenance and development of nuclear weapons increased by 21.8%, which was the largest figure in the world for the mentioned period (Beyza Binnur Donmez 2023). However, despite this substantial increase,

India's gross domestic product (GDP) grew at a rate of only 7% during the same period (FORBES INDIA 2023).

Conclusion

In conclusion, the economic consequences of developing, maintaining, and modernizing a nation's nuclear arsenal are significant and far-reaching. This financial investment encompasses a wide spectrum of expenditures, ranging from research and development to the construction of testing facilities, supply chains, and skilled personnel training. The redirection of resources from social development initiatives to national security represents a complex trade-off that nuclear-armed states must navigate.

Direct economic costs associated with nuclear programs are particularly evident in developed nations with substantial nuclear arsenals. The examples of the United States, Russia, and India illustrate the scale of financial commitments required to sustain and upgrade these arsenals. The United States, in particular, has seen a significant increase in its nuclear arsenal's projected maintenance and modernization costs, with estimates reaching an astonishing \$2 trillion over the next three decades. Russia, another major nuclear power, has consistently invested a substantial portion of its defense budget in the modernization and maintenance of its nuclear weapons. In 2022, Russia's military budget experienced a notable increase, and the costs associated with its nuclear weapons stockpile also rose significantly. India, despite having a smaller nuclear arsenal, allocated a considerable portion of its defense budget to nuclear programs, with a remarkable increase in expenditure. However, this substantial allocation did not translate into equally substantial economic growth, as reflected in India's GDP.

Recommendations:

Balancing Security and Socio-Economic Development: Nuclear-armed states should continue to carefully assess the balance between their security requirements and socio-economic development. It is crucial to strike a balance that ensures national security without compromising the well-being and progress of the population.

Transparency and Accountability: Governments should maintain transparency in disclosing the costs associated with their nuclear programs. This transparency allows for informed public and international scrutiny, ensuring that resources are allocated prudently and efficiently.

Arms Control and Reduction: International efforts toward arms control and disarmament remain paramount. Reducing the number of nuclear weapons and their modernization can lead to substantial cost savings, which can be redirected toward pressing social and economic needs.

Future Perspectives:

The complex interplay between a state's nuclear ambitions and its economic trajectory is likely to remain a key topic in international relations and security studies. As we look to the future, several perspectives emerge:

Arms Control Agreements: The success and evolution of arms control agreements will continue to influence the economic costs and priorities of nuclear-armed states. Negotiations and developments in this realm will be closely watched.

Emerging Nuclear Powers: The economic challenges faced by emerging nuclear-armed states, as they strive to establish and modernize their arsenals, will warrant attention. Their choices will have implications for both their security and socio-economic development.

Global Security Landscape: The global security landscape is constantly evolving. New threats and challenges may necessitate adjustments in nuclear deterrence policies and budgets, further impacting the economic dynamics of nuclear programs.

In the coming years, understanding the trade-offs and challenges associated with nuclear arsenals will continue to be vital for policymakers, scholars, and the global community at large. Balancing national security with socio-economic progress remains an enduring imperative.

References

- Anthony A. Mayberry. 2022. Defence and Peace Economics. April 13. Accessed october 30, 2023. https://www.tandfonline.com/doi/full/10.1080/10242694.2022.2065186?needAccess=true.
- Beyza Binnur Donmez. 2023. breaking. Jun 12. https://www.aa.com.tr/en/economy/global-spending-on-nuclear-weapons-hits-829b-report/2920351.
- FORBES INDIA. 2023. FORBES. September 29. Accessed October 30, 2023. https://www.forbesindia.com/article/explainers/gdp-india/85337/1.
- International Campaign to Abolish Nuclear Weapons. 2023. Wasted: 2022 Global Nuclear Weapons Spending. Genève, Switzerland: The International Campaign to Abolish Nuclear.
- Perlo-Freeman, Sam. 2016. STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE. April 5. Accessed October 30, 2023. https://www.sipri.org/commentary/blog/2016/opportunity-cost-world-military-spending.
- Shannon Bugos. 2022. armscontrol.org. January. Accessed October 30, 2023. https://www.armscontrol.org/fact-sheets/USNuclearModernization.
- Siddiqui Zeba. 2019. Reuters. march 1. Accessed October 31, 2023. https://www.reuters.com/article/us-india-kash-mir-pakistan-nuclear-factbo-idUSKCN1QI4O5.

The Role of Nuclear Capabilities: Deterrence or Coercion?

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Abstract

Throughout the history of international relations, nuclear power has been mostly considered as a tool of both direct and extended deterrence ensuring longstanding peace, as it proved to be the cheapest and easiest tool to destroy a state, its population and economy. However, since the end of the Cold War, ongoing geo-political processes, including Russia's recent invasion of Ukraine as well as North Korea's assertive nuclear rhetoric, have called into question the effectiveness of extended deterrence. The given work explores the role of nuclear capabilities in contemporary world politics in terms of the changing purposes of its utility.

The paper reviews the basic concepts of nuclear deterrence and coercion, and examines their implications on international crisis bargaining. The main purpose of the paper is to determine whether nuclear power is transforming from an effective deterrence mechanism to a tool of coercive foreign policy, the reason for which can be an assumption about an adversary's perception that extended nuclear deterrence lacks credibility. The research question along with the hypothesis has been explored through a comparative analysis of two case-studies: the Russia-Ukraine War and the North Korea-South Korea tensions, in terms of coercive foreign policy. By identifying common aspects across the two cases and drawing the cause-and-effect relationship between the lack of credibility of extended deterrence and nuclear coercion, the research concludes that from a coercer's perspective, challenges related to the extended nuclear deterrence might be a cause of the aggressive foreign policy of certain states.

Keywords:

Nuclear Capabilities, Deterrence, Coercion, Russia-Ukraine War, North Korea-South Korea Tensions.

Contemporary international politics faces various complex security challenges, among which is the role of nuclear capabilities, which has become an increasingly central issue for global peace and security. Ongoing geo-political processes, including Russia's invasion of Ukraine and its nuclear rhetoric, recently have attracted widespread attention among world leaders and policymakers, reaffirming uncertainties regarding the purposes of the potential use of nuclear weapons.

Since 1945, most strategic thinking about nuclear capabilities has been mainly focused on deterrence theory, as it relates to attempts to contribute to longstanding peace. As a leading nuclear deterrence scholar Robert Jervis notes, nuclear weapons are a tool for maintaining the status quo, not for changing it, and should be used for defending vital interests, such as sovereignity and national territory. However, the complex geo-political interests of nuclear powers complicate their interactions and violate the balance of power, casting doubt on the basic idea of its deterrent role. Taking into account evolving nuclear rhetoric, the given work seeks to examine the credibility of extended deterrence, in line with the changing role of nuclear capabilities in global politics, by identifying general trends in the foreign policy of nuclear powers.²

Thus, the emphasis of current study is on exploring the role of nuclear capabilities in terms of international crises, regarding its ability to exacerbate tensions through coercive policy. This paper describes the basic concepts of deterrence and coercion and their implications in the nuclear realm. The main purpose is to answer the following research question: is nuclear power transforming from an effective deterrence mechanism to the tool of coercive foreign policy?

Due to international political dynamics, it can be assumed that coercers perceive that their opponents lack the will and readiness to defend the third party through the use of nuclear weapons, leaving space for the coercer to apply more offensive strategies. Thus, the hypothesis of the given work can be formulated as follows: the lack of credibility of an extended nuclear deterrence results in a coercive foreign policy in belligerent nuclear states.

The research has been conducted using a qualitative methodology, including the analysis of secondary data from academic studies – books, research, journal articles, as well as online sources. The above-mentioned assumptions have been explored through a comparative analysis of two case-studies: the Russia-Ukraine War and North Korea-South Korea tensions, in which, according to the majority of experts, nuclear coercion has been actively used as a tool for aggressive foreign policy.

Main Part

Deterrence in the Nuclear Age

Since the end of World War II, nuclear deterrence has been reemerging and growing in its significance as a critical aspect of great powers' security and defence policy. In international politics, deterrence is the practice of discouraging a potential adversary from a military attack. It attempts to prevent hostile actions, as opposed to the "compellence" concept, which involves actions forcing a state to implement certain desired policies. Deterrence is the persuasion of a potential adversary of the heavy losses resulting from military conflict that would outweigh any possible benefits. "Deterrence can be a technique, doctrine and a state of mind. In all cases it is about setting boundaries for actions and establishing risks associated with crossing these boundaries".

Generally, two types of deterrence are widely known: deterrence by denial and deterrence by punishment. Deterrence by denial represents a strategy aimed at deterring aggressive actions by making their success unrealistic, thus eroding an enemy's confidence in achieving its strategic goals. For example, a state can achieve this by developing inclusive defence capabilities, consisting not only in the military component, but including other essential elements, such as civil defence, economy, diplomacy, etc. Furthermore, successful deterrence also can be achieved by creating a balance of power in the disputed territories that would prevent an attacker from carrying out its intentions against a potential victim state.⁴ The second approach, deterrence by punishment, focuses more on a conflict's potential disastrous consequences. For example, the devastating economic sanctions that would result in a nuclear conflict would significantly increase the price of an attack. It is noteworthy that, based on the academic research, deterrence by denial is considered a more reliable approach than deterrence by punishment, as a potential aggressor might question a defender's will to impose penalties due to the risks posed by accompanying political, military, economic, social, and other factors.

Deterrence can be direct or extended. The first approach involves the direct actions of a state aimed to prevent potential attacks on its territory, while extended deterrence focuses on discouraging attacks on third countries – partners or allies. For example, during the Cold War the U.S. exercised both direct and extended de-

¹ Robert Jervis, The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armagedon. Ithaca, NY: Cornell University Press, 1989.

² Karl P. Mueller, Deterrence and Coercive Diplomacy, Routledge Handbook of Air Power Routledge, 2018.

³ Lawrence Freedman, Deterrence, 2004.

⁴ J. Michael Mazzar, Understanding Deterrence, RAND Corporation, 2018.

terrence. Direct deterrence was aimed to dissuade adversaries from a nuclear attack on its territory, also known as "massive retaliation", whereas the goal of the extended deterrence was the prevention of conventional threats against the NATO states.

The fact is that extended deterrence is much more complicated than the direct approach. During military operations, it is more challenging for a state to deny an attack far away from its territory, as it requires projection of military force, sometimes close to the territory of a hostile nation. The factor of credibility in decision-making also must not be ignored. From an adversary's perspective, a state will always go to war to defend itself, while it may lack will and readiness to protect a third party. For instance, during the Cold War, some experts questioned the credibility of the U.S. willingness to sacrifice its own territory in defence of European states.

No comparable technological revolution in weapons has ever occurred prior to the development and accumulation of nuclear capabilities by the United States and Soviet Union. It was accepted to be both an effective and an efficient tool in achieving their national security objectives, in comparison to the enormous costs of conventional forces. Generally, nuclear capabilities revolutionized the approach of great powers to projecting their security and defence. There was no more necessity for them to develop the full spectrum of military capabilities in order to thwart an enemy attack against their national interests, sovereignty and territorial integrity. Instead, it was more important that they maintained credibility and a high level retaliatory capacity to significantly damage any potential attacker.

Essential components of deterrence are "the perception of capability to deliver violence, perception of will, and reputation of the ability to implement intentions effectively". Deterrence theory relies on the perception that the opposing parties act both rationally and according to the rules widely accepted by international society. Deterrence, in contrast to defence, can be defined as a public good, since it deters potential hostile parties from attacking a nation, every individual – without exception – benefits from this safety. During the Cold War, nations with nuclear capabilities had stronger deterrence mechanisms, as an attack against them would almost inevitably end in resounding defeat.

Here it is worth to mention the economic aspects of nuclear deterrence, both direct and extended. In terms of the direct approach, the economic consequences of hostilities would almost certainly be disastrous, while a nuclear state may avoid the fatal economic results in an extended deterrence scenario.

The states possessing nuclear weapons had enough capacity to unilaterally destroy the main cities of adversarial countries, and if the latter were ready for this potentiality and were able to respond quickly, the devastating consequences of this hostility could be mutual. This fact is especially noteworthy considering that the number of urban centers accounting for the larger portion of economic strength of the great powers, the U.S. and Russia, was actually quiet small. For example, around 170 large metropolitan areas account for 75 percent of the U.S.' manufacturing industry and around 55 percent of its population. The allocation of the main economic hubs in Russia is about the same. How many bombs are needed to destroy 75 percent of the industrial capital of these powers, and what would be their cost to a comparable use of conventional weapons resulting in the same effect? Certainly, it depends mainly on two factors, such as the size of the area and the size of the bomb. Hiroshima's case shows that a 20-kiloton atomic bomb was able to devastate a city of 250,000, killing one-third of its population. The spread of radiation reached about 7,000 square miles. Respectively, 10 megaton thermonuclear bomb can destroy an area 60 times larger, the equivalent of almost any metropolitan in the above-mentioned great powers.⁶ The extended approach to nuclear deterrence lacks credibility, since the probability that states would put at high risk their security – and the existential parts of their economy – because of third countries' interests is rather low.

Despite its positive and peaceful role in terms of deterrence, nuclear capabilities, in case of improper utilization, can form the basis for an aggressive foreign policy focused on achieving high-stakes national security goals, with fatal consequences not only for hostile countries, but for the entire globe.

Coercion in the Nuclear Realm

Nowadays, the transformational role of nuclear capabilities is increasingly being used as a tool to blackmail and coerce an opponent into altering its behaviour. As the scholar Thomas Schelling notes, the logic of coercion is more about hurting than seizing, in order to get an actor to do something against its desire. As he points out, coercion involves "compellence" as well as certain aspects of deterrence; compellence refers to convincing an adversary to act, whereas deterrence seeks to prevent an opposing party from acting.⁷

The analysis of the political effects of nuclear capabilities from a coercionist perspective has emerged particularly over the last decades, since nuclear weapons have enhanced the bargaining power of coercion. A coercive state's purpose is to achieve its objectives and interests without actually having to execute the threat, since the costs and consequences related to its execution might be tremendous for the attacker, let alone its target. These objectives might include: relinquishing territory, dismantling military bases, paying reparations, or even changing domestic policies. Some analysts call this strategy "the dark side of international relations", as nuclear

⁵ Michael Codner, Framing Deterrence in the Twenty-first Century Conference Summary. p. 20.

⁶ Hitch, J. Charles. McKean, N. Roland, The Economis od Defense in The Nuclear Age, 1960, p.7

⁷ Pfaff C. Anthony, Coercing Fluently: The Grammar of Coercion in the Twenty-first Century, United States Army War College Press: Strategic Studies Institute, 2022.

weapons are used to advance political interests by forceful means.8

Similar to deterrence, coercion also provides two alternative approaches, each focused on inducing another state to comply with the demands set by a coercer. One emphasizes counterforce and the other, countervalue. Coercion by denial pertains to scenario in which a blackmailer threatens the target state in order to impose its interests by force if its demands are not complied with. This approach generally poses threats to the target's capabilities, such as its armed forces and military facilities, seizing or even destroying the object in dispute, as well as the target country's ability to resist. Another approach is coercion by punishment: a strategy which is used to make a target expect to suffer high costs or threatening to inflict unacceptable pain. Hence, it aims to change the adversary's policy or strategy without affecting its abilities. In fact, coercive behaviour frequently straddles the lines between these two coercive approaches, and in order to advance its interests, the coercer tends to employ both of them, like Russia is currently doing in the ongoing Russia-Ukraine war.

There are two fundamentally different predictions provided by the two competing theories of nuclear coercion: the nuclear coercionist school suggests that atomic bombs give their owners political leverage; the nuclear skepticism theory, by contrast, argues that they do not. On the one hand, nuclear weapons enable a coercer to threaten extraordinary punishment, raising risk and escalating crises. However, if rhetorical threats seem insufficient, the coercer can also try to employ demonstrative, limited, or forceful military action. On the other hand, considering its strategic and moral costs, coercive nuclear threats are not considered credible and tend to fail. In fact, the outcomes of coercive efforts are shaped by a variety of factors, among which power, costs, and stakes are key. These may not be equal for all parties engaged in a crisis, and they may require rational cost-benefit analysis. Hence, coercion may fail because of overestimation of the nuclear weapons utility and/or underestimation of the global reaction. Furthermore, domestic political and international reputational costs must be considered. Thus, each actor's decision depends both on its own circumstances as well as its expectations about the likely behaviour of the other actors. A two-step scenario of coercive interactions is illustrated below. After receiving a coercive demand, the target needs to decide whether to comply or resist. Facing resistance, the coercer has two options: enforce its threat or give up.¹³

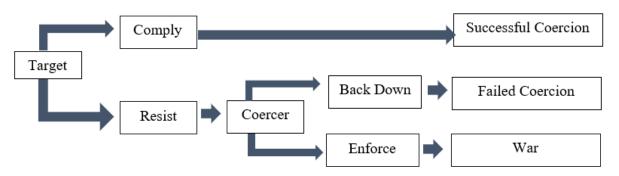


Figure 1. A framework of coercion.14

Despite the lack of successful nuclear coercion experiences, current political-security situations, like the Russian-Ukrainian War and tensions between North Korea and South Korea, clearly demonstrate the attempts of nuclear powers to use their capabilities to support the states' assertive foreign policies.

The Nuclear Coercion Case-Studies

The Russia-Ukraine War

One of the most obvious demonstrations of the changing role of nuclear capabilities is Russia's belligerent foreign policy supported by nuclear rhetoric during the ongoing war in Ukraine. This war might result in profound geo-political shifts related to the high risk of nuclear escalation. In contrast with recent decades, when nuclear weapons were regarded as the main guarantor of the balance of power among the states, Russia's current coercive policy may turn the widely acknowledged perception of extended nuclear deterrence upside down.

Russia's nuclear coercion has brought into question the current international security order, since it appears to be the most significant and comprehensive attempt at a prolonged and consistent coercive policy. The nuclear threats have been used to deter direct NATO military involvement; limit Western military assistance to <u>Ukraine</u>; prompt relief of sanctions against Russia; and to compel the government of Ukraine to capitulate to its

- 8 Todd S. Sechser. & M.. Fuhrmann, Nuclear Weapons and Coercive Diplomacy, Cambridge University Press, 2017.
- 9 Mueller Karl P., Deterrence and Coercive Diplomacy, Routledge Handbook of Air Power Routledge, 2018.
- 10 Ibid
- 11 Ibid
- 12 Arndt Anna C., Horovitz L. & Onderco M., Russia's Failed Nuclear Coercion Against Ukraine, The Washington Quarterly, 2023
- 13 Todd S. Sechser & M. Fuhrmann., Nuclear Weapons and Coercive Diplomacy, Cambridge University Press, 2017.
- 14 Ibid

demands and acquiesce to the annexation of Ukrainian territories.¹⁵ The majority of analysts consider Russia's nuclear coercive foreign policy as a failure due to its underestimation of the West's reaction to its invasion of Ukraine.¹⁶ However, this does not eliminate possible future attempts of nuclear coercion, if the coercer perceives and believes that there are credibility gaps in terms of extended deterrence.

Although, nuclear coercion seems exceedingly difficult to maintain, Russia will probably continue to try to enhance its position in the global security system through its use of extensive coercive rhetoric, triggering widespread concern.

The North Korean-South Korean Tensions

Similar to the Ukraine case, according to some scholars, the U.S. promises of extended deterrence for South Korea appears to be less effective, as North Korea continuously develops its nuclear capabilities for military purposes.

Since 2009, when North Korea launched its second nuclear test, Pyongyang's rhetoric and foreign policy has become more aggressive towards South Korea. One year later, on March 26th, a North Korean submarine attacked an sunk a 1,200-ton South Korean gunboat. In the aftermath, North Korean political leadership issued warnings of a physical response, in case of an attack from South Korea. In its statement, the North Korean Government threatened to use nuclear weapons if the U.S. or South Korea responded militarily, ignoring the potential threats of the U.S.' extended deterrence.¹⁷ Furthermore, even the presence of the U.S. troops in South Korea has not limited North Korea's nuclear coercive rhetoric.

As history has shown, both the U.S. and South Korea acted cautiously, without a considerable military assault. According to some analysts, officials in Pyongyang could understand this to mean that offensive foreign policy, backed by nuclear rhetoric against neighbors, can be implemented without significant retaliation. Recent studies have found that coercers' continuing assertive efforts are mainly driven by their ambition to elevate their status in the world, particularly in regional politics, and change the dynamics of regional security talks in their favor. 19

Conclusion

Nuclear capabilities have significantly changed world politics, considering its role in international bargaining. Some policymakers still debate about the correlation between deterrent and coercent approaches since coercion involves some elements of deterrence. Both deterrence and coercion involve threats and costs for the target; they demonstrate the comparative effects of power, interests, and outcomes, which depend on the strategic choices made by states. One of the key distinctive aspects of a state applying a deterrent strategy is that it aims to maintain status quo, whereas, coercive states are focused on getting a target state to do something against its desire.

The possession of nuclear weapons enables their owners to think strategically about how to achieve their national and/or geo-political interests by using nuclear capabilities. Decades ago, Ukraine, which possessed one of the largest nuclear arsenals, gave it up in exchange for the guarantee from Western nuclear powers, that in case of threats to its sovereignty and territorial integrity, the country would be protected.

The Russian-Ukrainian War and the North Korean-South Korean tensions are cases where the nuclear coercion would be less effective if the credibility of extended deterrence were strengthened. In both cases, belligerents have questioned the reliability of a third country's defensive assurances, assuming that the great nuclear powers would be unwilling to risk their security to defend Kyiv and Seoul through extended nuclear deterrence.

The paper has shown that today, nuclear power is employed not only as an effective mechanism to defend national interests, but also as a tool of offensive foreign policy. Despite the lack of successful nuclear coercion examples, the current political-security cases of the Russian-Ukrainian War and continuing tensions between North Korea and South Korea create the possibility that, from a coercer's perspective, credibility challenges of the extended nuclear deterrence may cause changes to the foreign policy of certain states. However, based on the research, despite the situations discussed above, the Western nuclear extended deterrence remains a guarantor of global security.

¹⁵ Anna C. Arndt., Horovitz L. & Onderco M., Russia's Failed Nuclear Coercion Against Ukraine, The Washington Quarterly, 2023.

¹⁶ Ibid- P. Dreuzy & A. Gilli., Russia's Nuclear Coercion in Ukraine, NATO Review: Opinion, Analysis and Debate on Security Issues, 2022.

¹⁷ J. Meyerle, K.Gause & A. Ostovar, Nuclear Weapons and Coercive Escalation in Regional Conflicts: Lessons from North Korea and Pakistan, CNA: Analysis & Solutions, 2014.

¹⁸ Ibid

¹⁹ William R. Mckinney, Understanding North Korea's Nuclear Coercion Strategy, 38 NORTH: Informed Analysis of Events in and around North Korea, 2017.

References

Arndt Anna C., Horovitz L. & Onderco M., Russia's Failed Nuclear Coercion Against Ukraine, The Washington Quarterly, 2023.

Art Robert J. & Jervis R., International Politics: Enduring Concepts and Contemporary Issues, Thirteenth Edition, New York: Pearson, 2016.

Codner, Michael. Framing Deterrence in the Twenty-first Century Conference Summary. p. 20.

Dreuzy P. & Gilli A., Russia's Nuclear Coercion in Ukraine, NATO Review: Opinion, Analysis and Debate on Security Issues, 2022.

Freedman L., Deterrence, 2004.

Fuhrmann M. & Sechser Todd S., Crisis Bargaining and Nuclear Blackmail, International Organization, 2013.

Hitch, J. Charles. McKean, N. Roland, The Economis of Defense in The Nuclear Age, 1960.

Langeland K., Anthony V., Reach C., Dictus Ch. & Tarini G., Building U.S. Responses to Russia's Threats to Use Nonstrategic Nuclear Weapons, A game Theoretic Analysis of Brinkmanship, RAND Corporation, 2023.

Mazzar J. Michael, Understanding Deterrence, RAND Corporation, 2018.

Mckinney William R., Understanding North Korea's Nuclear Coercion Strategy, 38 NORTH: Informed Analysis of Events in and around North Korea, 2017.

Meyerle J., Gause K. & Ostovar A., Nuclear Weapons and Coercive Escalation in Regional Conflicts: Lessons from North Korea and Pakistan, CNA: Analysis & Solutions, 2014.

Mueller Karl P., Deterrence and Coercive Diplomacy, Routledge Handbook of Air Power Routledge, 2018.

Nye Joseph S., Dilemmas of Deterrence, ASPI: Australian Strategic Policy Institute, 2023.

Nye Joseph S., Nuclear Deterrence after Ukraine, Project Syndicate, 2022.

Pfaff C. Anthony, Coercing Fluently: The Grammar of Coercion in the Twenty-first Century, United States Army War College Press: Strategic Studies Institute, 2022.

Schelling Thomas C. The Strategy of Conflict, Cambridge Mass.: Harvard University Press, 1960.

Sechser Todd S. & Fuhrmann M., Nuclear Weapons and Coercive Diplomacy, Cambridge University Press, 2017.

Steward Robert M., Lieutenant Colonel, ILANG, Assessing The Uncertainty of Nuclear Deterrence, United Stated Air Force Center for Unconventional Weapons Studies, 2017.

America's Nuclear Policy in the New Nuclear Era

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Abstract

Now that there is full-scale Russian aggression in Ukraine, along with conflicts in the Middle East, the risk of a potential confrontation between nuclear powers is high. Time will tell to what extent nuclear weapons will be retained as a means of preventing a major war. One thing is clear - the world is entering a new nuclear era. According to experts, nuclear rhetoric has not been so frequent since the Cuban Missile Crisis. Current global processes are becoming more difficult to predict in light of new challenges. In this context, the nuclear rhetoric of Vladimir Putin, the deployment of Russian tactical nuclear weapons in Belarus, as well as China's attempt to increase its nuclear capabilities amid intensified relations with America, are noteworthy. America continues to work with its allies and partners to promote a nuclear non-proliferation treaty and negotiate with Russia. At the same time, America is trying to deter potential adversaries, including Russia and China, from using nuclear weapons against the US and its allies or partners.

The purpose of this paper is to analyze American nuclear policy against the backdrop of the growing confrontation with Russia and China and its role in national security. The paper will also discuss America's nuclear capabilities and issues related to their modernization.

This paper is a desk study, and the social research method was used in its work. In particular, the empirical data used in the paper includes a review of the scientific literature created on the mentioned issue and policy documents developed in the field of security. Additionally, the opinions expressed by experts in the field of politics and security and the statements of officials on the mentioned issue were considered.

The possession of nuclear weapons by states has significant implications for global security and geopolitics. All nuclear states, based on their national interests and security, seek to use their nuclear capabilities for nuclear deterrence or nuclear intimidation. That's why, in the face of increasing tensions with Russia and China, America's nuclear strategy continues to change, adjusting to new challenges while adhering to the key concepts of deterrence, assurance, and strategic stability. Nuclear capability modernization is crucial to this approach, but it also presents issues that must be carefully considered to preserve national security while addressing global concerns about nuclear proliferation and arms control. The nuclear posture and modernization initiatives of the US remain crucial to international security talks, underscoring the significance of responsible nuclear strategy in an ever-changing world.

Keywords:

Us Nuclear Policy, Nuclear Weapons, Nuclear Proliferation, Nonproliferation, Nuclear Posture Review, Nuclear Deterrence.

The growth of nuclear weapons has fundamentally altered the nature, scope, and production of these arms, and the status of those possessing such weapons remains a source of contention. Since the inception of nuclear weapons, the discourse has been divided into two camps: those advocating for the reduction and elimination of these weapons and those supporting the development of new technologies and nuclear arms. When discussing nuclear policy, it is essential, first and foremost, to define what nuclear weapons are, their origins, and which countries possess these arms and articulate their objectives regarding nuclear weapons.

A nuclear weapon is an explosive device in which the energy source is a nuclear reaction. In simpler terms, a substantial amount of energy is produced as a result of the fission of the nucleus of a heavy element, causing widespread damage.

The weapon associated with the name of Robert Oppenheimer in the USA can be considered the first product of the Cold War. These weapons proliferated globally during the Cold War, and currently, nine countries possess them. The number of warheads in these countries varies. The USA (1945), Russia (1949), Great Britain (1952), France (1960), Israel (1960-1979), India (1974), Pakistan (1998), China (1964), and North Korea (2006). Russia, the USA, and China have the largest nuclear arsenals.

US: As one of the two superpowers during the Cold War, the US possesses the world's largest nuclear arsenal. Its nuclear policy, developed over the years, aims to deter aggression against itself and its allies. The primary concerns include the potential for nuclear proliferation, accidental use, or unauthorized access to nuclear weapons.

As of the March 2023 New START announcement, the US possesses 1,419 strategic nuclear weapons deployed on 662 strategic delivery systems, encompassing heavy bombers, intercontinental ballistic missiles, and submarine-launched ballistic missiles. Additionally, the US maintains an estimated 100 B-61 nuclear gravity bombs at six NATO locations across five European nations: the Netherlands, Italy, Germany, Turkey, Belgium.

A declassification notification from the US State Department on October 5, 2021, revealed that the total number of "active" and "inactive" warheads in the US as of September 2020 was 3,750. This statistic excludes retired warheads or those pending decommissioning. As of early 2023, the present military stockpile is estimated to be 3,708 warheads, with an additional 1,536 retired warheads awaiting dismantlement, bringing the total to 5,244 warheads.¹

The American nuclear arsenal is deployed across three basic areas, known as the Triad:

- Land-based intercontinental ballistic missiles (ICBMs);
- Sea-based nuclear submarine-launched ballistic missiles;
- · Air-based nuclear weapons from the Air Force's heavy bomber group.

The US uses nuclear-armed B-52 Stratofortresses and B-2 Spirits to deliver strategic nuclear bombs by air. The B-21, the newest Air Force stealth bomber, is anticipated to replace the B-2 in the mid-2020s. If these bombers can dodge air defenses, they can conduct a second strike. The US should keep developing the B-21 and nuclear hypersonic cruise missiles.

The US also has smaller "tactical" nuclear bombs that may be launched via cruise missiles or conventional fighter-bombers such as the F/A-18 Hornet, F-15 Eagle, F-16 F, F-22, and F-35. Tactical nukes, as opposed to their more powerful strategic equivalents such as ICBMs, are intended for use on the battlefield to target particular targets.

Gravity bombs, short-range missiles, artillery rounds, land mines, depth charges, torpedoes, nuclear-armed ground-based or shipborne surface-to-air missiles (SAMs), and air-to-air missiles are all examples of tactical nuclear weapons. In terms of range or yield, there is no specific definition of the "tactical" category. Tactical nuclear weapons have a lesser yield than strategic nuclear bombs, but they are nonetheless formidable, with current tactical warheads having yields in the tens or perhaps hundreds of kilotons. Variable yield and improved radiation weapons (often known as "neutron bombs") are among the elements of these weapons designed to improve their battlefield capabilities.

With the intention of eliminating national defenses, strategic missiles and bombers are assigned predefined targets, such as enemy airfields, radars, and surface-to-air defenses. Conversely, tactical weapons are intended for quick assault maneuvers in closer proximity to friendly forces. Although tactical nuclear weapons played a significant role in the Cold War's peak nuclear weapons stockpile levels, NATO and other organizations recommended reducing and increasing the transparency of their stockpiling and use due to concerns that their deployment could cause an unplanned escalation. The US and USSR removed the majority of their tactical nuclear arms from service and eliminated of them after the Cold War ended in 1991. By 2021, there were only approximately 240 American and 2000 Russian tactical warheads, compared to thousands during the late 1980s; however, estimates for Russia vary greatly.

Russia: Russia possesses one of the largest nuclear arsenals globally, and its nuclear policy is centered around maintaining a credible deterrent against potential adversaries. Concerns include the possibility of regional conflicts escalating to the use of nuclear weapons and ongoing modernization efforts. As of the September 2022 New START announcement, Russia deploys 1,549 strategic warheads on 540 strategic delivery systems, en-1 Arms Control Association, FACT SHEETS & BRIEFS. 2023. https://www.armscontrol.org/taxonomy/term/135 (05.11.2023)

compassing intercontinental ballistic missiles, submarine-launched ballistic missiles, and heavy bombers. Notably, Russia suspended the New START Treaty in February 2022, leading to a failure to meet treaty commitments for submitting updated data. However, both Russia and the US have agreed to adhere to treaty limitations until 2026. As of December 2022, the US intelligence community estimates that Russia maintains an arsenal of 1,000-2,000 non-strategic nuclear weapons, not constrained by the New START Treaty.

According to the Federation of American Scientists (FAS), as of May 2023, Russia's military stockpile consisted of approximately 4,489 nuclear weapons, with an additional 1,400 retired warheads awaiting dismantlement.²

China: China maintains a nuclear arsenal smaller than that of the US and Russia but is actively expanding and improving its nuclear capabilities. Its nuclear doctrine emphasizes a minimal deterrence posture, with potential threats arising from regional tensions in the South China Sea and the Taiwan Strait. Independent analysts estimate that China possesses around 410 nuclear warheads, deliverable via land-based ballistic missiles, sea-based ballistic missiles, and bombers. Out of this total, it is believed that approximately 201 strategic launchers (intercontinental ballistic missiles and submarine-launched ballistic missiles) exist. More warheads are assumed to be under manufacture to equip additional road-mobile and silo-based missiles and bombers in the future.

China has consistently updated its nuclear forces since the 1990s, with a notable increase in the quantity and types of weapons deployed in recent years. According to the Defense Department's estimate as of October 2023, China currently has 500 nuclear weapons, and if it continues at its current pace, it might possess up to 1,000 deliverable nuclear warheads by 2030.³

Main Part

To evaluate US nuclear weapons, one must first comprehend their critical role in US national security, the growing nuclear danger presented by enemies, and the current status of US nuclear forces and supporting infrastructure. Understanding the significance of nuclear weapons provides a better context for assessing the condition of the US' nuclear capabilities. Since the end of World War II, US nuclear weapons have played a key role in averting confrontation among major nations. Nuclear deterrence has remained the top US national security priority due to its potential to prevent large-scale strikes that endanger the US homeland, allies, and forward-deployed forces, as well as to ensure friends and partners. All US military actions are operationally dependent on the back-up of US nuclear deterrence. It is consequently important that the US maintains a contemporary and adaptable nuclear arsenal capable of deterring a wide variety of threats from a wide range of possible enemies.⁴ Nuclear deterrence has been a key component of the US' national security strategy since the creation of nuclear weapons.

Key Elements of US Nuclear Deterrence Strategy:

Assured Destruction: The US strategy relies on the concept of assured destruction, meaning that the US maintains a sufficiently large and diverse nuclear arsenal to ensure that, even in the event of a nuclear attack, the country would be capable of responding with devastating force. This is intended to dissuade potential adversaries from initiating a nuclear conflict.

Triad of Delivery Systems: The US maintains a triad of nuclear delivery systems, consisting of land-based intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and strategic bombers. This diversification enhances the survivability and flexibility of the nuclear deterrent.

No-First-Use Policy: The US maintains a policy that it will not use nuclear weapons first in a conflict, except in the case of an extreme circumstance. This no-first-use policy is designed to emphasize the defensive nature of the US nuclear posture and reduce the likelihood of nuclear escalation.

Extended Deterrence: The US provides extended deterrence to its allies through its nuclear umbrella. This means that the US assures its allies, particularly NATO members and partners in the Asia-Pacific region, that it will respond to nuclear aggression against them with its own nuclear capabilities.

Flexible Response Options: The US retains a range of response options to allow for flexibility in addressing different levels of aggression. This includes the ability to tailor the size and scope of its nuclear response based on the nature of the threat.

Arms Control and Non-Proliferation Efforts: The US has been actively engaged in arms control efforts to limit the spread of nuclear weapons and reduce existing arsenals. Treaties such as the New START (Strategic Arms Reduction Treaty) with Russia aim to achieve mutual reductions in deployed strategic nuclear weapons.

Modernization of Nuclear Arsenal: The US continues to invest in the modernization of its nuclear arsenal to ensure its effectiveness and reliability. This includes upgrades to aging systems and the development of new technologies.

Cyber and Missile Defense: Recognizing the evolving nature of threats, the US integrates cyber capabilities

² Arms Control Association, FACT SHEETS & BRIEFS. 2023. https://www.armscontrol.org/taxonomy/term/135 (05.11.2023)

³ Arms Control Association, FACT SHEETS & BRIEFS. 2023. https://www.armscontrol.org/taxonomy/term/135 (05.11.2023)

⁴ Patty-Jane Geller. AN ASSESSMENT OF US MILITARY POWER: US Nuclear Weapons. 2022. "The Heritage Foundation". 2023 Index of US Military Strength. https://www.heritage.org/sites/default/files/2022 10/2023_IndexOfUSMilitaryStrength_ASSESSMENT_POWER_NUCLEAR.pdf (05.11.2023)

and missile defense into its overall deterrence strategy to address potential challenges from emerging technologies and unconventional threats. Emerging technologies, such as hypersonic weapons and cyber capabilities, present new challenges to traditional deterrence strategies. Adapting to these advancements is crucial for maintaining an effective deterrent.

Global Cooperation: Nuclear deterrence is not only a national effort but also involves cooperation with allies and partners. Ensuring a coordinated and cohesive approach among US allies is essential for the success of extended deterrence. The US continues to evolve its nuclear deterrence strategy in response to changing geopolitical dynamics, technological developments, and the evolving nature of security threats. As with any national security strategy, the effectiveness of nuclear deterrence relies on a combination of military capabilities, diplomatic efforts, and international cooperation.

US nuclear policy during the Cold War

The nuclear bombings of Hiroshima and Nagasaki in 1945 practically put an end to the Second World War and marked the beginning of the nuclear armament of global powers, their global geopolitical confrontation. The beginning of the Cold War in the USSR and the USA led to the development of new military doctrines, strategies, which were focused on nuclear deterrence, the balance of power and the modernization and development of nuclear weapons. In other words, such a geopolitical situation was created in which the determining factor for the development of new military doctrines and strategies was not only the global geopolitical reality and the theater of probable military conflict (which the famous German military politician Carl von Clausewitz talks about in the section on the practicalities of war), but also the American ruling political elite. and fears, attitudes, and attitudes among the population related to the USSR and a possible nuclear confrontation. The fears and mistrust between the two superpowers contributed to the securitization of issues related to nuclear science, therefore it required the government to implement such effective measures that would make it possible to achieve the absolute security of their nations through the adoption, development and increase of nuclear weapons. That is, a situation has been created in which the possession of nuclear weapons appears as a means of preventing the third world war between two opposing states. During the Cold War, specialized military strategies were created, according to which nuclear weapons were classified, nuclear warheads were placed on carriers with land, sea and air bases. They also began to develop anti-missile defense systems programs, which threatened the nuclear deterrence strategy, Nuclear deterrence is a tactic that seeks to persuade enemies that the costs and hazards of hostile acts exceed any potential advantages. Deterrence became the core principle of America's nuclear policy. The US aimed to prevent a Soviet attack or expansion by making it clear that any aggression would result in a devastating nuclear response. This concept of Mutually Assured Destruction (MAD) implied that both superpowers had enough nuclear weapons to ensure the destruction of the other. The Cold War witnessed a significant arms race, with both the US and the Soviet Union constantly developing and expanding their nuclear arsenals. This led to the development of increasingly powerful and accurate nuclear weapons. The US maintained a first-use policy during the early years of the Cold War, but later adopted a no-first-use policy during the 1960s. This change aimed to reduce the risk of a catastrophic nuclear conflict. The intense nuclear competition between the US and the Soviet Union heightened global tensions and led to proxy conflicts in various parts of the world, like the Korean War and the Cuban Missile Crisis. Amid the nuclear arms race, both superpowers engaged in arms control negotiations, resulting in agreements like the Partial Test Ban Treaty (1963) and the Strategic Arms Limitation Talks (SALT) during the 1970s. The Cold War ended in 1991 with the dissolution of the Soviet Union. The policy of containment and deterrence, which had guided America's nuclear posture for decades, was reevaluated. America's nuclear policy during the Cold War was deeply rooted in the principles of deterrence, containment, and the ever-present threat of mutually assured destruction. It influenced not only US-Soviet relations but also global security dynamics and led to significant arms control efforts. The lessons learned from this period continue to shape nuclear policies and non-proliferation efforts today, reminding the world of the risks and consequences of a nuclear-armed world.

US nuclear policy after the Cold War

The risks of strategic competition, the degree of danger of crisis and military conflict, and the new complexities brought about by China's nuclear expansion and the changes it brings to strategy are all increased by the significance of present and future nuclear weapons in our competitors' strategies and capabilities. The Nuclear Information Project under the Clinton administration said that the US had won the Cold War and that Russia was no longer seen as a threat. The Bush administration claimed that rather than Russia, the threat came from the so-called rogue states of North Korea, Iran, Iraq, Libya, and Syria as well as the transfer of missiles and WMD to them. The Obama administration similarly considered that nuclear terrorism and nuclear weapon proliferation were the biggest threats, rather than Russia. The Trump administration acknowledged that we were currently in a phase of great power competition with China and that Russia had returned to great power competition. This time, the Biden administration acknowledges that Russia remains a threat, that China is rapidly growing its nuclear capabilities, and that these two countries pose the most significant danger.⁵

US Nuclear Policy in the Modern Era

The US and its allies are now confronted with a more complicated security environment and growing strategic challenges. The reemergence of long-term strategic rivalry with Russia and China is today's most pressing

5 Mitsuru Kurosawa, Biden Administration's Nuclear Posture Review: Analysis and Assessment. Journal for Peace and Nuclear Disarmament. 12 Jul 2023. https://doi.org/10.1080/25751654.2023.2235764 (05.11.2023)

security problem. While the US has focused on sustaining its existing nuclear systems, Russia and China have expanded the importance of nuclear weapons in their policies and aggressively boosted the size and complexity of their nuclear forces. Furthermore, North Korea's nuclear capabilities endanger our allies and the country, complicating an already intricate geopolitical picture. Against the backdrop of Russia continuing its nuclear rhetoric alongside the war against Ukraine, and Washington repeatedly warning Moscow about the catastrophic consequences of using tactical nuclear weapons, the strategy of America's nuclear policy is of particular interest. In October 2022, the US Department of Defense released public versions of three strategic documents in late October: the National Defense Strategy (NDS), the Nuclear Posture Review (NPR), and the Missile Defense Review (MDR). The nuclear policy strategy is usually a classified document. However, the public has the opportunity to get acquainted with its non-secret part - the overview - which includes the main directions, threats, and assessment of current developments. The NPR claims that no other aspect of US military might can equal the unique deterrent provided by nuclear weapons, and that a safe, secure, and effective nuclear deterrent forms the foundation of all US national security objectives. The NPR is in favor of keeping up all current major nuclear modernization programs, including those pertaining to command and control, air, sea, and land forces, as well as certain new capabilities. However, it also acknowledges that nuclear risks cannot be eliminated by deterrence alone. Consequently, the NPR gives "renewed emphasis" to initiatives related to risk reduction, nuclear non-proliferation, and arms control, all of which support and strengthen US nuclear deterrent goals. According to the NPR, the most responsible and successful way to lessen the influence of nuclear weapons on US policy and avoid nuclear use is through mutually verified nuclear arms control. There are some key points from The NPR:

Defining Nuclear Weapons' Role and Purpose: The NPR recognizes three responsibilities for US nuclear weapons: 1) deterrence, 2) assurance of friends and partners, and 3) achievement of US objectives if deterrence fails. Deterring a nuclear attack on the US or its friends and partners is the primary purpose of US nuclear weapons, as stated by the 2022 NPR, citing the 2010 NPR. Although the US has extremely strict guidelines for using nuclear weapons, the NPR claims that the US nuclear arsenal is meant to make an adversary's decision-making process more difficult, making it more difficult for them to decide whether to start an armed conflict, spark a crisis, launch a strategic attack using non-nuclear means, or go all the way to using nuclear weapons on any big scale.

Rejects No First Use and Sole Purpose Policies: After conducting a thorough analysis, the NPR came to the conclusion that enforcing a No First Use or Sole Purpose policy would expose the US and its allies and partners to an intolerable degree of danger given adversaries' non-nuclear capabilities. The NPR, however, appears to be moving in the direction of a single-purpose philosophy.

Circumstances for Nuclear Use: The US would consider using nuclear weapons to protect its critical interests or those of its allies and partners only in dire situations. For non-nuclear weapon states that are parties to and compliant with the NPT, the US will not use or threaten to use nuclear weapons; however, for all other states, there is still a limited range of scenarios in which US nuclear weapons may still be useful in deterring attacks with strategic effect. According to the NPR, the United States is approaching a historic period in which it will be confronted by two of the biggest nuclear powers as geopolitical opponents and prospective foes, imposing new strains on stability as well as new problems for deterrence, security, arms control, and risk mitigation. While Russia maintains the most capable and diverse nuclear foe, China's expanding capabilities are viewed as a threat to the US and its allies. In exchange for verified reductions or restrictions from both enemies, the NPR calls for a diminution in the role of nuclear arms in US strategy toward Russia and China.

Extended Deterrence Commitments: The NPR continues the US' long-standing commitment to friends and partners to modify extended deterrence and assurance policies in response to regional security situations. It supports NATO being a nuclear alliance, as well as updating and sustaining forward-deployed nuclear weapons and delivery systems in Europe, such as the new F-35A Joint Strike Fighter and B61-12 gravity bomb. The government also recognizes the importance of adapting Europe's extended deterrence to existing and emerging security situations, notably through increased exercises and increasing the coherence of both nuclear and non-nuclear NATO assets. Separately, the NPR asks for robust and credible nuclear deterrence in the Indo-Pacific to confront China's nuclear and missile advances, as well as North Korea and Russia's persistent threats. The NPR emphasizes collaboration with allies, such as Japan, South Korea, and Australia, as well as the continuation of long-term deterrence conversations, including the capacity to forward-deploy strategic bombers, dual-capable aircraft, and other nuclear weapons to the area.

The NPR indicates that the US is prepared to establish a new weapons control framework with Russia to replace the New Strategic Weapons Reduction Treaty (New START), which expires in February 2026. While both nations support this endeavor, the NPR notes that "priorities are not identical," emphasizing the importance of dialogue, when conditions allow, to address each side's differing goals and perceptions of military systems affecting strategic stability.

Strategic Stability Dialogue with China: Despite China's unwillingness to participate, the NPR underlines the significance of incorporating China in a variety of strategic concerns. Military de-confliction, crisis communication, sharing information, bilateral restraint, risk mitigation, developing technology, and approaches to nuclear weapons control, including fissile material manufacturing, are all part of this.

Non-Proliferation Regime and Multilateral Arms Control: The US has been a key player in the establish-

ment and maintenance of the global non-proliferation regime and multilateral arms control efforts. These initiatives aim to prevent the spread of nuclear weapons and other weapons of mass destruction (WMDs), promote disarmament, and enhance international security. In addition to reiterating the US commitment to the Nuclear Non-Proliferation Treaty, the NPR also supports the International Atomic Energy Agency's safeguards system, the Additional Protocol, strengthened strategic commerce control, the establishment of atomic weapon-free zones, the implementation of the Comprehensive Nuclear Tests Ban Treaty, and the commencement of talks for the Fissile Material Cutoff Treaty.

Managing Escalation Risks: The NPR emphasizes the need for discourse during peacetime to reduce the possibility of misinterpretation and escalation during a crisis. To manage escalation and potential misunderstanding, the NPR underlines messaging, nuclear force posture, and crisis communication and management procedures. Similarly, the NPR aims to reduce the chance of the US misinterpreting opponent objectives through effective intelligence analysis, wargaming, and other tactics that provide actionable insights.

Support for the Sentinel ICBM: The NPR highlights full funding for the Sentinel intercontinental ballistic missile (ICBM) program and the W87-1 warhead as an a one-to equivalent for the Minuteman III ICBM in order to keep 400 ICBMs on alert. According to NPR, every other option to the Sentinel program of record, such as a Minuteman life extension, would raise danger and expense.

Keeping the W76-2 SLBM Warhead: The W76-2 submarine-launched ballistic missile (SLBM) warhead, which was added to the Trump NPR in 2018, was quickly constructed and deployed in 2019. The 2022 Biden NPR determined that the W76-2 now provides an essential way of deterring restricted nuclear use and that its deterrent value will be reviewed when additional systems come online, in addition to in considering the security climate and probable deterrence scenarios.

Plutonium Pit Modernization: Throughout the next ten years, the NPR emphasizes the recovery of ability to produce plutonium pits. To minimize single points of failure, it suggests a two-site arrangement at the Los Alamos National Laboratory and the Savannah River Site. The NPR clearly states that greater pit output will defend against aging plutonium while also allowing for the development of new pit designs.

Conclusion

It is important to note that nuclear weapons present unique challenges, including the potential for accidental use, unauthorized access, and an arms race. Global efforts, such as arms control agreements and non-proliferation initiatives, seek to mitigate these risks and promote disarmament. Furthermore, the dynamics of international relations can change, leading to shifts in the perceived threats and ambitions of nuclear-armed states over time.

Based on earlier pronouncements, the Biden administration's Nuclear Posture Review was expected to be progressive toward nuclear disarmament. However, due to the worsening worldwide security climate and Russia's military actions against Ukraine, along with the threat to use nuclear weapons, the approach in the NPR is not significantly different from prior administrations.

The new NPR focuses on a complete and balanced approach. However, it appears to place a high value on the military element of nuclear weapons, aiming to improve nuclear deterrence and upgrade the nuclear arsenal, while assigning a lower value to the political and diplomatic aspects, which are crucial for strengthening international peace and security.

References

- Arms Control Association. FACT SHEETS & BRIEFS. 2023. https://www.armscontrol.org/taxonomy/term/135 (05.11.2023);
- Geller, Patty-Jane. AN ASSESSMENT OF US MILITARY POWER: US Nuclear Weapons. 2022. "The Heritage Foundation". 2023 Index of US Military Strength. https://www.heritage.org/military-strength/assessment-us-military-power/us-nuclear-weapons (05.11.2023);
- Kurosawa. Mitsuru. Biden Administration's Nuclear Posture Review: Analysis and Assessment. "Journal for Peace and Nuclear Disarmament". 12 Jul 2023. https://doi.org/10.1080/25751654.2023.2235764 (05.11.2023).
- Office of the Secretary of Defense. Nuclear Posture Review. February. 2018. https://media.defense. gov/2018/Feb/0 2/200018728861/-1/-1/2018-NUCLEAR-POSTURE-REVIEW-FINALREPORT.PDF. (05.11.2023);
- US Department of Defense. 2022a Nuclear Posture Review. October 27, 2022. https://media. defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR -MDR.PDF (05.11.2023)
- US Department of Defense. 2022b. Fact Sheet: 2022 Nuclear Posture Review and Missile Defense Review. March 28, 2022. https://media.defense.gov/2022/Mar/29/2002965339/-1/-1/1/FACT-SHEET -2022-NUCLEAR-POS-TURE-REVIEW-AND-MISSILE-DEFENSE-REVIEW (05.11.2023)
- Tenth NPT Review Conference. Working Paper by China, 29 July, 2022. http://document-dds-ny.org/UNDOC/GEN/N21/359/73/PDF/N2135973.pdf?

Prospects of the Regional Gas HUB

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Abstract

In the light of the current tense EU-US-Turkey relations, it is unlikely that in the coming years the EU and the USA will support the idea of establishing Turkey's Caspian gas monopoly HUB and will try to diversify gas flows to Europe. As can be seen from the geo-economic processes, overviewed in the article, formation of Turkey as a Caspian gas HUB has problems from both the north and the east. these are:

Difficulties in the exploitation of new deposits in the Caspian offshore;

- The impossibility of meeting the demand for the EU gas due to the operation of the existing "Turkish Stream" and "Blue Stream" pipelines with low capacity and the suspension of the operation of the "Trans-Balkan" Gas Pipeline";

Expenditures and duration of construction of new (parallel) pipes of "Turkish Stream" on the bottom of the Black Sea;

Possibility of connecting Russian gas to Europe through the Southern Gas Corridor (SGC), using the already existing pipeline infrastructure of Russia-Azerbaijan and Russia-Georgia, which is proven by the successful export of gas from Russia to Azerbaijan from November 2022.

Due to the mentioned reasons, it is likely that the EU will direct more efforts not to the so-called on devel-

opment of the regional gas HUB in Turkey, but also on the diversification of energy supply via Georgia.

The Vice Prime Minister of Georgia, Minister of Economy, Mr. Levan Davitashvili, stated at a briefing held on November 21, 2022 that the Georgian government is working on a project to supply gas from the Caspian Sea shore of Azerbaijan to Europe through Georgia. According to Vice Prime Minister the project, in which Azerbaijan, Romania and Hungary also participate, already have been started in 2015 and provides for a plan by which "... gas will be liquefied on the territory of Georgia, and then it will be re-gasified in Romania." Unfortunately, this project was stopped and had no further development", he said, adding that "... Europe is especially interested in alternative sources of gas supply, when everyone is talking about diversification of energy supply. This project has gained special relevance this year".

Davitashvili noted that the evaluation of the project and the infrastructure in the territory of Georgia-Azerbaijan is underway. "It won't happen in a day or a year," he said, adding that "...first, we need to depict a complete picture...then we need to formulate a detailed action plan...and start implementing this plan step by step, includ-

ing attracting investments."

Keywords:

Bleak Sea, SCG, Gas HUB, LNG, Georgia, The EU.

Europe is supplied with natural gas by four active corridors: the first is the so-called North Sea route (Netherlands, Norway, Great Britain), the second one is the North African corridor with four underwater gas pipelines of Tunisia and Algeria; the third one includes gas pipelines from Russia to Belarus, the Balkans, Ukraine and Turkey; the fourth one is formed by the pipelines connecting with the Southeastern part of the European Union through the South Caucasus, Turkey, Greece and Albania. Turkey's importance is already clearly visible within these routes – the country is the main connection point within the both - third and fourth gas corridors.

Above has contributed to Ankara's role as an important potential regional player. Moreover, the current ambition of the Turkish government is not only being a gas transit country but to become a regional gas HUB. The latter involves the combination of gas storage and distribution, wholesale and spot-trading, and most importantly, the function of a regional price-setter. In Central Europe, this function is performed by the HUB located near Vienna, the capital of Austria - Baumgarten. President of Turkey R.-T. Erdogan has been dreaming for a long time that Turkey will become not only a gas transit route for South and South-Eastern Europe, but also the so-called gas HUB. Bellow we try to explain how the implementation of above mentioned plan will face serious objective and subjective obstacles... Our research question is: Is Turkey ensure not only the transit, but also the HUB function in the EU – Russia gas trade?

Main Part

Natural gas Turkey receives mainly through pipelines from Iran, South Caucasus (Azerbaijan, Georgia) and Russia. However, the country is also somewhat dependent on liquefied natural gas (LNG) imported from Qatar, US, in order to meet the domestic demand. In 2020's, the annual Turkish customs tax on imported gas of 45 billion cubic meters (bcm) amounted to 41-42 billion US\$.¹ The country is strategically positioned as a potential transit HUB with inter-regional pipelines carrying hydrocarbons from the South Caucasian Caspian region to the Mediterranean port of Ceyhan (oil) and a small amount of gas via the Dardanelles to the European networks. This increase in transit is also beneficial for Georgia, since 2007 until 2026 according to the so-called Century Contract, Georgia receives 5% of the gas transported through the "South Caucasian Gas Pipeline" (which is connected to TANAP in Erzurum, Turkey) for free, and 5% at a preferential rate, - as a transit fee.

Turkey has traditionally been a transit country supplying gas to Europe from Azerbaijan and Russia from first decade of XXI century. Ankara plans to increase its transit role in delivery of Azeri gas to Europe, doubling shipments up to 20 bcm annually by 2027. The main obstacle in this respect is the limited ability of Azerbaijan to produce and export the sufficient amount of gas in the near future. Also, it is still questionable whether Baku will obtain gas from Russia and then secretly divert it to Europe. These doubts are somewhat confirmed by the start of Russian gas exports to Azerbaijan in late autumn 2022. On November 18, 2022, Russia's Gazprom announced that it would supply Azerbaijan with up to 1 bcm of natural gas from December of last year to March 2023 according to the new contract signed with the Azerbaijani state firm SOCAR.

Supply of Azeri gas to the EU since 2020 has been carried out through the EU's Southern Gas Corridor (SGC) pipelines – South Caucasus (SCP), Trans-Adriatic (TAP) and Trans-Anatolian (TANAP) Gas Pipelines – all of them crossing Turkey's territory and all are feeding by the Azerbaijani Shah Deniz (SD) Caspian Gas fields; therefore, Ankara's role has been decisive in terms of the transit, But it completely depends on the delivery from the SD deposits. According to the MoU signed between Baku and Brussels in July 2022, the Azerbaijani side promised to increase exports to the EU from 10 to 12 bcm by the end of summer.² Both sides welcomed this new agreement as an extension of economic relations between the EU and Azerbaijan. The EC called the agreement "...a victory in efforts to diversify the EU's gas supply". But there was't specified what the source of the additional supply would be, and Baku is able or not to deliver even 12 bcm of gas to Europe. This has further raised Turkey's importance both for Azerbaijan (supplier) and the EU (buyer) since the increased volumes will pass the Turkish territories. Also, the current war in Ukraine has created perspectives for Baku and Ankara: longer the war drags on, the more Baku will be able to use cheap Gazprom's gas to satisfy its demand and freeing up more Caspian gas, if there is enough gas in Caspian deposits, to boost exports to Europe. Let's take a closer look at the availability of gas in Azerbaijan!

From the end of 2020 by the beginning of 2023, gas exported to Europe through the TAP and the TANAP passing through Turkey, exceeded 18 billion cubic meters, according to the report of the pipeline company TAP: "...the TAP's capacity can be doubled in stages to further contribute to Europe's energy security," writes TAP AG company. Starting from 2021, Azerbaijan launched supplying natural gas to Southern Europe - Italy, Greece and 1 Turkey: A new emerging gas player with resources and infrastructure. https://www.mei.edu/publications/turkey-new-emerging-gas-player-resources-and-infrastructure

- 2 EU and Azerbaijan enhance bilateral relations, including energy cooperation. 18 July 2022. https://ec.europa.eu/commission/presscorner/detail/e%20n/ip_22_4550
- 3 Azerbaijan has already sold over 18 bcm of gas to European markets, 21/11/2022. http://caspianbarrel.org/en/2022/11/azerbaijan-has-already-sold-over-18-bcm-of-gas-to-european-markets/

Bulgaria through the TAP gas pipeline. The volume of supply in 2021 amounted to 8.2 bcm. In 2022, the export volume was forecasted to be 22-23 bcm, including 11.5 bcm to Europe and the rest to Turkey. The forecast was fulfilled and 18 bcm were exported to Europe. In any case, it still remains a question: how has Azerbaijan managed such a sharp increase in gas exports, when the promising gas fields - Absheron, Babek, Umid, Karabagh - are still at the initial stages of development, and the main sources of the EU Corridor (Shah-Deniz 1 and Shah-Deniz 2) are almost fully exploited? RF's Gazprom announced that it would supply Azerbaijan with up to 1 bcm of gas from December 2022 to April 2023 under a new contract with the Russian gas monopoly and state energy company SOCAR.⁴

Gazprom has supplied gas to Azerbaijan in early 2000s, but later the country rises production on the Shah Deniz field managed by BP, which allowed it to cover not only his gas needs, but also to send it to Turkey via Georgia. When much of its gas already bought by foreign companies, Azerbaijan returned to receiving gas from Russia in 2017-2018, but purchases from Russia stopped again, after launch last phase of the Shah Deniz field in 2019.

Baku has long prioritized selling its gas abroad over domestic needs to maximize export earnings. The new 2022 agreement with Gazprom was signed when Azerbaijan prepared for the New Year peak. But the re-launch of Russian gas imports now raises suspicions, given that Azerbaijan exports more gas to the EU, like 2017-2018. In announcement to the Azerbaijani news agency, SOCAR outlined that it has a history of cooperation with Russia.

From 2020, in the same time, the supply of Caspian gas to the EU is carried out through the "Southern Gas Corridor" (SGC), i.e. 10 bcm of natural gas will reach European consumers. According to the MoU signed between two sides in July 2022, Azerbaijan promised to increase exports to 12 bcm in 2022. Both Brussels and Baku welcomed this new agreement as an extension of energy relations between the EU and Azerbaijan. The EC called the agreement a "...victory in efforts to diversify the EU's gas supply". But never determined what the source of the additional supply would be. In fact, Baku was able to deliver not 12, but 18 bcm of gas to EU in 2022!

The Shah-Deniz consortium (responsible for Azerbaijan's gas exports) announced, that additional export deals to sell gas from the field, above 10 bcm of gas annually already agreed, have not been agreed with the operating consortium. This raises a legitimate question: is Russian gas being quietly, secretly sold as Azerbaijani gas to comply with the EU-Azerbaijan July 2022 memorandum? On the one hand, the re-launch of Russian gas supplies to Azerbaijan may simply indicate that SOCAR is worried about increasing its demand. And indeed, the agreement between Azerbaijan and the EU is only a memorandum and therefore non-binding. But the timing raises suspicions that the longer the war in Ukraine drags on, Azerbaijan will be able to use cheap Russian gas to cover its domestic demand, freeing up more Caspian gas to boost exports to Europe. And even adding Russian gas to his own one - after all, hydrocarbons cannot be distinguished by origin...

Azerbaijan is free to buy as much gas as it consumes, on the other hand. But it turns out that it is using sanctioned Gazprom's gas to send more volumes of Caspian gas to Europe (in fact, the deal is a "swap" contract). Thus, the import of gas from Russia to Azerbaijan somewhat undermines the spirit of the Azeri-EU agreement. It will also be another example of how problematic it is for EU to provide an alternative to Gazprom's gas in the nearest future, and how Moscow will try to use the EU's Southern Gas Corridor (SGC) gas pipelines for its own purposes.

For Azerbaijan attracting western investment could be a major problem, as much more western companies have declared to cut expenditures on hydrocarbons in the future in favor the renewable energy. It applies to BP, the largest foreign company in Azerbaijan, which aims for a 40% reduction in hydrocarbon production. Many financial groups, like the BP, have made commitments to phase out fossil fuel investments. Among them is the EIB, which at one time had a decisive role in Europe's "Southern Gas Corridor" (SGC) project of the century, which already connects Azerbaijani gas to the EU. The SGC, on the other hand, was built when gas prices in Europe were substantially low. Using the political support of European nations consuming Azeri gas, effective contracts have been agreed, even though Azerbaijani gas prices have not always been competitive with other natural or liquefied gas prices at European terminals.

The situation now is completely different. On the ground, prices in Europe are high, and supplies of the small remaining volume of Russian gas are now unreliable, and will probably be cut off altogether in the coming 2024 year, according to the EU plans. This gives an additional chance to Azerbaijan gas, which is priced with long-term contracts, and it therefore gains an advantage. If there is less practical support from the EU for new hydrocarbon projects, European market conditions mast lead to an increase in Caspian gas supplies there.

Ankara has raised the ambition to play the potential regional gas HUB role. This is to be achieved through increasing the transit role carrying more Azeri, Iranian and Russian gas towards the EU, given that the necessary infrastructure is already in place: all of the EU's SGC pipelines, also Turk Stream and Blue Stream pipelines serves as the carrier of Russian gas, and Tabriz-Erzurum gas pipeline pumps Iranian gas.

Turkey is developing its own gas production; it expects to launch its own offshore gas field Sakarya on the Black Sea coast by the end of 2023. The country also has several LNG import (regasification) terminals and Underground Gas Storages. Ankara itself does not need any more additional imported gas. It can negotiate with Russia

⁴ Relaunch of Russian gas supplies to Azerbaijan raises questions about Baku-Brussels deal. 22/11/22, https://www.intellinews.com/relaunch-of-russian-gas-supplies-to-azerbaijan-raises-questions-about-baku-brussels-deal-263151/

only for purpose carrying the Gazprom's gas to the EU playing the role of a gas HUB. Some European countries that are heavily dependent on Gazprom and have economic and political ties with Moscow.

Conclusion

In light of the current strained the EU-US-Turkey relations, it is unlikely that in the coming years Washington and Brussels will support the idea of Turkey as a transit monopoly and will try for diversify gas flows to Europe. As can be seen from the above-mentioned geo-economic processes, the formation of Turkey as a Black Sea regional gas HUB has serious problems, both from the north and from the east. **Therefore**, probably, the European Union will take more efforts not to Turkey's so-called gas HUB development, but on the diversification of the EU energy supply routes via the Black Sea.

One of these alternatives could be the construction of a gas pipeline from Azerbaijani new fields to the Georgian Black Sea deep water port of Anaklia, creation of a degasification terminal there and the construction of a regasification terminal in the EU to receive LNG (liquefied natural gas) tankers from Georgia.

References

- Turkey: A new emerging gas player with resources and infrastructure. https://www.mei.edu/publications/tur-key-new-emerging-gas-player-resources-and-infrastructure
- EU and Azerbaijan enhance bilateral relations, including energy cooperation. 18 July 2022. https://ec.europa.eu/commission/presscorner/detail/e%20n/ip_22_4550
- Azerbaijan has already sold over 18 bcm of gas to European markets, 21/11/2022. http://caspianbarrel.org/en/2022/11/azerbaijan-has-already-sold-over-18-bcm-of-gas-to-european-markets/
- Russia moots plan for making Turkey a major hub for its gas supplies. https://intellinews.com/russia-moots-plan-for-making-turkey-a-major-hub-for-its-gas-supplies-259426/
- Turkish minister says Black Sea gas supplies to start by late April. REGION 19 March 2023 12:00; https://caliber.az/en/post/153593/
- 6 Relaunch of Russian gas supplies to Azerbaijan raises questions about Baku-Brussels deal. 22/11/22, https://www.intellinews.com/relaunch-of-russian-gas-supplies-to-azerbaijan-raises-questions-about-baku-brussels-deal-263151/



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