



**Unveiling Nuclear Non-Proliferation Synergy:
US-Russia Dynamics, Ukraine's Impact, and Envisioning the NPT's Evolution**

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Abstract:

Non-proliferation cooperation between the United States and Russia improved nuclear weapon security for decades. However, when Russia's economy steadied, the collaboration between the two nations slowed and became more difficult. Russia's ties with the West became strained, and security services began to play a bigger role in its strategy. Because Russia annexed Crimea and military action in Ukraine, relations between the two countries deteriorated noticeably, and the US imposed sanctions and suspended nuclear energy cooperation. This study aims to dissect the underlying factors and political dynamics that led to the breakdown of cooperation between the United States and Russia regarding the Non-Proliferation Treaty (NPT). Additionally, it investigates how the roles of both countries in addressing regional proliferation threats have evolved. Through qualitative analysis, the research seeks to provide insights into the complexities of international relations and nuclear security governance. The article argues that unless the NPT's shortcomings are rectified, it will eventually lose significance and will be viewed as a contract that is impossible to enforce and ineffective in preventing nuclear proliferation.

Keywords: United States, Russia, nuclear nonproliferation regime, International Atomic Energy Agency, the Strategic Arms Limitation Treaty, arms control and disarmament Conference

INTRODUCTION

The United States of America was the first state that started working on nuclear weapons during World War 2 under the Presidency of Franklin D. Roosevelt. The United States was also the first and only country in the world to use a nuclear weapon. The US attacked two Japanese cities Hiroshima

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and Nagasaki and thousands of casualties and losses resulted in the surrender of Japan. Since the witnessed destruction caused by nuclear weapons international community has engaged in efforts to prevent the intentional or accidental use of these weapons of mass destruction. There are various efforts against the proliferation of nuclear weapons by two major powers of the world, the United States, and Russia. During the Cold War period in the 1970s, various bilateral treaties including the Strategic Arms Limitation Treaty (SALT) 1 and 2 were signed between the Soviet Union and the United States (US State Department, 2019).

In a test ban treaty in 1963, leaders of both nations hoped for a more upcoming comprehensive agreement on arms control (Terchek, 1970). After four years following the first treaty, both parties decided to sign a space pact that prohibited the stationing of nuclear weapons systems in space. Negotiators from the United States and the Soviet Union achieved an agreement on the conclusion of an international non-proliferation treaty (Ogilvie-White, 1996).

Nuclear weapons technology was most likely prevalent by the beginning of 1960 (Cochran & Norris, 2018). The fusion of the atom and the science of eruption had entered academic journals and literature, and nuclear technology was no longer just followed by the government but also by private firms. Plutonium, the building block of nuclear bombs, was readily available and inexpensive. Following China, many more powers desired to obtain nuclear weapons and, most likely, test nuclear weapons (Goldemberg, 2009).

The Soviet Union, the United Powers and its allies, and the United Kingdom are the only states capable of launching nuclear attacks. Both sides of the Cold War had large stocks of nuclear weapons, and any strike would have resulted in catastrophic destruction (Reiss, 2016).

Ireland was the first country to seek a ban on the transfer of nuclear technology during the United Nations General Assembly meeting in 1961 (Sinnott, 1995). Although the resolution was accepted by the members, it took until 1965 for the Geneva Disarmament Conference to officially begin. The negotiators from the United States attempted to find a compromise between the desire to strengthen its North Atlantic Treaty Organization (NATO) partners and seek to prohibit future transfer of technology to the Soviet Union (Hunt, 2015).

The Nuclear Non-Proliferation Treaty (NPT) was signed in 1968 and came into force in 1970 (Freedman, 2018). It has several articles requiring nuclear signatories not to transfer nuclear technology or nuclear weapons to any other state, and non-nuclear weapons states not to acquire or develop nuclear weapons. All the signatories of the Nuclear NPT agreed to submit the safeguard against proliferation established by the International Atomic Energy Agency (IAEA). According to NPT, five permanent members of the United Nations Security Council (UNSC) who have tested their nuclear weapons before 1968 are considered nuclear weapon states, and others are categorized as non-nuclear weapon states.

The countries that are members of the NPT agreed to limit the growth of their nuclear arsenals and to focus on using nuclear technology for peaceful purposes. They also agreed to limit the research and development of nuclear weapons to promote global peace. The treaty has a 25-year duration and is reviewed every 5 years (Egeland, 2021).

The United States and Russia have provided a notable example of cooperation in the area of non-proliferation from 1991 to 2014 (Bunn, 2021). This collaboration has led to significant improvements in security for nuclear weapons in both countries, as well as in the former Soviet states. The cooperation between the two countries has also contributed to the overall security of the United States, Russia, and the world by reducing the risk of nuclear weapons or materials falling into the hands of terrorists or rogue proliferating states.

In the late 2000s, the cooperation between the United States and Russia in the area of nuclear non-proliferation slowed down and became more difficult. This was due to various factors such as Russia's economy, the crucial nuclear security, and the worsening of Russia's relations with the West.

Additionally, Russia's security services began to have a greater influence on Russian policy. Relations between the two countries became even more strained when Russia annexed Crimea in 2014 and the United States imposed sanctions and halted cooperation on nuclear energy (Bidgood & Potter, 2021). Russia is a signatory state of the NPT and the non-proliferation regime is a key component of Russia's foreign policy. Russia also supports the idea of achieving "nuclear zero" and has made significant efforts towards the elimination or reduction of nuclear weapons and technology, both independently and in cooperation with the United States, such as the START 1 treaty and other agreements.

The United States and Russia signed the New START Treaty in 2010, which set limits on the number of strategic nuclear weapons that each country can possess. After three years of the treaty, Russia had fulfilled two-thirds of its obligations under the treaty. The treaty gave both countries seven years, until 2018, to reduce their nuclear arsenals. However, Achieving the goal of a "nuclear zero" world is a complex and difficult process that will require a significant amount of effort and implementation over a long period (Landau, & Bermant, 2014). After signing the treaty, President Vladimir Putin of Russia stated that Russia would work in full cooperation with the United States to ensure the world's safety and achieve nuclear disarmament based on equality, considering all factors that affect international security and strategic stability.

Russia's reliability as a nuclear ally has come into question in recent years. As a signatory state of the NPT a member of the IAEA board, a permanent member of the UN Security Council, and a participant in negotiations concerning Iran and North Korea's nuclear programs, Russia is deeply involved in many non-proliferation issues. Additionally, as a supplier of sensitive equipment, materials, and technology and as a long-standing ally of countries of proliferation concern, Russia's actions and decisions have a significant impact on the global non-proliferation landscape. However, its actions and policies in recent years have led to concerns about its reliability as a partner in non-proliferation efforts. Russia's intervention in Crimea in 2014 led to a major political crisis in the West and raised concerns about the integrity of the nonproliferation efforts (Allison, 2014).

This study focuses on the following questions: Which factors and political aspects led to the breakdown of NPT between the United States and Russia? How does Russia's and the United States' role in dealing with countries of regional proliferation Change?

LITERATURE REVIEW

The potential consequences of the Russia-Ukraine conflict on the Nuclear Non-Proliferation Treaty (NPT). The author argues that Russia's actions undermine the logic of the NPT, which aims to prevent the spread of nuclear weapons. They point out that Ukraine gave up its nuclear arsenal after joining the NPT, and Russia's aggression makes it seem like the treaty leaves non-nuclear states vulnerable to nuclear powers. This is exemplified by Putin putting Russia's nuclear forces on high alert during the invasion (Umland, & von Essen, 2022).

Shift in the U.S.-Russia relationship regarding nuclear non-proliferation. Historically, despite tensions, both countries collaborated to manage nuclear materials and prevent weapons proliferation. However, this cooperation started to decline around a decade before the Ukraine invasion. The invasion further exacerbated this trend. Russia's recent actions, like buying weapons from sanctioned countries, prioritize other security concerns over non-proliferation. This shift might be temporary due to current tensions, but Russia's new foreign policy document suggests a more permanent change. The future of U.S.-Russia collaboration on non-proliferation seems bleak, especially for cases involving countries allied with one side and adversarial to the other. However, the shared interest in nuclear energy suggests some potential for continued cooperation despite the current challenges. (Hibbs et al., 2024)

THEORETICAL FRAMEWORK

This study can be better understood with the neorealism theory of international relations. Neorealism which is also known as structural realism was introduced in a book titled "Theory of International Politics" written by Kenneth Waltz in 1979. The neorealist approach is different from the classical realism approach that was given by Hans Morgenthau, Edward H. Carr, and Thucydides all of these are famous realists. As Waltz said one can understand international politics by examining the structure of the international system and according to him structure of an international system is reflected by alliances and other cooperative arrangements between the states.

The anarchic state of international relations and the distribution of power among states are two main features of Waltz's theory of neorealism. The state of anarchy means the absence of any central authority to control the international system, to adjudicate international disputes in short there is no government in international politics. Secondly, there is an unequal distribution of power in world politics because of which most powerful states try to impose a system that favors and hence according to Waltz system is dominated by one, two, or many superpowers (Uni-polarity, bipolarity, and multipolarity, respectively). Waltz argues that after the fall of the Soviet Union world became unipolar which made a dangerous configuration because it allowed one superpower to engage in foreign adventures.

In neoclassical theory, the international system's structure is crucial in determining state outcomes due to the unequal distribution of capabilities among leading states. Technology, particularly in the form of nuclear weapons, is a significant systemic factor influencing state behavior. Waltz illustrates this concept by suggesting that states possessing nuclear weapons tend to coexist peacefully due to the fear of retaliation from other nuclear-armed states. He argues that nuclear

proliferation doesn't necessarily lead to peace, but rather it can reinforce peace by fostering a deterrence effect, especially when nuclear weapons are controlled by competent governments.

There is a hypothesis in neo-realism that states possess military capability and can harm other neighboring states. Russett in his study "Grasping Democratic Peace" claims that "great powers typically have strong military forces able to exercise force at a distance and wide-ranging-even global interests to fight for" (Russett, 1994). Uncertainty is a leading reason for the states to compete in this anarchic system. According to the neorealist point of view, states can never trust one other they cannot be attacked by others as they are unaware of other's intentions so to deal with this security dilemma states seek to increase their power. It is hard for a state to conclude whether its question of power status is compatible with the current international system or it should have more power to make the system imbalanced. As the political scientist, Mearsheimer claimed "Power is a means to an end and the ultimate end is survival" (Mearsheimer, 2001).

The accomplishment of domestic political goals of a state is not possible without maintaining the autonomy and territory the same as in the international system every playing actor of the global must to survive and to survive they must make alliances, seek power, and status in the international arena to protect itself. Therefore, in such a context rise of one state in world politics is considered as a threat to another. According to Kenneth Waltz founder of neo-realism, "states seek to ensure their survival" (Waltz, Bull, & Butterfield, 1979). To ensure survival states use self-help principles and seek to enhance power and to drop down others in this world of anarchy otherwise, their survival is not guaranteed.

Through a neo-realist lens, this study scrutinizes the breakdown in US-Russia cooperation on the Non-Proliferation Treaty (NPT) amidst geopolitical shifts triggered by Russia's annexation of Crimea and military actions in Ukraine. It evaluates the impact on nuclear security synergy and regional proliferation dynamics, emphasizing the evolving roles of both nations. It contends that without addressing systemic challenges within the NPT framework, its efficacy may diminish, reflecting broader power struggles and security dilemmas in international relations.

RESEARCH METHODOLOGY

It is qualitative research as qualitative data collection techniques have been used in it. The purpose of the research is to investigate the factors and political dynamics contributing to the breakdown in US-Russia cooperation on nuclear non-proliferation, as well as to analyze how the roles of both countries in addressing regional proliferation threats have evolved.

The target audience of this study is professors, Researchers, scholars, and students of international relations and politics particularly those whose studies are focused on big powers rivalry. It will also focus on the breakdown in US-Russia cooperation on non-proliferation and its broader implications for nuclear security and proliferation dynamics, to inform future policy decisions and academic discourse in the field.

NPT AND BREAKDOWN OF COOPERATION BETWEEN US AND RUSSIA?

One of the most important, re-proving, and strategic foreign relations in the world is nurtured by the United States and Russia. Both nations are intrigued by nuclear safety, space exploration, non-proliferation, and counter-terrorism. Following the fall of the USSR, their relationship was mostly

cordial under Russian President Boris Yeltsin then various incidents happened like NATO bombing of Yugoslavia in the spring of 1999, Russia's annexation of Crimea in 2014, and military intervention in Ukraine and Russian military forces intervention in the Syrian Civil War in 2012 and also meddled in the presidential elections in the United States in 2016 and 2020 (Russell, 2022). Relations have been at their lowest point since the Cuban Missile Crisis. The Russian invasion of Ukraine in 2022 is a further source of tension in the relationships and there has been a noticeable deterioration in relations between the two nations.

Few non-proliferation issues can be resolved without Russia's direct involvement, and Moscow frequently acts as a saboteur. To prevent the spread of WMD, avoid direct military conflict, and deter terrorists from pursuing WMD, both countries have a shared interest in doing so. But despite this, Moscow frequently prioritized other goals over non-proliferation, including demonstrating its support for friendly nations, thwarting American goals, putting economic penalties on the United States, and pursuing its business interests.

Due to disagreements on the nuclear security crisis brought on by Russia's ownership of the Zaporizhzhia nuclear power facility in Ukraine, Russia prevented the 2022 Nuclear Non-Proliferation Treaty (NPT) Review Conference on 26th August (Hernández, & Kimball, 2022). From agreeing on a crucial result document numerous risks are posed by the Russian army's control of the Zaporizhzhia nuclear power plant (NPP), including radiation leaks, energy shortages, loss of security and revenue, and industrial espionage.

Escalation of Tensions

The United States has cautioned Russian officials against a potential invasion of Ukraine, emphasizing that such an action would have significant repercussions, including harsh economic sanctions. Ukraine has reported the gathering of approximately 94,000 Russian troops. The ongoing conflict between Ukrainian government forces and Russian-backed rebels in eastern Ukraine has persisted for seven years, prompting Washington to call for a return to the Minsk agreements established in 2014 and 2015 (Mackinnon, 2022). The Minsk Agreements were established to end the conflict in Ukraine. However, Russia has claimed that it is deploying troops in response to what it perceives as aggressive actions by NATO and Ukraine. These actions include US strategic bomber flights and warship maneuvers in the Black Sea. Ukraine has expressed interest in joining NATO and is seeking legally binding security guarantees from the West that NATO will not move further eastward or position missiles in Ukraine that could be aimed at Russia (Meyer, & Arkhipov, 2021).

The United States has stated that no state has the authority to impede Ukraine's ambition to become a member of NATO. Additionally, the US has accused Belarus, which is a close ally of Russia, of exploiting Middle Eastern migrants as a means of creating challenges for the European Union. Belarus has reportedly encouraged thousands of migrants to try and enter the EU through its territory. In response to the situation, Russia has deployed nuclear-capable jets to monitor Belarusian airspace in support of Alexander Lukashenko, the country's president.

The United States has cautioned Russia against utilizing energy as a political weapon, particularly against Ukraine, and has suggested that Russia could and should help alleviate Europe's energy crisis by increasing gas supply. Organizations in Russia that are involved in the construction of the Nord Stream 2 gas pipeline under the Baltic Sea have been subjected to sanctions. Russia cannot

begin pumping gas through the pipeline until a German regulator has approved it. If the situation in Ukraine worsens, fresh Western sanctions may be imposed (Froehlich, 2022).

In a series of retaliatory measures, both Russia and the United States have reduced the sizes of their respective embassies. However, on December 2, Sergey Lavrov, Russia's Foreign Minister, expressed the view that embassy limitations could be an area where the two nations could make a fresh start and move forward by lifting the restrictions on representation.

Soon after President Biden took office, the United States and Russia extended a critical accord aimed at constraining the expansion of their strategic nuclear weapon stockpiles. At the time, President Biden suggested that it might take between six and twelve months to evaluate whether a successful strategic dialogue between the two nations could be established, given their pledge in Geneva to "establish the basis for future arms control and risk reduction measures." Currently, there are no apparent indications of any significant advancement in this regard (Kinery, 2023).

The current state of US-Russia relations is demonstrated by recent comments made by President Joe Biden, who stated that Russian President Vladimir Putin "cannot remain in power" considering Russia's ongoing military incursion into Ukraine. Biden has also referred to Putin as a "butcher" and a "war criminal," which has led to warnings from the Kremlin that relations between the two nations are on the brink of breaking down. This serves as the most recent example of the extent to which relations between the US and Russia have deteriorated (Arndt & Horovitz, 2022).

The deteriorating situation in Ukraine has prompted the US and its European allies to impose a range of severe sanctions on Russia. The UN has reported that over 3.8 million people have died as a result of the conflict. The West has provided various forms of economic, diplomatic, and military assistance, which have helped Ukraine on the battlefield and worked to further isolate Russia from the West. In addition, the European Union has welcomed Ukraine as a candidate for EU membership and has provided refuge to millions of Ukrainian refugees. These actions have demonstrated the international community's commitment to supporting Ukraine and condemning Russia's aggressive actions (Bryant, 2023). During her trip to Ukraine, Ursula von der Leyen, the President of the European Commission, expressed her appreciation to President Zelensky for Ukraine's rapid progress in moving towards EU membership. The EU has taken several measures against Russia and is actively working to reduce its energy imports from the country. In response, Russia has taken steps to restrict gas supply to Europe ("EU sanctions against Russia," 2023).

The ongoing energy dispute between Russia and much of Europe has had significant financial costs for EU member states, while also posing a significant challenge to Russia's long-term economic prospects. The shift in Europe's energy policy away from Russia, which could potentially be permanent depending on the outcome of the conflict, Russia's political trajectory, and the durability of Europe's new energy arrangements, has added to the complexity of the situation (Charlton, 2022).

Soon, if Russia experiences a decrease in export revenue, the Russian central bank may have to step in and provide direct financing to the government. This could lead to additional economic challenges for Russia. It has been reported that there are ongoing discussions regarding the possible admission of Sweden and Finland to NATO, which would increase the alliance's military

capabilities and demonstrate that Russia does not have the power to veto a country's membership. Finland has had concerns about Russian influence due to its proximity to Russia's border.

However, no official decision has been made regarding the admission of these countries to NAT. However, the US has provided significant military assistance to Ukraine, including weapons, training, and equipment, to help them defend against the ongoing Russian aggression. The US has also been a strong advocate for Ukraine's sovereignty and territorial integrity and has been working closely with its European allies to impose economic and diplomatic sanctions on Russia to pressure them to end their invasion of Ukraine. The Lend-Lease Act signed by President Biden further solidifies the US commitment to supporting Ukraine and its allies in the region (Vergun, 2022). The U.S. has been providing intelligence and military advice to Ukraine to help them in their counteroffensive against Russian-backed forces (Karasapan, 2022).

Numerous countries, including the European Union, the United Kingdom, other European nations (such as Switzerland), Canada, Australia, New Zealand, Japan, South Korea, Singapore, and Taiwan, have implemented sanctions, export restrictions, or both in response to Russia's conflict with Ukraine (Funakoshi et al., 2022). Many of these restrictions are similar or identical to measures imposed by the United States. The EU, with U.S. assistance, ordered the Society for Worldwide Interbank Financial Telecommunication (SWIFT) and other financial messaging services to stop working with 10 major Russian financial institutions. In addition, Germany suspended the certification of the Nord Stream 2 pipeline two days before Russia's attack. The EU has also decided to ban most imports of Russian oil starting in December 2022. Furthermore, the Group of Seven (G7) countries have expressed their desire to set a limit (Welt, 2023). The immediate impact of the sanctions on Russia has been the focus of attention, and they have been severe. However, historically, sanctions have not been effective in deterring foreign adversaries. In the case of the 2014 conflict between Ukraine and Russia, for example, President Barack Obama was unsuccessful in effectively using them (Cohen, 2014).

The impact of the sanctions on Russia has received significant attention, and they have been severe. Historically, sanctions have failed to deter foreign adversaries effectively. However, this time the measures taken against Russia are largely unprecedented, with even typically neutral nations like Switzerland and Sweden calling for significant restrictions. In response, sanctions have been imposed on Vladimir Putin, Russia's president, as well as the oligarchs who support him. Of utmost importance, Russia has been cut off from SWIFT, a vital part of the worldwide payments system, making it more difficult for them to process foreign transactions (Garside, 2022).

Despite the imposed sanctions, the Russian stock market has yet to resume trading. This is speculated to be due to the fear that opening the market could result in significant financial losses for investors. Meanwhile, the Russian central bank has raised its interest rates to 20%, and Putin has implemented capital controls to limit the flow of foreign currency out of the country. These controls have set a limit of \$10,000 of foreign currency that individuals are allowed to take out of Russia (Turak, 2022). Despite not having an official embargo on Russian oil, the country has faced challenges selling its oil on the global market, even at a discounted price ("Moody's Cuts Russia," 2022).

In addition to government sanctions, many major corporations such as Netflix, TikTok, and Ikea have suspended business dealings with Russia. Furthermore, Visa, MasterCard, and American Express have stopped processing transactions in the country, which has inflicted significant damage on the Russian economy (O'Brien, 2022). As a result of the ongoing conflict with Ukraine and the imposed sanctions, Russia's debt rating has been lowered by Moody's, bringing it close to being considered junk status. This has led to an increased risk of default. Governmental measures haven't been the only ones taken in response to Russia's invasion of Ukraine. It will not only affect that part of the world; this economic damage to Russia is severe.

According to certain experts, there is speculation that oil prices could rise significantly, potentially reaching \$200 or even \$300 per barrel. In the past, oil prices temporarily peaked at a record-breaking \$130 per barrel. This surge in oil prices has negatively impacted plastic production. Moreover, the cost of wheat is experiencing a substantial increase of approximately 70%. A discerning reader has highlighted the historical correlation between such price hikes and instances of "instability and violence." Additionally, alongside the escalating natural gas prices, central banks worldwide are also facing challenges.

Apprehensions regarding potential import limitations on Russian oil by the United States resulted in a sharp decline of over 3% in various stock market indices within a single day. However, the final decision was announced a day later. Shell, a prominent company in the industry, is among the latest businesses to halt the purchase of Russian crude (McDonald, 2022). The stock price of American Express experienced a substantial decrease, with a decline of approximately 18%, following the company's choice to exit the Russian market. This decision had a significant impact on the company's stock value.

Several private schools in the United Kingdom, which had long been dependent on affluent Russian oligarchs for student enrolment, face considerable difficulties. Additionally, the ongoing refugee crisis has further strained the situation. Over merely 10 days, Poland has experienced a population increase of over 3% due to nearly two million Ukrainians leaving their home country. The combination of these factors has had a significant impact on both the educational and demographic landscapes (Jacoby, 2022).

The repercussions of the ongoing situation are anticipated to continue unfolding. In the immediate future, regions bordering Russia and Ukraine will bear a higher burden of the associated costs, but the impact will be felt globally, affecting various parts of the world. Finland, for instance, is projected to face initial challenges, considering that over a quarter of its businesses engage in trade with Russia. However, the consequences are bound to extend beyond Finland, affecting other regions ("Stock markets rebound," 2022).

Gas prices will probably continue to escalate, and there are indications that the weaponization of SWIFT (Society for Worldwide Interbank Financial Telecommunication) will bring about significant changes in the global financial landscape. Despite Russia's economy being ranked eleventh in the world, the repercussions of these developments are expected to be enduring. This is primarily due to the heavy reliance of other developed economies, especially Europe, on Russia's abundant natural resources. The interdependence between these economies and Russia's resource exports amplifies the potential impact and extends the consequences of the situation (Flanagan et al., 2022).

One example of a potential response is Germany, which may reconsider its stance on nuclear energy and explore the possibility of reducing its dependence on it. However, it is important to note that policy reversals of this nature typically require a significant amount of time and deliberation. When it comes to addressing Russia's expansionist objectives and holding Putin's regime accountable, the Western nations might find themselves with limited alternatives. The decision to take punitive measures against Russia could become a necessity rather than a choice in such circumstances (Freddy, 2022).

It is crucial to recognize that no entity can consider itself exempt from the economic consequences of geopolitical events. It is prudent to proactively develop plans to address these repercussions before they escalate beyond control. It is imperative to remember that the impact of conflicts, such as the ongoing Ukrainian conflict, extends far beyond the duration of military operations. The aftermath of such conflicts can result in prolonged economic hardships and challenges for all parties involved. By acknowledging this reality, we can better prepare ourselves to mitigate the long-term effects and minimize the pain inflicted by such conflicts (Rahman et al., 2022).

The NPT's inability to attain nuclear disarmament and the low likelihood of its realization are significant shortcomings. The International Court of Justice's advisory decision in 1996 highlights the obligation of parties to participate in disarmament negotiations, bring them to a fruitful conclusion, and accomplish nuclear disarmament in all its forms to adhere to Article VI of the treaty. The NPT has gained widespread support, and it is expected to persist for an extended period, despite its failures ("International Court of Justice," n. d.). If the shortcomings of the NPT are left unaddressed, its relevance is likely to diminish over time. It may be increasingly viewed as a contract that is challenging to enforce and ineffective in preventing nuclear proliferation. The non-nuclear weapon states (NNWSs) that are parties to the treaty will gradually lose their enthusiasm to uphold their obligations if concrete steps are not taken toward nuclear disarmament. It is crucial for nuclear disarmament efforts to proceed gradually but with a realistic chance of success in eliminating nuclear weapons. The current and ongoing factors that contribute to the breakdown of the NPT should be taken into consideration and addressed to strengthen the treaty's effectiveness (O'Hanlon et al., 2020).

Nuclear Nonproliferation and Changing Role of Russia and the US

Several countries, including Iran, North Korea, and Syria, and regions such as South Asia, have experienced significant changes in regional nuclear proliferation dynamics. One notable example is Russia's involvement in dealing with these countries. While Moscow recognized the extent of Iran's nuclear program more extensively than the United States or European nations did, it opposed substantial economic sanctions and maintained a positive relationship with Tehran throughout the nuclear negotiations. Russia played a crucial and constructive role in the talks, securing Iran's agreement to transfer a significant portion of its enriched uranium stockpile to Russia (Tselichtchev, 2018).

Moscow was able to provide assurances that Iran would remain reliant on Russia for fuel supply to its Russian-provided power reactors. However, in the case of North Korea, Russia has taken a secondary role compared to China in diplomatic efforts and negotiations (Jung, 2015). In recent years, as relations between North Korea and China were deteriorating, there seemed to be an

impression that Moscow was attempting to play a more prominent role in North Korea's affairs. However, Russia soon realized that lacking significant economic incentives to offer Pyongyang (unlike China), it would have limited influence over Kim Jong-un's regime. Russia has strongly condemned North Korean nuclear and missile testing but generally aligns with China in terms of opposing international judgment and advocating for a resumption of negotiations.

Additionally, Russia has sought to shield Syria from scrutiny and inspections by the International Atomic Energy Agency (IAEA) following Israel's 2007 destruction of a clandestine plutonium-production reactor that North Korea was reportedly operating for Syria (Kimball, 2008). Russia has indeed supported Damascus in rejecting the IAEA's requests for access to facilities associated with the destroyed reactor in Syria. Furthermore, Russia has lent support to Syria's unsubstantiated claim that the facility was not a nuclear reactor. In South Asia, Russia has not actively sought to promote strategic restraint between India and Pakistan. Building upon the close ties established during the Cold War era between India and the Soviet Union, Russia has emerged as a significant supplier of defense equipment to New Delhi. This includes leasing nuclear-powered submarines and engaging in the co-development of the nuclear-capable Sagarika submarine-launched ballistic missile (Abe, 2020).

The United States has distinct relationships with countries dealing with proliferation changes, such as India and Pakistan. Regarding India, it is evident that the U.S. has sought to engage with India within the context of its broader international objectives in the region. This approach is driven by various factors, including India's growing strategic importance and its potential as a counterbalance to China. On the other hand, the U.S. also acknowledges the significance of Pakistan, albeit to a varying extent. Pakistan's role in the region, including its nuclear capabilities, cannot be overlooked. The U.S. maintains diplomatic and security ties with Pakistan, although there have been challenges in managing issues related to proliferation and regional stability. It is important to note that the U.S. approach towards both India and Pakistan is influenced by a range of factors, including non-proliferation concerns, regional security dynamics, geopolitical considerations, and broader strategic interests in the region (Rose, 1997).

Following the Soviet intervention in Afghanistan and the shift of the Iranian revolution towards a more anti-Western stance, the United States placed significant importance on its close relationship with Pakistan. The circumstances surrounding Pakistan's nuclear advancements, as well as American efforts to regulate and monitor them, differ from the Indian experience. However, it is worth noting that the overall pattern may not be significantly different in terms of the US engaging with both countries to address nuclear proliferation concerns (Mehmood, 2003).

Indeed, Pakistan made a deliberate decision to pursue the development of nuclear weapons capability in 1972, following the secession of East Pakistan (now Bangladesh). At the time, Zulfikar Ali Bhutto, who served as the Head of State, sought to address India's significant military advantage and restore confidence within the Pakistani government after the loss of Bangladesh. Under Bhutto's leadership, Pakistan embarked on a dual path to achieve nuclear weapons capability. The first path involved diplomatic efforts to seek international support and recognition of Pakistan's security concerns, particularly about India. The second path involved covertly pursuing a nuclear weapons program, which included acquiring nuclear technology, expertise, and materials from various sources. It is important to note that the pursuit of nuclear weapons by Pakistan was driven

by a combination of security considerations, regional dynamics, and the desire to restore national pride and confidence in the aftermath of the separation of East Pakistan (Sublette, 2002).

Initially, as part of its nuclear power development program, Pakistan initiated plans to expand its nuclear capabilities by constructing multiple new reactors. In 1974, Pakistan agreed with France to build a large-scale nuclear power plant at Chasma. This project aimed to enhance Pakistan's nuclear power generation capacity and support its growing energy needs (Ricke, 2013). Upon its completion, the Chasma nuclear power plant in Pakistan would have provided the country with access to plutonium, a key ingredient in the production of nuclear weapons. Despite several diplomatic efforts by the United States to dissuade Pakistan from pursuing this facility, they were unsuccessful. Consequently, Washington resorted to other means to obstruct the project. After initial hesitations, France eventually agreed to halt the execution of its contract for the Chasma nuclear power plant in June 1978 (Lewis, 1976). At the same time, the Symington Amendment of 1976, an amendment to the Foreign Assistance Act, was enforced. This amendment prohibits the United States from providing economic and military assistance to any country that imports nuclear reprocessing or enrichment technology. The Symington Amendment was implemented as a measure to prevent the spread of nuclear weapons technology and discourage countries from pursuing nuclear weapons capabilities (Hathaway, 2000).

The evidence suggests that the withdrawal of American assistance did not deter Pakistan from its covert pursuit of nuclear weapons. Despite the French ending their support for the Chasma plant, Pakistan had already acquired most of the necessary technology to proceed with its construction. This indicates that the cessation of external assistance did not significantly impede Pakistan's nuclear weapons program, as it had already made substantial progress in acquiring the required knowledge and expertise (Albright & Kelleher-Vergantini, 2015).

CONCLUSION

The primary objective of the international nuclear order, including the Nuclear NPT, is to prevent nuclear warfare. However, several developments have recently posed challenges to this objective. The relationship between the United States and Russia has significantly deteriorated due to Russia's annexation of Crimea and military intervention in Ukraine. As a consequence, the United States has imposed sanctions and halted cooperation, including in the field of nuclear energy. To improve relations and promote the well-being of their people, both countries could focus on cooperation in the economy. Although political ties between the governments may be strained, the business communities in each nation could serve as a means to enhance relations. While economic and social relations between the United States and Russia have not traditionally been close, there are unforeseen opportunities to foster such relations now. By prioritizing economic cooperation and finding common ground, the two countries can potentially pave the way for better relations and contribute to the stability of the international nuclear order. By shifting focus away from proliferation and towards collaboration in areas of mutual interest, both nations can work towards shared prosperity and a more constructive relationship.

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