



JATSS, 2023 ; 5(1), 1-18

First Submission:11.02.2023

Revised Submission After Review: 02.03.2023

Accepted For Publication: 28.03.2023

Available Online Since:31.03.203

Research Article

Nuclear Deterrence and A Prospective Assessment of the Russian-Ukrainian War

Ali Ercan^a & Burak Samih Gülboy^b

Abstract

Nuclear weapons, which people first became acquainted with in history with the attack on Hiroshima and Nagasaki by the United States of America towards the end of the Second World War, have been a deterrent tool, especially with this painful experience in which 220,000 civilians lost their lives, and have been used for this purpose when needed by those countries who possess them. Nuclear deterrence was most intensely used as a deterrent tool, especially during the Cold War and between the two great superpowers of the time, the Soviet Union and the United States.

With the developments after Russia intervened in Ukraine in February 2022 and the wide support packages provided by Western countries to Ukraine, the President Vladimir Putin stated that the use of nuclear weapons is now among the options. In this study, firstly, concepts such as nuclear strategy, nuclear weapons, nuclear power, and nuclear deterrence will be discussed in the context of the conceptual framework; by following that, a prospective evaluation of the Russia-Ukraine war will be made in the context of nuclear deterrence.

Keywords: Nuclear Weapon, Nuclear Power, Nuclear Strategy, Nuclear Deterrence, Russia-Ukraine War

JEL Codes: F50, F51, F52, F55, H12, G15

^a Ph.D. Candidate, Istanbul University, Faculty of Economic, Department of Political Science and International Relations, Istanbul/Turkey, ali.ercan@ogr.iu.edu.tr, ORCID ID: <https://orcid.org/0000-0001-8642-5111>

^b Prof. Dr, Istanbul University, Faculty of Economics, Department of Political Science and International Relations, Istanbul/Turkey, bsg@istanbul.edu.tr, ORCID ID: <https://orcid.org/0000-0002-7309-8665> (Corresponding Author)



JATSS, 2023; 5(1), 1-18

İlk Başvuru:11.02.2023

Düzeltilmiş Makalenin Alınışı: 02.03.2023

Yayın İçin Kabul Tarihi:28.03.2023

Online Yayın Tarihi: 31.03.2023

Araştırma Makalesi

Nükleer Caydırıcılık ve Rusya-Ukrayna Savaşının Prospektif Bir Değerlendirmesi

Ali Ercan^a & Burak Samih Gülboy^b

Öz

İnsanların tarihte ilk olarak İkinci Dünya Savaşının sonlarına doğru Amerika Birleşik Devletleri tarafından Japonya'nın Hiroşima ve Nagazaki kentlerine yönelik saldırısıyla tanıştığı nükleer silahlar, özellikle 220,000 sivilin hayatını kaybettiği bu acı tecrübeyle birlikte bir caydırıcı güç unsuru olmuş ve bu silahlara sahip olan ülkelerin tarafından da günümüze kadar bu amaçla kullanılmıştır. Nükleer caydırıcılığın, özellikle 1945-1989 yılları arasında kapsayan ve dönemin iki büyük süper gücü olan Amerika Birleşik Devletleri ile Sovyetler Birliği arasında yaşanan Soğuk Savaş döneminde bir caydırıcılık unsuru olarak en yoğun şekilde kullanıldığı görülmüştür.

2022 yılının Şubat ayında Rusya'nın Ukrayna'ya yönelik başlattığı müdahale sonrası yaşanan gelişmeler ve Batılı ülkelerin Ukrayna'ya yönelik sağladığı geniş destek paketleriyle birlikte Rusya Federasyonu'nun devlet başkanı Vladimir Putin, nükleer silah kullanımının seçenekler arasında olduğunu belirtmiştir. Bu çalışmada, öncelikle kavramsal çerçeve bağlamında nükleer silahlar, nükleer güç, nükleer strateji ve nükleer caydırıcılık gibi kavramlar ele alınacak; akabinde ise nükleer caydırıcılık bağlamında Rusya-Ukrayna savaşı üzerinden prospektif bir değerlendirme gerçekleştirilecektir.

Anahtar Kelimeler: Nükleer Silah, Nükleer Güç, Nükleer Strateji, Nükleer Caydırıcılık, Rusya-Ukrayna Savaşı

JEL Kodlar: F50, F51, F52, F55, H12, G15

^a Doktora Tez Öğrencisi, İstanbul Üniversitesi, İktisat Fakültesi, Siyaset Bilimi ve Uluslararası İlişkiler Bölümü, İstanbul/Türkiye, ali.ercan@ogr.iu.edu.tr, ORCID ID: <https://orcid.org/0000-0001-8642-5111>

^bProf. Dr. İstanbul Üniversitesi, İktisat Fakültesi, Siyaset Bilimi ve Uluslararası İlişkiler Bölümü, İstanbul/Türkiye, bsg@istanbul.edu.tr, ORCID ID: <https://orcid.org/0000-0002-7309-8665> (Sorumlu Yazar)

Introduction

The evolution of nuclear weapons has dramatically changed the nature, scope, and destructive power of warfare in today's societies. Due to the destruction, it would cause the production of nuclear weapons and the position of the actors holding these weapons continue to be a matter of debate. Since the invention of nuclear weapons, the debate on the subject has progressed over two sides: While one part supports the necessity of reducing and eliminating these weapons, the other part argues that new technologies should be developed and nuclear weapons should be produced.

The possibility of the use of nuclear weapons within nuclear strategies, the acquisition of nuclear power by non-state armed actors, or the entry of some states into an arms race within the scope of aggressive defense policies outside the treaties, nuclear armament has also taken its place in the discussion areas of moral and ethical issues. (Pellecchia et al., 2014)

Nuclear weapons, which the world first met with the attack on the cities of Hiroshima and Nagasaki in Japan by the United States, have gained the feature of being a deterrent force with this painful experience in the following years. With the end of the Second World War, some countries and international institutions came together and made various attempts to prevent the proliferation of nuclear weapons. Although countries were not eager for the steps to be taken especially with the initiatives of the United Nations at first, when they saw that his process would be detrimental to world peace and the number of countries with nuclear weapons began to increase and these weapons began to spread, countries turned to initiatives to restrict the spread of these weapons. In this context, first of all, the "Nuclear Non-Proliferation Treaty (NPT)" was signed in the year of 1968 and started to take effect in 1970. Within the framework of this agreement, many organizations were established, including the International Atomic Energy Agency (IAEA), one of the institutions we hear its name a lot today.

Followingly, US leader George Bush and Soviet Union leader Mikhail Gorbachev met at the end of the Cold War in 1991 to sign the Strategic Arms Reduction Treaty (START 1). This treaty prohibited the installation of nuclear warheads, Intercontinental Ballistic Missiles (ICBMs), and bombers in the contracting countries. Attempts to restrain the proliferation of these weapons were not limited to this. After this treaty, the Comprehensive Prohibition of Nuclear Weapons Treaty (CTBT) was acknowledged by the UN in September 1996. Subsequently, with the termination of the START I treaty in 2009, the START II treaty was signed between Obama and Medvedev in 2010, which will last until 2026.

It is seen that nuclear weapons were used as deterrent tool, especially during the Cold War period. At the height of the Cold War, while the former US Secretary of Defense Robert McNamara, who was well-known for the Cuban Missile Crisis and the Vietnam War, made efforts for the abolition of nuclear weapons. Kenneth Waltz, the pioneer of structural realism, argues that nuclear weapons make states more cautious and less likely to behave recklessly, and more nuclear weapons might be better to secure the international order. (Tow, 2014) While it seems possible to agree with both views, Waltz's idea takes international relations from the perspective of realism to neorealism, taking the anarchic relations of states in the international system to the source of conflict. This perspective can adopt nuclear strategy and armament as the main element when the interests and superiority of the state are taken into consideration.

After the Cold War period, countries such as Iran and North Korea, which were disturbed by the USA's place in the international system as the sole superpower, have not given up on increasing their capacities despite all kinds of embargoes.

In February 2022, with the developments after the intervention initiated by Russia under the presidency of Vladimir Putin against Ukraine led by Vladimir Zelenskiy, and the wide support packages provided by Western countries for Ukraine, discussions began that this process may reach the level of nuclear weapon use. Especially at a meeting held by Russian President Vladimir Putin, he stated that this ‘special operation’ would last longer and that they could use weapons of mass destruction and nuclear weapons if necessary within the framework of their defense strategies as a result of the Western countries' involvement in the process. After these remarks, all eyes were turned to the Russian-Ukrainian War. (Yeung, 2022) It also seems that Putin has stayed away from describing this intervention as "war", instead, he called it a “special operation”.

Drawing on the debates on the subject, this study primarily analyzes whether the nuclear strategy has an impact as a deterrent in the interstate struggle; then how realistic the situation of the using nuclear weapons discussed in the context of the Russian-Ukrainian War is, and whether these threats are used as a deterrent and the possibility of these threats being implemented in the future.

The first part of the study primarily deals with the conceptual framework and explains concepts such as nuclear weapons, nuclear power, nuclear strategy, and nuclear deterrence. In this context, firstly, the strategy and power of the varied capabilities formed by nuclear and conventional weapons, especially how nuclear or conventional threats create credibility, are examined in the axis of "nuclear deterrence". Subsequently, the following section analyzes the role and deterrence of nuclear strategies in today's interstate relations.

In the next part of the study, the subject of nuclear deterrence is analyzed historically, then the Russia-Ukraine war is explained and a prospective evaluation is made of this war. Moreover, in this part, by taking into consideration the Russia-Ukraine war, general evaluations are made on the future of nuclear weapons and nuclear deterrence.

In the conclusion part, the main findings reached within the scope of the study are shared and general evaluations are made about the use of nuclear weapons and their use as a deterrence tool.

Conceptual Framework

Nuclear Weapons and Nuclear Power

The ultimate goal of states is to survive and be strong in the chaotic environment of the international system. Therefore, power is the most important and effective tool and one of the most important indicators of interstate power is military superiority. From the beginning of the nuclear age, international actors have naturally treated nuclear weapons as different from other weapons. The structural capabilities of nuclear weapons, coupled with the almost impossibility of putting up an adequate defense against them, have been the main element of attack deterrence. The discovery of nuclear weapons has also paved the way for new debates in international relations literature. Accordingly, the state in the position of the dominant country with nuclear power in its hands can easily take down the balance of power and such status quo might create a chaotic ground.

In today's society, nuclear power is the most important and destructive force. Nuclear energy has shown its power and heavy destructive influence both in nuclear accidents and nuclear tests when the US used them in Nagasaki and Hiroshima. The main distinction between a nuclear explosion and a conventional explosion is the fact that a nuclear explosion can have a stronger and longer impact than a biggest conventional explosion. Although the light and heat

emitted by a nuclear explosion and the accompanying radiation are not initially perceptible by the human sense organs, the first explosion destroys the living things within the radius of impact by evaporation. (Atomic Archive, 2022)

We see that nuclear weapons are generally classified as tactical nuclear weapons and strategic nuclear weapons. Tactical ones were used in terms of their destruction capacity at the beginning of the development of nuclear weapons; it has deviated from its original meaning due to the fact that highly destructive weapons can be easily produced in today's nuclear capacity. As of today, tactical nuclear weapons cover short- and medium-range warheads that can be directed at strategic military objectives during a conflict. Strategic nuclear weapons, on the other hand, include thermonuclear bombs capable of heavy destruction. Their first generation has a destruction capacity 50 times as heavy as the bomb dropped on Hiroshima and can also be known as hydrogen bombs. (Nichols et al., 2022) In the case of its use, it has the power to go to absolute destruction and destroy a city.

Although states turn to armament activities aimed at having global power and defense capacity, actual armament itself is a provocative act. The fact that other states begin to arm with the same motives will turn into an arms race, and sooner or later technological superiority will remain in certain power centers. States equipped with powerful weapons will determine their strategies by measuring the weapon capabilities of opposing states – even if they have strategic superiority – and the arms race will turn into a game in international relations, causing the deterrence strategy to gain strength. (Schelling, 1966)

The famous strategist Thomas Schelling, with the view that no defense mechanism can be effective against a possible nuclear attack, said that serious death and destruction would occur outside the dialectic of war and this could create unique opportunities. For Schelling, war was essentially the most violent form of bargaining, and he described the opportunities that emerged from that war as "equality of violence." (Schelling, 1980 p. 309)

Nuclear Strategy

Strategy is briefly defined as “the art of gathering all available resources in a joint effort to change an opponent's political preferences”. (Tzu, 1971) Deterrence can be interpreted as a perfect example of strategy, because it aims to change an opponent's political predilections without fighting to preserve the status quo, keep peace, and ensure that diplomacy is a method of change in international relations. (Gray, 2011)

Nuclear strategy, on the other hand, is the inclusion of the existence and defense mechanisms in the field of nuclear power at the basis of the strategies of states. Henry Kissinger, who was the former US Secretary of State and one of America's most famous nuclear strategists since the early 1960s, notes that achieving a more distinctive nuclear strategy is one of the most difficult tasks of today and that the cornerstone of nuclear deterrence lacks credibility. (Kissinger, 1957)

According to Lawrence Freedman (2022), nuclear strategy is the same as the other types of military strategies that aim relating military means to political outcomes, and in such case, states should consider these military means and worthiness of possible political outcomes before using them since the destruction of this strategy would be very powerful.

It is possible to claim that when the Cold War came to the end, the vision of the nuclear strategy of the states has started to change. It is also true that the scars of the Cold War have limited our vision of nuclear strategy today. (Leveringhaus, 2018) Concepts such as MAD

(Mutual Guaranteed Destruction) or Second-Strike Force, which were developed within the scope of the nuclear strategies of the USA and the USSR and considered as an optimal strategic condition, leave little space for developing the nuclear strategy. The nuclear strategies developed after the Cold War are fundamentally different. (Leveringhaus, 2018)

Nowadays, this finding remains relevant because compared to the Cold War era, very few people think that we could face a real nuclear war today. Global Zero, founded as a response group to nuclear strategies, called in May 2012 for the elimination of the fixed, land-based ICBM fleet that forms the pillar of the American nuclear triad. Likewise, the report argued that U.S. tactical nuclear weapons would be reduced over the next decade and that there were no practical benefits. (Global Zero U.S. Nuclear Policy Commission, 2012)

Today's nuclear strategy is characterized by the failure of nuclear deterrence, which is associated with nuclear terrorism and it will be discussed in detail in the next section.

Nuclear Deterrence

Deterrence refers to the ability to prevent possible attacks by an enemy by intimidating them. Deterrence also becomes effective when the state concludes that it will survive the enemy's attack and suffer more damage than the action the attacking state is trying to take. (Wirtz, 2018) This strategy is the early stage in the broad protection of our interests in parallel with an in-depth military defense. All of the efforts of countries to protect their borders stem from the chaotic atmosphere of the international order and the self-interested motivations of countries. Since deterrence is the threat of force to deter the opponent from committing an undesirable act; it can be accomplished through the threat of retaliation (deterrence by punishment) or by rejecting the opponent's war aims (deterrence by denial). (Morgan, 2013)

Deterrence based on conventional or nuclear weapons is based mainly upon several types of military capabilities; this, by turns, covers its weaknesses and strengths to provoke the reliability of a threat in opponent's mind. Nuclear and traditional deterrence is quite different in theory, practice, and impact. Differences arise in a variety of ways, based on whether refusal, punishment, or retribution strategies form the basis of the deterrent threat. (Wirtz, 2018) Regardless of the strategies being adopted or the weapons being used, capacity and reliability are key to the success of the deterrence policy. The opposing state must believe that the party posing the deterrent threats will implement them.

Today's society's approach to nuclear strategy is primarily based on the 'deterrence' concept. Initially, nuclear weapons were not used as a deterrent. The heavy and destructive destruction of the atomic bombs dropped on Hiroshima and Nagasaki caused humanitarian and ethical debates. Thus, nuclear weapons produced for use on the battleground began to be used in diplomacy as a "deterrence" based on strategy as an "absolute weapon". (Wirtz, 2018)

Traditional history traces the best-known example of nuclear deterrence to the U.S.-Russia conflict. The increase in Soviet conventional capabilities has led to an ever-greater demand for deterrence. (Lodal, 1980) Nuclear weapons, as an element of deterrence, have become an aggressive but critical part of U.S. Security strategies. That is why the primary and the most important step in security programs in the US is to take measures against the possibility of retaliation. (Brodie, 1978) Because deterrent threats based on nuclear capability are so certain that they can never be achieved with conventional weapons, nuclear war—especially the cost of engagements involving several nuclear weapons—is indisputable. (Wirtz, 2018) Despite being a country that has been actively implementing nuclear deterrence for a long time, security specialists and some policymakers argue that the current U.S. nuclear stance and capability are

not commensurate with the security threats it faces and that nuclear deterrence is not as effective as it used to be. (Klein, 2012)

Renowned strategist Colin Gray makes us understand that deterrence theory also has its limits. According to Gray, deterrence can only succeed if it operates in the minds of the party states' leaders. Accordingly, whether the deterrence theory is successful or not is not related to our worldview, but to the views of the leaders. (Gray, 2009) History is replete with those who have been subjected to conventional deterrence adopting a "come and take" attitude, even when it comes to threats from vastly superior powers. (Wirtz, 2012) It is thought that the theory of deterrence is certainly as old as the use of physical force, actually, the new one here is the fear created by the failure of this theory. (Brodie, 1978)

The obvious difficulty in nuclear deterrence theory lies in the fact that the initiative is given to the enemy. At the same time, this difficulty arises as this strategy is unable to adapt itself to non-rational actors because it would be too optimistic to predict that all actors will act in a completely rational manner. Nowadays, the actors who create this challenge are, in particular, non-traditional nuclear actors (i.e. undeclared nuclear powers), countries that are not part of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), and non-state armed actors. (Brodie, 1978)

After the year of 1946, some questions about the nuclear strategy and its deterrence nature began to be frequently discussed in the literature, and these questions are as follows:

- What are the changing physical requirements for the success of deterrence?
- What kinds of wars do nuclear deterrence deter?
- What is the role of tactical nuclear weapons?

Beyond all these questions, there is another question that we face today is "If the deterrence theory fails, what goals and objectives can we fight a nuclear war?" (Brodie, 1978)

The theory of nuclear deterrence is a complex concept because it has a fundamental paradox at its core. Nuclear deterrence is successful as long as it prevents the nuclear weapons from being used, but a reliable deterrence capability needs planning for aimed use. If these weapons used, then deterrence fails. Long story short, nuclear deterrence is only possible through efforts to maintain an efficient and reliable nuclear attack capability, and also a planning its use it against potential adversaries. (Klein, 2014)

Of course, we should examine the nuclear deterrence strategy in conjunction with Mutually Assured Destruction (MAD) and a Second-Strike Capability. Dominantly in the early years of the Cold War, MAD meant that whichever of the parties attacked would mutually destroy each other with a counterattack. According to this doctrine, even if a nuclear power attacks to destroy all the nuclear warheads of the other side -even when the principle of astronomical nuclear weapons capabilities of both sides is accepted – they will receive a heavily destructive response and destroy each other within the framework of the remaining weapons of the other side. The principle of deterrence and MAD applies to a large extent if one of the parties has the capacity for a second attack. (Walton, 2010)

The concept of 'expanded strategy' is being accepted as the biggest innovation in the field of nuclear strategy, and this strategy means deterrence targeting governments that support terrorist organizations. According to Gallucci (2006), in terms countering the risk of terrorist use, this is one of two possible answers designed. Nuclear deterrence undoubtedly persists in the contemporary world, but its limits need to be rethought. Today's deterrence conditions have to be different from those of the Cold War. Strategists around the world are talking about the

impact of cyber and space technologies and their combination with nuclear power, and the increasing importance of deterrence strategy in the future. Such a strategic advantage and deterrence is not just cyber, space, and nuclear; it does also cover the fields of law, economics, diplomacy, etc. (Libicki, 2009)

When we read these recent analyses on deterrence, it would be necessary to ask the following questions:

- "What dimension of deterrence does a new military force with cyber and space technology fit in?"
- "Do these technologies make nuclear deterrence unnecessary or reduce its impact, or do they form as an ingredient in deterrence elements?"

Despite all the above-mentioned arguments and assessments that nuclear deterrence is not as important a policy tool as it used to be, nuclear deterrence stays the basis of all nuclear-armed security strategies, including NATO. "Under the Deterrence and Defence Posture Review" published by NATO in 2012, the member states are committed to the pursuit of a safer world for everyone and to creating a world nuclear weapons free in line with the objectives of the Treaty on the Non-Proliferation of Nuclear weapons, maintain stability internationally. (NATO, Deterrence and Defence Posture Review, 2012)

When we take into consideration the discussions above and evaluate them, we see that it is possible to think that the nuclear deterrence theory is a strategy that also encourages nuclear armament. The incredible security guarantee afforded by the nuclear deterrence strategy will undermine nuclear disarmament policy objectives and may encourage various actors to develop their nuclear programs independent of the existing registered stockpile.

Nuclear Deterrence from Past to Present and The Russian-Ukrainian War

Historical Analysis

After the Cold War, nuclear strategies did not vary much. However, nuclear strategy has been associated with deterrence theory for many years. According to Jervis, nuclear deterrence can be studied in three waveforms. Although the first wave is not systematic, it seeks to assess the efficacy of nuclear weapons both on diplomatic and military relations. (Jervis, 1979) The strategic superiority of this period was the US, which held the most amount of the nuclear power. Although the USSR succeeded in acquiring its nuclear weapons, the quality and quantitative superiority remained with the United States. In this period, far from strategizing on nuclear power, there are very few people who understand this system; Bernard Brodie (1972), was considered the first of the nuclear strategists, elaborated on the deterrence effect of nuclear weapons.

The second wave undoubtedly begins with the USSR's first atomic bomb tests in 1949 and the hydrogen bomb tests in 1954. The escalation of tensions in this interval was the fact that in 1957 with Sputnik, USA territory could be hit by USSR nuclear-tipped missiles. (Jervis, 1979) In the article published by Brodie (2007) on the subject, it is stated that the second attack capability will create a safe mutual balance situation for both sides. However, this period, in which the total response strategy was heavily criticized, led to the evolution of the flexible response strategy.

According to Jervis (1979), the third wave strategy begins in the 1970s and this strategy turned into a policy of superiority rather than a policy of power balancing with the USSR. The proliferation of tactical nuclear weapons in this term resulted from the limited view of nuclear war as compatible. (Klein, 2014)

Strategic Defense Initiative (SDI) is the initiative that is the basis of today's missile defense systems, defense systems and weapons in the field of nuclear deterrence has also become important in this period. (Jervis, 1989) Following the Nuclear Non-Proliferation Treaty of 1968, the USA and the Soviets announced that they would begin negotiations to limit and later reduce all types of defensive and offensive missiles carrying atomic weapons. In the 1970s, SALT (Strategic Arms Limitation Talks) negotiations restricting nuclear weapons began. In the 80s, the USSR and the USA started "START (Strategic Arms Reduction Talks)" negotiations by saying that the restriction was not enough and serious interruptions should be made. Also, in 1987, the Intermediate-Range Nuclear Forces Treaty (INF) was signed by the USA and the USSR.

However, from 1990 to 1997, when the United States existed as the sole superpower, nuclear strategy took a back seat to nuclear agendas. As a result of the dissolution of the USSR to 15 independent states after the Cold War, the Soviet nuclear arsenal was disbanded with many parts that were not counted. In this post-Cold War disintegration, the strategy was based on proliferation rather than focusing on how to design nuclear strategy in the post-Cold War world order. As a result, in 1991, the United States implemented a project of denuclearization of the three former Soviet republics (Ukraine, Belarus, Kazakhstan) until 1996. (Leveringhaus, 2018)

In order to secure Soviets' nuclear weapons, initiatives for arms control and non-proliferation were signed in the first years of 1990s. Russia and the United States accelerated negotiations on the Strategic Arms Reduction Treaty (START I). In 1996, a test moratorium was established, leading to the signing of the Comprehensive Test Ban Treaty (CTBT), and the stopping of the production of new nuclear weapons. In addition to that, a program to strengthen international nuclear guarantees (which would become an Additional Protocol in 1997) was launched in 1993 and the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the strongest legal framework prohibiting the proliferation of nuclear weapons, was launched in 1995 and extended indefinitely. (Freedman, 2003)

In 1995, US Secretary of Defense William Perry declared in a statement to Congress, "We now have the opportunity to forge a new relationship based on MAD, but on MAS, 'Mutually Assured Security.'" (Leveringhaus, 2018, p. 78-80) However, when India and Pakistan tested their nuclear weapons in 1998 and denied to participate in the NPT, and nuclear strategies returned back to the world agenda. Iran's launch of the Shabab-3 missile program and North Korea's testing of the long-range Taepodong missile indicated that nuclear power tests were increasing. Developments such as the terrorist threats against US embassies in Kenya and Tanzania, and then the September 11 attacks, have raised suspicions that nuclear weapons could be obtained by US adversaries and terrorist organizations. Thus, this led to a big change in U.S. nuclear strategy. (Leveringhaus, 2018)

By the late 2000s, US President Obama had relaunched the Prague Agenda, an initiative aimed at reducing the nuclear number and regulating arms control with Russia. Prague Agenda included the review of the US nuclear missile defense systems that also included the signing of a new arms control treaty START (Strategic Arms Reduction Treaty) between the US and Russia and the holding of the global nuclear security summit. (The White House Archives, 2009) With the agreement signed between Medvedev and Obama in 2010, it is seen that the two countries have decided to reduce nuclear weapons by 30% over a period of seven years. As of this date, we can say that the nuclear strategy has begun to lose its effectiveness, and the return to the strategic stability dialogues and arms control strategy has begun.

Another initiative that emerged in the late 2000s is called "Global Zero" or "nuclear weapons free" which was an approach that focused on the human impact of nuclear weapons. After the Oslo Conference on the Humanitarian Impact of Nuclear Weapons in 2013, the world

moved closer to anti-nuclear proliferation at meetings in Mexico, Vienna, and various countries. (Schultz et al., 2008)

It is possible to say that this approach, which has a humanitarian efficacy agenda, has become more communal among non-nuclear weapon states and non-governmental organizations. Moreover, despite all these developments, we do not see that these steps caused to a significant alteration in nuclear disarmament or nuclear strategy.

A Prospective Assessment of the Russian-Ukrainian War

Russian President Vladimir Putin ordered intervention against Ukraine on 24 February 2022, arguing that Ukraine, headed by Volodymyr Zelensky, “is ruled by drug gangs and neo-Nazis, and that this administration poses a threat to his country”, and the primary objective of this operation is “to protect the people who have been subjected to humiliation and genocide by the Kyiv regime for eight years.” (Treisman, 2022)

After the fall of the Soviet Union in 1991, Ukraine declared her independence. Putin, who claims that Ukraine is a part of Russia, thinks that an administration that is in favor of the European Union and NATO membership next to its country poses an existential threat to the security of his own country due to her territorial claims and fears Kiev’s being a part of the Western orbit. These claims and fears as follows:

- Military threats of Western countries through NATO and European Union nearby Russia’s national borders,
- Western cultural influence on Ukraine which Russia totally opposes,
- Russia’s suspicion of western ideas and norms on Ukraine,
- The situation of Pro-Russian separatist regions in Eastern Ukraine,
- Historical experiences of western intervention and influence during the Russian civil war and Nazi invasion,
- Developments that have taken place since the collapse of the Soviets in Russia’s backyard,
- Broken western promises on NATO’s expansion around Russia,
- The approach of Western countries and institutions to make Russia seen as a hostile in the eyes of the people since Russia’s intervention to Syrian civil war and annexation of Crimea,
- Possible negative effects of western expansion and threats on Putin's rule and power in the eyes of Russian people,
- Russian people’s view of the West as unreliable (The Conversation, 2022)

To be able to use its army outside the territory of Russia, Putin received the necessary approval from the Russian Parliament on February 22, 2022. (Saul, 2022)

Russia, which has deployed an army of 190,000 troops on Ukraine’s eastern border, previously denied the intelligence information and satellite images shared by the United States with the world on her possible intervention in Ukraine. Putin said that “they conduct military exercises in the region, and these exercises are peaceful and do not pose a threat to any country”. (Culbertson, 2022) But after a brief period, he confirmed these allegations by starting an attack on Ukraine.

Russia officially recognized the Donetsk, Luhansk, Kherson, and Zaporozhye regions three days before the intervention, and these regions are within the official borders of Ukraine and declared their independence from Ukraine on 30 September 2022. In fact, this recognition step gave a clear signal that Russia would attack these regions which are located in the eastern part of Russia. In his statement before the operation, Putin said that these regions belong to the

Russian Federation and that any attack on these lands will be considered as made against Russia. Even just this is an indicator of how determined Putin is in defending these lands.

A few months before the attack on Ukraine, Russia had requested that the United States and NATO implement a binding arrangement and guarantee that Ukraine would never become a member of NATO and that NATO would withdraw multinational forces from the Eastern European member states. (Tetrault-Farber & Balmforth:2021) However, this demand was not met, and Russia nevertheless announced that it would respond if an aggressive stance was adopted by NATO. Unfortunately, the attempts of French President Macron and German Chancellor Scholz, who met with Putin many times to prevent a possible attack by Russia, failed.

Western countries and institutions, which were ineffective and silent during the annexation of Crimea by Russia, reacted quickly and effectively and began to take decisions in support of Ukraine. Germany made the first major move among these countries and decided to freeze the certification process of the \$11 billion worth Nord Stream 2 natural gas pipeline project, which was previously criticized by the United States for increasing Europe's dependence on Russian gas. (Marsh and Chambers, 2022) Subsequently, the United States, the European Union, and NATO stepped in and announced various sanctions plans against Russia to stop the war and carried out these plans. In addition to these sanctions, many countries, especially the United States, have started to offer both financial aid and military equipment support to Ukraine immediately.

Russia has more neighboring countries than any country in the world and among her neighbors, seems like Belarus is the only one that supports the intervention against Ukraine. However, countries such as Poland, Latvia, Lithuania, Georgia, Norway, Estonia, Finland, China, Mongolia, Azerbaijan, and Kazakhstan which are also neighboring countries and have their own approaches to the issue from different perspectives, they did not support this intervention during the vote at the United Nations. (United Nations, 2022)

It seems that the conflicts in Ukraine, which have been calm for some time, will intensify again with a large-scale Russian intervention that is likely to take place sometime in the upcoming months and unfortunately would bring more civilian deaths along with it. NATO and EU member states are the ones that provide the most military equipment and financial assistance to Ukraine. According to the amount of their contribution, these countries and institutions are as follows: The USA, the United Kingdom, Germany, Canada, Norway, Finland, France, Italy, Netherlands, Belgium, Estonia, and Latvia along with International Monetary Fund (IMF).

According to the U.S. State Department, this assistance includes Stinger anti-aircraft guns, Javelin anti-tank guns, Switchblade tactical drone systems, 155-mm howitzers, 105-mm howitzers, NASAMS air defense systems, Mu-17 helicopters and T-72B tanks, including large-scale military equipment, weapons, ammunition, and defense systems. On the other hand, the United Kingdom is the second state that has provided the most aid to Ukraine after the United States. (Euronews, 2023)

Upon these developments, under the leadership of Putin, Russia further hardened its statements by citing the option of using nuclear weapons and weapons of mass destruction, and stating that this is among the possibilities within the scope of the country's defense and this possibility will be carried out if necessary. (Yeung, 2022)

It is seen that a protracted war strategy is being pursued by the two countries. In this intervention, which has been going on for more than a year in the territory of Ukraine and seems to continue further. Besides the two countries' soldiers, foreign fighters and mercenaries are seen to be active in part of the war so far.

Besides these soldiers and military equipment, Ukrainian leader Zelensky, who is seen as a hero with the support he has received especially from Western countries and international

institutions, has been using tools such as diplomacy, media, international public opinion support, and propaganda effectively since the beginning of the war.

The question being asked by many countries and experts here is whether Putin will use these nuclear weapons or not. While some say that Putin has put forward this as a deterrent force after Putin has mentioned this possibility many times, NATO Secretary General Stoltenberg said in a statement that they will take it seriously and it is their legitimate duty to protect the countries that are attacked and that this will have grave consequences for Russia. (Weaver, 2022)

Additionally, European Union officials stated that Putin's statements are an indication that Russia will increase its aggression and continue the existing war, and that Putin is playing a nuclear gamble. Ukrainian officials, on the other hand, stressed that Russia's threat to use nuclear weapons is beyond them and that the necessary response to Putin must be given by other nuclear-powered countries, such as the United States, France, China, and the United Kingdom. (CNN Turk, 2022)

The fact that Russia is located in such a geostrategically important region and strengthens her hand as well as the necessity of always remaining alert against regional and global power struggles along with the threats that exist around her. Russia knows that the way to survive as an independent and powerful state in the international conjuncture is to strengthen its presence and influence in its immediate surroundings in the first place. That's why she determines and implements policies in this direction.

Looking at the geostrategic consideration of the Russian Armed Forces, it is seen that they are very strict when it comes to military issues and classify the situation through four different categories:

- Operation environment,
 - Armed conflicts below the threshold of war,
 - Local, limited-range battles,
 - Regional warfare situation and a warfare situation that is likely to spread globally.
- (Kasapoglu, 2022)

The main argument claimed by the people argue that Russia's threats to use nuclear weapons are not a bluff, is that the people who govern Russia and are influential in making decisions got stuck their minds intellectually in East Berlin. In the view of the Soviet Security Elite, which made of Russian oligarchs and silovarchs (Putin's close circle), not only Ukraine but also Latvia, Estonia, and even the Turkish states would not have a future independent of Russia since these countries were part of the Soviet Union in the past. The people of this security elite have a great influence on Putin and vice-versa. Therefore, the options of using nuclear weapons and using this option as a deterrence policy are evaluated by the Kremlin as a serious measure to stop Western military aid. (Kasapoglu, 2022)

However, after the long-term peace environment that came with the Cold War where nuclear weapons were not used and their use was prohibited by treaties, it is thought that it would be more effective for states to resort to dialogue-based diplomatic means to solve problems instead of using nuclear weapons, considering the possible destruction that may occur in case of declaring war on each other. The opposing view in the debate on this issue is that this long-lasting peace has lasted so long because of nuclear deterrence. Is such an assumption possible?

Although the nuclear strategy is treated as an element of deterrence, and nuclear war seems to be a virtual reality; non-state armed organizations and rogue state theory are an obstacle to modern nuclear strategy. But when we consider all these together, this is perhaps the most obvious dilemma of modern nuclear strategy.

Today North Korea and Al Qaeda, which is one of the non-state armed actors, are acting outside the global nuclear institutions and agreements. When we consider that one of the most important building blocks of the success of deterrence is based on the rationality of states, the inability to predict how these actors will act causes the deterrence strategy to lose its validity. However, this situation emerges as a regional problem.

Conclusion

Today, more than 90% of nuclear weapons are possessed by the USA and Russia, but apart from these two countries, a total of 9 countries, namely the UK, Israel, Pakistan, India, France, China, and North Korea, have nuclear powers. At the moment, all leaders agree that there would be no winner if nuclear war takes place. Yet we still see that research for nuclear weapons and the modernization of the weapons still continue. In addition to that, states are still working on increasing their ballistic and nuclear technology. Countries with nuclear weapons force countries that do not have nuclear power with this element in various fields of diplomacy.

Looking at the developments on the ground, it is seen that Russia considers all the options on the table to protect its territory and national security. In fact, Russia's nuclear doctrine emphasizes that these weapons will be used only for defensive purposes. In its routine nuclear exercises, Russia evaluates the possibilities of how the countries it sees as enemies may retaliate and determines strategies accordingly.

Far from backing down against the coercive sanctions imposed on it by Western countries and the isolation policies of the international community, Russia appears to be playing its deterrent cards, such as the threat to use nuclear weapons and the cessation of gas exports, etc.

There are contradictory statements by Russian officials with regards to using nuclear weapons in Ukraine. For instance, Putin has previously said that Russia will not be the first country that launches a nuclear attack under any circumstances. However, some Russian officials also stated that nuclear weapons might be used. Although it is not clear whether Russia will use its nuclear leverage, there is one fact that exists and it is that Putin, in the scope of the partial mobilization he announced on September 21, will recruit 300,000 soldiers who previously served in the army and will play this deterrent power card to the end. On the other side, NATO countries also have nuclear weapons as well as some other deterrence options such as economic and military ones in their hands, and this should not be ignored and also constitutes a deterrent tool against Russia. Because if Russia chooses to use nuclear weapons, she may be ended up as an isolated state in the world.

Another apparent fact is that if Western countries continue to provide extensive weapons, equipment, and material aid packages to Ukraine, this war will continue for a longer time. Because, although the prolongation of the war adversely affects some countries as well as the citizens of those countries, especially over food and energy prices, it has become an indirect show of power for some countries and the prolongation of this process is in some countries' and people's interest.

Although it is not clearly explained by Russia what her ultimate purpose, target, and political objectives of Ukrainian war are, we see that Ukrainian objectives are clear. But it is seen that the tools that are being used to achieve these goals with a Machiavellian approach and that there is a transforming structure of the war. We can claim that the main priority of Western countries is to keep this war within the borders of Ukrainian territory, to prevent it from spreading to other neighboring countries, and to end it in the case of Ukraine.

US President Joe Biden said in October that the risk of nuclear war was this high for the first time since the Kubra Missile Crisis in 1962. Although Turkey's mediation initiatives, which are currently balancing its relations with Russia and Ukraine, have been instrumental in resuming grain shipments, it remains an uncertain reality as to whether she will be successful to stop this war through her close relations with both countries.

With regards to nuclear deterrence and using nuclear weapons, no power in the world would prefer to be an initiator of such chaotic period which may lead to a great destruction as it seen in the past examples. For this reason, the possible consequences of nuclear war would be unbearable. However, in order to combat with traditional threats, we see that nuclear deterrence is still among the US strategies.

The return of the nuclear strategy in the historical process is due to the element of deterrence within the spheres of influence. Today's nuclear strategy is still considered on the axis of nuclear deterrence. Moreover, while the possibility of using low-yield tactical nuclear weapons has remained only a probability so far, nuclear deterrence is a solid truthness.

For this reason, no matter how much I believe in the danger of nuclear weapons, I do not find it very realistic from a neorealist perspective that global disarmament or a step back from nuclear power can be taken in today's modern theory of the state.

References

- Berkowitz, B.D. (1985). Proliferation, deterrence, and the likelihood of nuclear war", *The Journal of Conflict Resolution*, 29 (1), 112-136.
- Brodie, B. (1978). The development of nuclear strategy, *International Security*, 2(4), 65-83.
- Brodie, B. (2007). *Strategy in the missile age*, RAND
- Brodie, B. (1972). *The absolute weapon: atomic power and world order*, Books for Libraries Press
- Butterworth, R. & Sheldon, J. (2008). *Deterrence in space: Responding to challenges to the us in outer space*, George Marshall Institute
- Culbertson, A. (2022, September 18). Ukraine Crisis: Putin says military drills 'purely defensive' and 'not a threat' as Western Leaders warn invasion imminent, *Sky News*, <https://news.sky.com/story/ukraine-crisis-putin-says-military-drills-purely-defensive-and-not-a-threat-as-western-leaders-warn-invasion-imminent-12545284>, (Retrieved 14 December 2022)
- Deep-rooted Russian fear of the West has fuelled Putin's invasion of Ukraine, *The Conversation*, (3 March 2022), <https://theconversation.com/deep-rooted-russian-fear-of-the-west-has-fuelled-putins-invasion-of-ukraine-178351>, (Retrieved 26 February 2022)
- Freedman, L (2003). Evolution of nuclear strategy reflect changes in the post–Cold War period up to the early 2000s, in *the evolution of nuclear strategy.*, 3rd ed., Palgrave Macmillan
- Freedman, L.D. (2002). 'Nuclear strategy'. *Encyclopedia Britannica*, <https://www.britannica.com/topic/nuclear-strategy>. (Retrieved 1 March 2023)
- Gallucci, R. L. (2006). Averting nuclear catastrophe: Contemplating extreme responses to US vulnerability, *Annals of the American Academy of Political and Social Science*, 607 (1), 51-58.
- Global Zero U.S. Nuclear Policy Commission (2012, May). Global zero u.s. nuclear policy commission report: modernizing US nuclear strategy, force structure and posture, *Global Zero*
- Gray, C. (2009). *National security dilemmas: Challenges & opportunities*, Potomac Books, Inc.,
- Gray, C. (2011). *The Strategy Bridge: Theory for Practice*, Oxford University Press
- How much military support have Western countries provided to Ukraine, what weapons have been sent?, *Euronews*, 10 January 2023, <https://tr.euronews.com/2023/01/10/batili-ulkeler-ukraynaya-ne-kadar-askeri-destekte-bulundu-hangi-silahlar-gonderildi>, (Retrieved 12 January 2023)
- Jervis, R. (1979). Deterrence theory revisited. *World Politics*, 31(2), 289–324.
- Jessie, Y. (2002, December 8)). Ukraine war is going to 'take a while', Putin says as he warns nuclear risk is increasing", *CNN World*, <https://edition.cnn.com/2022/12/07/europe/putin-ukraine-russia-nuclear-intl-hnk/index.html>, (Retrieved 3 October 2022)

- Kasapoglu, C. (2022, September 26). The west's misconception of Russia on the nuclear threat, *Anadolu Agency*, <https://www.aa.com.tr/tr/analiz/nukleer-tehdit-konusunda-batinin-rusya-yanilgisi/2694615>, (Retrieved 15 January 2023)
- Kissinger, H. (1957). *Nuclear weapons and foreign policy*, Council on Foreign Relations by Harper
- Klein, J. J. (2012). Deterring and dissuading nuclear terrorism. *Journal of Strategic Security*. Vol.5, pp.15-30, <http://scholarcommons.usf.edu/jss/vol5/iss1/6>. (Retrieved 15 January 2023)
- Klein, J. J. (2014, November 25). The case for tactical nuclear weapons, International Relations and Security Network, https://www.files.ethz.ch/isn/187842/ISN_185683_en.pdf, (Retrieved 12 October 2022)
- Klein, J. J. (2014). Towards a better u.s. nuclear strategy, *Journal of Strategic Security*, 7 (3), 84-94.
- Lebow, R. & Stein, J. G. (1989). rational deterrence theory: i think, therefore i deter, *World Politics*, 41(2), 208–224
- Leveringhaus, N. (2018). Beyond 'hangovers': The new parameters of post–Cold War nuclear strategy.", *New directions in strategic thinking 2.0: Anu strategic & defence studies centre's golden anniversary conference proceedings.*, Ed. Gleen R. Acton, ANU Press, 77-90.
- Libicki, M. (2009). *Cyberdeterrence and Cyberwar*. RAND Corporation
- Lodal, J. (1980). Deterrence and Nuclear Strategy. *Daedalus*, 109(4), 155-175.
- Marsh, Sarah and Madeline Chambers (2022, February 22). Germany freezes Nord Stream 2 gas project as Ukraine crisis deepens, *Reuters*, <https://www.reuters.com/business/energy/germanys-scholz-halts-nord-stream-2-certification-2022-02-22/>, (Retrieved 21 December 2022)
- Morgan, P. (2003). *Deterrence Now*, Cambridge University Press
- Narang, V. (2014). *Nuclear Strategy in the modern era: Regional powers and international conflict*, Princeton University Press
- NATO, Deterrence and Defence Posture Review (2012)., https://www.nato.int/cps/en/natolive/official_texts_87597.htm , (Retrieved 25 May 2019).
- Nichols T, Stuart D., & McCausland J.D. (2012). *Tactical Nuclear Weapons and NATO.*, Army War Coll Strategic Studies Institute
- Pellecchia E., Antonini, R., Bottai A. & D'Alessandro, A. (2014). Total nuclear disarmament: ethical and moral issues, *Global Bioethics*, 25:2, 136-146
- Roberts, B. (2016). *The case for us nuclear weapons in the 21st century*, Stanford University Press
- Royner, J. (2018). Was there a nuclear revolution? Strategy, grand strategy and the ultimate weapon" <https://warontherocks.com/2018/03/was-there-a-nuclear-revolution-strategy-grand-strategy-and-the-ultimate-weapon/>, (Retrieved 8 October 2022)

- Schelling, T. (1966). *Arms and Influence*, Yale University Press
- Schelling, T. (1980). *The strategy of Conflict*, Harvard University Press
- Schultz G., Perry W., Kissinger H. & Nunn S. (2008, January 15). 'Toward a nuclear-free world', *Wall Street Journal*, [www.nti.org/media/pdfs/NSP_op-eds_final .pdf? = 1360883065](http://www.nti.org/media/pdfs/NSP_op-eds_final.pdf?_=1360883065), (Retrieved 15 November 2022).
- Walton, C. D. (2010). The second nuclear age: nuclear weapons in the twenty-first century, in Baylis, J., Gray, C. and Wirtz, J. (eds) *Strategy in the contemporary world* (third edition), Oxford University Press, 208-225.
- Tétrault-Farber, G. & Balmforth, T. (2021, December 17)). Russia demands NATO roll back from east europe and stay out of ukraine, *Reuters*, <https://www.reuters.com/world/russia-unveils-security-guarantees-says-western-response-not-encouraging-2021-12-17/>, (Retrieved 21 December 2022)
- “The effects of nuclear weapons”, *Atomic Archive*, <http://www.atomicarchive.com/Effects/index.shtml>, (Retrieved 4 October 2022)
- Tow, W. T. (2014). the nuclear waltz: rational actors, deterrence and nuclear non-proliferation, *Australian Journal of Political Science*, 49(3), 541-546.
- Treisman, R. (2022, March 1). Putin's Claim of fighting against Ukraine 'neo-Nazis' distorts history, scholars say, *NPR*, <https://www.npr.org/2022/03/01/1083677765/putin-denazify-ukraine-russia-history>, (Retrieved 10 December 2022)
- Tzu, S. (1971). *The art of war*, translated by Samuel B. Griffith, Oxford University Press
- “Ukraine: UN General Assembly demands Russia reverse course on ‘attempted illegal annexation’”, *UN News*, 12 October 2022, <https://news.un.org/en/story/2022/10/1129492>, (Retrieved 10 December 2022)
- Weaver, C. (2022, October 2). "NATO's Jens Stoltenberg warns Russia of severe consequences if it uses nuclear weapons", *Financial Times*, <https://www.ft.com/content/36ca9f0b-d287-47ac-8944-36171dbd9a10>, (Retrieved 13 January 2023)
- Will Putin Use Nuclear? (2022, September 25). *CNN Turk*, <https://www.cnnturk.com/dunya/putin-nukleer-kullanir-mi?page=1>, (Retrieved 13 January 2023)
- Wirtz, James J. (2012). Deterring the weak: problems and prospects, *Proliferation Papers*, No.43, Institut Francais des Relations Internationales, <https://www.ifri.org/en/publications/enotes/proliferation-papers/deterring-weak-problems-and-prospects> (Retrieved 15 January 2023).
- Wirtz, J. (2018). How does nuclear deterrence differ from conventional deterrence? *Strategic Studies Quarterly*, 12(4), 58-75.

Information About the Article/Makale Hakkında Bilgiler

Conflict of interests/ Çıkar Çatışması

The authors have no conflict of interest to declare.

Yazarlar çıkar çatışması bildirmemiştir.

Grant Support/ Finansal Destek

The authors declared that this study has received no financial support.

Yazarlar bu çalışma için finansal destek almadığını beyan etmiştir.

Author Contributions/ Yazar Katkıları

The draft process of the manuscript/ Taslağın Hazırlanma Süreci A.E./B.S.G. Writing The Manuscript/ Makalenin Yazılması A.E./B.S.G. Submit, Revision and Resubmit Process/ Başvuru, Düzeltme ve Yeniden Başvuru Süreci A.E./B.S.G.

,