



Will South Korea Build Its Own Nuclear Weapons?

Yong Soo Park

Korea Maritime and Ocean University, Korea.

How to cite this paper: Yong Soo Park. (2022) Will South Korea Build Its Own Nuclear Weapons? *Journal of Humanities, Arts and Social Science*, 6(4), 581-590. DOI: 10.26855/jhass.2022.12.011

Received: October 28, 2022

Accepted: November 12, 2022

Published: December 19, 2022

* **Corresponding author:** Yong Soo Park, Korea Maritime and Ocean University, Korea.

Email: yspark@kmou.ac.kr

Abstract

This study predicts that, if North Korea's nuclear threat increases, South Korea will ultimately adopt an offensive balancing strategy to maximize its internal military power. In doing so, it will be more than capable of building its own nuclear weapons, if necessary, through strategic thought and action and by following realist logic. In the context of an anarchic international system, South Korea, because of its lack of knowledge about the ultimate intentions of North Korea, which is armed with nuclear missiles, will eventually try to internally maximize all the military power it can acquire, including nuclear weapons, in order to ensure its survival, thereby achieving a balance of power in the Korean Peninsula. This is because maximizing power is the most certain way to ensure one's survival and security in the anarchic international system.

Keywords

South Korea, nuclear weapons, North Korea, United States

1. Introduction

South Korea is currently exposed to nuclear and missile threats from three northern countries—Russia, China, and North Korea—which, as of January 2021, possessed 6,255, 350, and 40–50 nuclear weapons, respectively (SIPRI 2021). North Korea has accomplished the miniaturization and weight reduction of nuclear warheads through hydrogen bomb testing and possesses intercontinental ballistic missiles (ICBMs) as well as submarine-launched ballistic missiles. It also possesses the ability to detonate nuclear electromagnetic pulse (EMP) bombs. Its emergence as a “de facto” nuclear-weapon state signifies that the stable balance of power in the Korean Peninsula has already collapsed. Undoubtedly, the time has come for South Korea to seek a new deterrence strategy against security threats from North Korea.

Currently, South Korea has been responding to North Korea's nuclear threat through a “three-axis defense system” including the “Kill Chain,” but security experts are skeptical about the effectiveness of the defense strategy of striking nuclear weapons with conventional force. Because South Korea still does not possess nuclear weapons and has no plans for future development, it has no choice but to rely on the US commitment to extended deterrence (Hwang, 2021: 29). However, many security experts have frequently expressed serious doubts about US security promises, arguing, if an emergency occurs on the Korean Peninsula, will the United States defend Seoul from North Korea at the risk of a nuclear retaliatory attack on its territories, such as Washington, D.C. or Boston? (Kim, 2015; Lee, 2017; Park, 2017; Kim, 2020; Hwang, 2021: 29; T. Kim, 2021). In the current situation in which North Korea's nuclear and missile development has already been completed, the nuclear umbrella provided by the United States is already torn, they say.

Because North Korea's nuclear threat is intertwined with the problem of reliability of the US defense of and extended deterrence in the Korean Peninsula, discussions have been actively conducted on South Korea's nuclear armament. So, will South Korea build its own nuclear weapons? This study discusses this issue from the perspective of the theory of offensive realism. Given the current situation in which the possibility of a military clash on the Korean

Peninsula is increasing more than ever due to the increasingly unstable international order stemming from the intensifying US-China competition, this study is expected to provide new perspectives and ideas for the discussion of the foreign strategy that Korea should take in the future. It consists of six chapters. The following chapter examines the neorealist/offensive realist view of nuclear weapons to help understand why states want to build their own nuclear weapons. Chapter 3 reviews key concepts of John Mearsheimer's theory of offensive realism as a logical framework for predicting South Korea's future actions. Chapter 4 examines the security threat to South Korea, focusing on North Korea's nuclear threat. Chapter 5 examines discourses on South Korea's nuclear armament and discusses its likelihood. Finally, Chapter 6 presents the conclusion of this study.

2. A Neorealist/Offensive Realist View of Nuclear Weapons

Most advocates of so-called "proliferation optimism" in the study of international politics, such as Kenneth Waltz and John Mearsheimer, belong to the school of neorealism/offensive realism. They are optimistic about nuclear proliferation because they believe that nuclear weapons are the "ultimate deterrent" with formidable destructive power, deterring nuclear and conventional warfare, guaranteeing absolute security, and facilitating a higher level of international stability (Waltz, 1981, 1990; Sagan & Waltz, 2013; Mearsheimer, 1993, 2000). In his 1981 paper "The Spread of Nuclear Weapons: More May Be Better," Waltz, the founder of neorealism, claimed that more nuclear weapons may help stabilize the international order. Using the rational deterrence theory, he argued that, if two or more states had a "second strike capability," war between them would not occur (Waltz, 1981, 1990, 2012). This is because, if one country launches a nuclear attack on the other, it will be subjected to a retaliatory nuclear attack. Because of this, states have every incentive to develop and deploy nuclear weapons to ensure ultimate security; thus, when more nations possess nuclear weapons, the more stable the international system will become. The nuclear proliferation optimism of the school of neorealism/offensive realism is in sharp contrast to the majority view that nuclear non-proliferation plays an essential role in the stability of the international order.

Nuclear proliferation optimism is based on the perception that, during the Cold War, the United States and the Soviet Union deterred each other through a "balance of terror" by nuclear weapons, thereby preventing the outbreak of an all-out war like World War III and achieving stability in the international order (Waltz, 1981; Mearsheimer, 1990). This provocative nuclear proliferation optimism, which assumes that nuclear proliferation could make the world more peaceful, is based on the realist view that nuclear weapons can deter large-scale conventional warfare as well as nuclear war through the fear of "mutually assured destruction (MAD)." This is because the consequences of using nuclear weapons are so disastrous that achieving victory in nuclear war itself is meaningless (Mearsheimer, 1984/85: 21). Due to the fears associated with their use, nuclear weapons themselves are the ultimate deterrent, which a strong conventional military force could never match (Mearsheimer, 1984/85: 20; Waltz, 1981, 1990, 2012).

The nuclear deterrence theory, which states that fears caused by MAD deter states from attacking using conventional and nuclear weapons, gained worldwide popularity as a tactic against nuclear weapons during the Cold War. The theory argues that even a state with relatively weaker nuclear power can sufficiently protect itself from an unexpected attack by an enemy with relatively stronger nuclear power. In the world of conventional weapons, war can break out as a result of misjudgment due to uncertainty about the outcome of the war and the perception that, even if a war is lost, the damage will be limited. However, with nuclear weapons, states deter war due to the conviction that, if one were to break out, the damage will be infinite (Waltz, 1981: 6-7). Thus, states will act cautiously because the threat of using nuclear weapons maximizes the risks and costs of choosing a war for both parties, thus deterring the outbreak of a large-scale war (Mearsheimer, 1984/85: 21). Even when a war situation becomes unfavorable after the outbreak of a conventional war and the survival of a state is threatened, the threat of nuclear retaliation from the state gains public confidence and suppresses the escalation of war (Waltz, 1981: 91).

Therefore, the school of neorealism/offensive realism believes that nuclear weapons play a positive role in bringing stability and peace to the international order. From this perspective, Mearsheimer, who represents a theory of offensive realism, criticized the US non-proliferation policy, arguing that it was rather harmful to US interests (Mearsheimer, 1984/85). A year before Ukraine signed the "Budapest Memorandum on Security Assurances" in 1994—to hand over nuclear weapons to Russia in exchange for security guarantees from the United States, Britain, and Russia—Mearsheimer argued that it was an unwise strategy for Ukraine to give up its nuclear weapons on its own. Helater argued that developing nuclear weapons by countries such as Germany, India, Japan, and South Korea could be a means to achieve a regional balance of power and build a safer international order (Mearsheimer, 1990, 1993, 2000).

3. Mearsheimer's Theory of Offensive Realism

Realism can be divided into (1) classical realism represented by Hans J. Morgenthau, (2) neorealism represented by Waltz, and (3) offensive realism represented by Mearsheimer by period. Morgenthau and Waltz agree that the international political actor is the state, which is an integrated rational actor, and that the international system is anarchic. However, while Morgenthau found the essence of international politics in the "will to power" inherent in human nature, Waltz emphasized the anarchic structural character of international relations, not human nature. According to Waltz, the state puts its own survival and interests above all else in the environment of an anarchic international system, acting "defensively" to maintain rather than destroy the balance of power. Mearsheimer's beliefs align with Waltz on the assumption that the state pursues security for its own survival in the anarchic international system, but he has a different view of the "amount of power" the state pursues. Waltz argued that the international system makes the state maintain rather than increase its existing power, whereas Mearsheimer argues that the international system makes the state pursue the maximization of its relative power and that great powers will adopt an offensive attitude by pursuing the maximization of power in order to obtain a hegemonic position (Mearsheimer, 2014: 21, 140-1). The reason why the state acts and thinks offensively toward others is that possessing greater power is the surest way to secure its own survival and safety in the anarchic international system (Mearsheimer, 2014: 21, 140-1). Therefore, the state strives to maximize its power "continuously" rather than being satisfied with the status quo to ensure its survival and, ultimately, aims to become a regional hegemon. As a result, cooperation between states becomes difficult and the possibility of war increases. Mearsheimer's theory of offensive realism, which insists on maximizing power, is clearly different from Waltz's theory of defensive realism.

Mearsheimer's theory of offensive realism is based on five core assumptions: (1) the international system is anarchic (the power to arbitrate disputes does not exist above states), (2) all states have some military capabilities, (3) states can never fully ascertain the intentions of other states, (4) states value survival above all else, and (5) states are rational actors that seek to promote their own interests. Based on these assumptions, Mearsheimer argues that, in the anarchic international system where there is no central authority higher than the states from which they can seek help when they are in danger, states as rational actors must think carefully about the best way to survive, because, in the end, their actions are expressed as strategic actions of maximizing power. In the anarchic international system, not knowing the ultimate intention of other states causes states to seek maximization of power based on military reinforcement. In this process, the behavior of states becomes aggressive because they seek to weaken the power of other states while simultaneously securing the superiority of their relative power. In order to maximize the relative power in the distribution of power, states pursue four important national objectives or prerequisites that can most certainly guarantee their survival in the anarchic international system: (1) regional hegemony, (2) maximum wealth, (3) superiority in army power, and (4) nuclear superiority. The problem is that even when a state builds up its military capabilities entirely "defensively" for its own survival, it appears inherently aggressive to other states, who, because they face serious security instability, reinforce their military power aggressively, ultimately leading to a vicious cycle of an endless arms race, causing a "security dilemma" in which the possibility of serious military clashes increases (Mearsheimer, 2014). Mearsheimer called international politics of great powers "a tragedy" because even peaceful countries ultimately fall into this security dilemma (Mearsheimer, 2014: 32).

Although Mearsheimer's theory of offensive realism was originally created as a paradigm for explaining and predicting the behavior of great powers, there is no reason not to apply it to the case of a middle power such as South Korea. It is a well-known fact that numerous studies have already used the theory of offensive realism to explain foreign strategies of not only China but also Japan and North Korea in the 21st century. This suggests that Mearsheimer's theory can be applied to predicting the future behavior of South Korea as well.

4. North Korea's Nuclear Threat

North Korea has conducted a total of six nuclear tests between October 9, 2006, and September 3, 2017. The 6th and most recent test was conducted with an explosive power of 140-250kt, demonstrating that its nuclear capabilities differed in power from the previous five tests (Yu, 2018: 38). The fifth nuclear test in 2016 was a nuclear warhead test, while the sixth in 2017 was a hydrogen bomb test (Hwang, 2021: 45). The explosive power of North Korea's 6th nuclear test was analyzed to be on the same level as hydrogen bombs deployed in major nuclear-weapon states, including the United States. With this level of power, a single strike could cause at least two million casualties in Seoul and destroy most of the downtown buildings (Yonhap News, 2017). A recent report by the US RAND Corporation predicted that North Korea would be in possession of 67-116 nuclear weapons by 2020 and 151-242 by 2027

(Bennett et al., 2021: 37). In February 2016, North Korea successfully launched and entered “Kwangmyongsong-4” into orbit at the level of an ICBM. On November 29, 2017, it declared “the completion of the national nuclear force” following a successful test-fire of the Hwasong-15, its first ballistic missile capable of reaching all of the US mainland, with a range of 13,000 to 14,000 km (Yonhap News, 2016; Cho, 2020: 10). Currently, North Korea not only has the ability to detonate EMP bombs, but also has realized the miniaturization and weight reduction of nuclear warheads through the hydrogen bomb test. Despite being nuclear-armed, North Korea continues to profess that it will continue to focus on the completion and development of its national nuclear force and accelerate the unification of the Korean Peninsula with a strong national defense force (Kim, 2017: 146; Park, 2020: 58; K. Kim, 2021).

The rise of North Korea as a de facto nuclear-weapon state implies that the balance of power in the Korean Peninsula has been broken. Mearsheimer predicted that North Korea would never give up its nuclear weapons for its own survival (Perper 2018). Now, South Korea is in a dilemma, having to find a new deterrence strategy against North Korea as a de facto nuclear-weapon state. However, since South Korea has been prevented from developing nuclear weapons and has no plans for their future development, it has no choice but to rely on the US commitment to extended deterrence in the Korean Peninsula (Hwang 2021: 29). However, the recent withdrawal of US forces from Afghanistan and its refusal for direct military intervention in the Russian invasion of Ukraine have raised doubts about its willingness to defend its ally South Korea and its commitment to extended deterrence in case of emergency. A number of security experts have frequently expressed doubts about the US security commitment, asking, if an emergency on the Korean Peninsula occurs, will the United States protect Seoul from North Korea at the risk of a nuclear retaliation on its territories, such as Washington, D.C. or Boston? In the current situation where North Korea’s advanced nuclear and missile development has already been completed, the nuclear umbrella provided by the United States is already torn, they argue. In short, the rise of North Korea as a nuclear-weapon state was a major turning point that fundamentally changed the security order in the Korean Peninsula and sharply amplified South Koreans’ security insecurity.

Currently, South Korea has developed a “three-axis” defense system that consists of the Korean Missile Defense System, the Kill Chain pre-emptive strike platform, and the Korean Massive Punishment and Retaliation to counter North Korea’s nuclear and missile threats (Cho, 2020:57). However, security experts contend that, despite South Korea’s current defense system being fully deployed, it is not 100% effective. In January 2022, in relation to then presidential candidate Yoon Seok-yeol’s mention of the Kill Chain, Joshua Pollack (2022), an expert in the field of nuclear proliferation and arms race in Northeast Asia, pointed out that the strategy of preemptively striking nuclear weapons with conventional weapons is not good. In the paper “Conventional Counterforce Dilemmas: South Korea’s Deterrence Strategy and Stability on the Korean Peninsula” published in 2021, Norwegian defense researchers Bowers and Hiim (2021) also expressed doubts about the effectiveness of countermeasures against North Korean nuclear weapons with conventional weapons because it is becoming increasingly difficult to find and destroy all North Korean targets. For example, the “rail-mobile missile system,” which was introduced by North Korea in early 2022 (a system in which a train carrying nuclear ballistic missiles is hidden in a tunnel disguised as a regular passenger car and then suddenly launched), makes detection and destruction by US reconnaissance satellites more difficult (News is 2022). In any case, North Korea’s missile technology will make rapid advancements in the future, and the number of its nuclear warheads and other missiles will continue to increase. As mentioned above, North Korea is expected to acquire around 200 nuclear warheads by 2027. At this scale, South Korea’s conventional countermeasure capabilities will inevitably decrease significantly.

For this reason, there have been growing calls to find a solution to the North Korean nuclear threats through nuclear balance. It is no longer meaningful to discuss the superiority of conventional forces in the face of overwhelming disparity in the asymmetric force.

5. Discourses on South Korea’s Nuclear Armament

Although never successful, South Korea’s attempt to build its own nuclear weapons dates back to the Park Chung-hee era. After the Park administration’s secret attempt to develop nuclear weapons in 1973 was discovered by Donald Gregg, the then head of the Central Intelligence Agency’s Korean branch, it was halted due to the US government’s relentless pressure, and South Korea joined the Nuclear Non-Proliferation Treaty (NPT) in 1975. Since then, the US government has tried to alleviate South Korea’s security concerns by promising to provide extended deterrence, the so-called nuclear umbrella, to expand the scope of US nuclear weapons use and protect the security of the expanded region. The United States first publicly announced the provision of extended deterrence at the 11th

South Korea–US Security Consultative Meeting (SCM) held in July 1978, continually repeating its commitment at the annual SCM (Hwang 2021: 36). Since then, the US government has never supported South Korea's nuclear weapons program. Its official position so far has been that South Korea's nuclear development cannot be supported because it threatens the non-proliferation regime itself. South Korea's possession of nuclear weapons is still considered a very politically dangerous issue. Instead, the US government has promised defense to South Korea indirectly through its commitments to extended deterrence.

However, since the United States withdrew its tactical nuclear weapons¹, the reliability of the US commitment to extended deterrence on South Korea has been questioned, as it now has no choice but to rely entirely on US strategic assets such as ICBMs and bombers (Hwang, 2021: 44). In particular, because North Korea has succeeded in developing an ICBM capable of hitting the US mainland, it was argued that, if North Korea attacks South Korea, the United States may not be able to defend South Korea because of the possibility of a nuclear attack on the US mainland. With rapid advancements to North Korea's nuclear and missile capabilities and the lack of confidence in the US commitment to extended deterrence, NATO-style nuclear sharing, redeploying tactical nukes to South Korea, and South Korea's nuclear armament have been discussed among security experts as ways to substantially strengthen nuclear deterrence.

NATO-style nuclear sharing refers to the US deploying nuclear weapons to its NATO allies and placing them under common control. Currently, five NATO member countries—Germany, Belgium, Italy, the Netherlands, and Turkey—have a nuclear-sharing agreement that allows them to use about 200 US tactical nuclear weapons deployed in their countries in case of emergency. In addition, a total of 100 B61 nuclear bombers have been deployed to these countries (Hwang, 2021: 45). Only the United States has the actual power to press the nuclear button, and the allies have the right to veto by their own pilots when they load and drop the nuclear bombs from their fighter-bombers. The idea is to introduce such a NATO-style nuclear sharing arrangement between South Korea and the United States (Hwang, 2021: 45). In July 2019, the US National Defense University proposed that the United States share nuclear weapons with South Korea and Japan as an option (Kim 2020: 49). However, even if nuclear weapons are shared, the final authority over whether to use them rests with the United States; thus, it is more symbolic than effective to South Koreans (Kim, 2020: 49). Moreover, many opinions contend that nuclear sharing is unrealistic in a situation where the deployment itself has not taken place, as it is a measure that assumes that tactical nuclear weapons have already been deployed in South Korea (Hwang, 2021: 45). Therefore, in South Korea's reality, redeploying US tactical nuclear weapons seems to be an easier option than NATO-style nuclear sharing because it can provide South Korea with a nuclear deterrence that is stronger than the traditional US-extended deterrence. Nuclear weapons deployed on the battlefield not only are the most practical punitive force, but also convey a positive political and psychological message to South Koreans. However, concerning the redeployment of US tactical nuclear weapons into South Korea, various issues have been raised, such as the selection of a location for deployment, the justification of North Korea's possession of nuclear weapons, an increase in South Korea's dependence on nuclear weapons, a shortage of US tactical nuclear weapons to deploy, and the possibility of weakening the South Korea–US alliance (Hwang, 2021: 45).

As a sense of crisis grows among South Koreans with regard to what would happen if North Korea threatens South Korea with nuclear missiles in a military clash, South Korea—regardless of the superiority of its conventional force, may be left in a position where it can do nothing but look to the United States; thus, domestic support for South Korea's nuclear armament is increasing rapidly. Despite the controversy over nuclear armament, the vast majority of South Koreans currently prefer South Korea's own nuclear armament over US extended deterrence. In order for South Korea to pursue its own nuclear armament, it is absolutely essential to, above all else, secure the full support of domestic public opinion, which has been rapidly increasing over the past three to four years. An April 2019 survey conducted by the Korea Institute for National Unification revealed that 60.3% supported and 39.4% opposed South Korea's nuclear armament, while the approval rate rose to 71.3% and the dissent decreased to 28.7% in an October 2021 survey (Choi, 2022). In a 2010 survey by the Asan Institute for Policy Studies, 55.6% of the respon-

¹Since 1958, when the Cold War began in earnest, the US had deployed various "tactical nuclear weapons" to South Korea, such as nuclear bombs dropped from fighters and bombers or fired by artillery and rockets (Hwang 2021: 44). US tactical nuclear weapons, deployed in the Korean Peninsula, were withdrawn after the end of the Cold War following President Roh Tae-woo's "Denuclearization Declaration" in November 1991 and the "Joint Declaration on Denuclearization" between the two Koreas in January of the following year. This was done as an extension of the Strategic Arms Reduction Treaty between the US and the Soviet Union as the Soviet Union collapsed and the structure of the Cold War was torn down.

dents supported South Korea's nuclear armament, while, in a September 2021 survey, 69.3% supported it (Choi, 2022). In a poll conducted by the Chicago Council on Global Affairs commissioned by Korea Research on 1,500 Koreans aged 18 and over from December 1 to 4, 2021, 71% of the respondents supported South Korea's nuclear armament while 56% supported the redeployment of US tactical nuclear weapons in South Korea (Lee, 2022). The fact that domestic support for South Korea's nuclear armament is growing rapidly is reflective of South Koreans' increasing security insecurity. In addition, the likelihood that South Korea will develop its own nuclear weapons in the near future is higher than ever.

At the governmental level, official discussions on South Korea's nuclear armament have been taboo. If South Korea, a member of the NPT, develops nuclear weapons, it is likely to cause diplomatic and economic isolation in the international community, weaken the South Korea–US alliance, provide an excuse to justify North Korea's possession of nuclear weapons, and instigate a nuclear arms race in Northeast Asia. However, as the North Korean nuclear threat has been growing rapidly, the number of cases in which major political figures in South Korea mention the necessity of its nuclear armament, regardless of party affiliation, has been rapidly increasing, which suggests that South Korea's security strategy may change abruptly in the future. For example, in an interview with the Wall Street Journal in May 2014, the then South Korean President Park Geun-hye mentioned the possibility of South Korea pursuing its own nuclear armament in response to North Korea's nuclear test (Baker & Gale, 2014), an opinion echoed in February 2016 by the then ruling party's floor leader Won Yoo-cheol (JoongAng Ilbo, 2016). Former lawmaker Chung Mong-joon wrote on his blog in 2016, "If North Korea acquires nuclear capability enough to strike major cities on the west coast of the United States with ICBMs... We have to think for ourselves whether the United States will give up Los Angeles or San Francisco to save Seoul," further igniting the discussions on South Korea's nuclear armament. In February 2018, a number of lawmakers from the opposition party visited the United States to discuss South Korea's nuclear armament and, in 2020, Kim Jong-in, the then Chairman of the Emergency Response Committee of the opposition party also insisted on the need for South Korea to develop its own nuclear weapons (Dong-A Ilbo, 2020), which was reiterated by Seoul mayor Oh Se-hoon shortly after North Korea bombed the inter-Korean joint liaison office on June 16, 2020 (Yonhap News, 2020a). Hong Joon-pyo, the opposition party candidate for the 2022 presidential election, also insisted on the need to pursue nuclear armament in his presidential campaign.

As mentioned earlier, the official position of the US government so far has been that it cannot support South Korea's nuclear armament, as it threatens the non-proliferation regime itself. However, as China's ambition to dominate the Indo-Pacific region has materialized since 2010, an increasing number of US experts and politicians are highlighting the possibility of accepting or condoning South Korea's nuclear armament. These changes are closely related to the US global strategy to effectively contain the expansion of China's power while reducing the US defense cost burden in East Asia through South Korea's nuclear armament. In an interview in 2013, Mearsheimer said that South Korea had no choice but to rely on the US nuclear umbrella because there was no longer any way to induce or force North Korea to give up its nuclear weapons and that South Korea should maintain its own nuclear armament option in case the reliability of the US nuclear umbrella was not certain (Bae, 2013). In April 2015, Charles D. Ferguson (2015), president of the Federation of American Scientists, a representative nuclear weapons expert, published a report describing South Korea's nuclear armament scenario in relatively detailed technical, political, and diplomatic terms. Presenting objections to factors to deter South Korea's nuclear armament, such as economic sanctions, NPT, and South Korea–US relations, the report predicts that, if South Korea faces serious threats to its national security amid the changing geopolitical situation in Northeast Asia, it is possible that it will eventually pursue nuclear armament and that it will not be possible to prevent it. The report estimates that, given the current technological level, South Korea can build more than 100 nuclear bombs within two years using the plutonium extracted from the Wolsong nuclear power plant (Ferguson, 2015: 14). Although the withdrawal from the NPT may lead to international sanctions, countries like the United States, France and Japan that are collaborating with South Korea in the nuclear industry will likely not impose severe sanctions (Ferguson, 2015: 3-4).

Shortly after North Korea's sixth nuclear test on September 3, 2017, discussions about South Korea's nuclear armament in the United States began in earnest. In October 2017, Henry A. Kissinger mentioned that, since North Korea had nuclear weapons, South Korea could respond by building its own nuclear bombs. Stephen E. Biegun, then the US special representative for North Korea, in a lecture at the University of Michigan on September 6, 2019, quoted Kissinger's point of view, stating that if denuclearization negotiations with North Korea failed, South Korea and Japan could also go nuclear (Hankook Ilbo, 2019). Although these remarks were seemingly intended to put

pressure on North Korea and China, it was unusual for an incumbent high-level US official to publicly make such remarks. In July 2019, the US National Defense University published a report titled “Twenty-First Century Nuclear Deterrence: Operationalizing the 2018 Nuclear Posture Review,” which claims that South Korea’s nuclear armament provides the United States with the advantage of primarily blocking the threats of a nuclear attack by North Korea, China, and Russia on the United States (JoongAng Ilbo, 2019).

A major US politician who talked about the possibility of accepting or condoning South Korea’s nuclear armament was former president Trump. Since the 2016 US presidential campaign, he had frequently made very positive comments about South Korea’s nuclear armament as a means to reduce the US defense cost burden. During the 2020 presidential campaign, he also said that after re-election, South Korea’s nuclear armament would be a major topic of discussion for his next administration (Sevastopulo, 2016; Tanter, 2017). In an interview after visiting South Korea in early 2017, as the North Korean nuclear program was an imminent threat, the then US Secretary of State Rex Tillerson also stated that, depending on the development of the (North Korean nuclear) situation, the United States might have to consider allowing South Korea and Japan to arm themselves with nuclear weapons, strengthening President Trump’s condonation for nuclear armament by South Korea and Japan (Dong-A Ilbo, 2017). Joseph DeTrani, who served as a special envoy for the Six-Party Talks with North Korea in October 2017 and as the US representative of the Korea Peninsula Energy Development Organization, also said that, if North Korea was recognized as a nuclear-weapon state, countries in the region, including South Korea and Japan, could pursue nuclear armament despite the US extended deterrence (Chosun Ilbo, 2021). In 2020, the US Congressional Research Service also predicted that South Korea was likely to build its own nuclear bombs, if confidence in the US nuclear umbrella declined (Yonhap News, 2020b).

On October 7, 2021, Dartmouth College professors Jennifer Lind and Daryl G. Press, in a joint contribution to the Washington Post titled, “Should South Korea Build Its Own Nuclear Bomb?”, claimed that South Korea’s nuclear armament could not only better protect it from the North Korean nuclear threat but also help maintain political independence from Chinese power and influence (Lind & Press, 2021). They supported South Korea’s nuclear armament, arguing that, although it was not what the United States wanted, it could be the best option given the weakened foundation of the South Korea–US alliance at the moment. Many experts have warned that South Korea will be subject to international sanctions like North Korea if it builds its own nuclear bombs, but the two professors argue that it may be “legal” for South Korea to develop its own nuclear weapons after leaving the NPT using Article 10 of the Treaty, which provides that “Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country.” Thus, their argument is that, because the situation in which North Korea threatens South Korea with nuclear weapons is such an “extraordinary event,” South Korea’s withdrawal from the NPT is legal. Indeed, although the North Korean nuclear threat has been the subject of international debate for the past 20 years, no country has been able to solve it, and it has now reached a state of emergency that threatens the US mainland. Therefore, it is absurd to insist that only South Korea cannot withdraw from the NPT in such an emergency situation. They further claims that, if South Korea withdraws from the NPT on the grounds of North Korea’s illegal possession of nuclear weapons and rapid changes in the security environment of East Asia, China and Russia among the five permanent members with the UN Security Council veto power would strongly oppose and try to impose sanctions, while the United States, Britain, and France are likely to stand on the side of South Korea. In an interview with Radio Free Asia, conducted later that year, Professor Press revealed that, after their contribution was published, he received a phone call from many people in US academia and political circles to support him, which indirectly hinted at the high level of support in the United States for South Korea’s nuclear armament (Lee, 2021).

Although the above claims are quite fresh, they are just the opinions of experts, not the official position of the US government. However, the fact that such discourses are frequently raised in the United States shows that public opinion in support of South Korea’s nuclear armament is growing. Meanwhile, Joe Biden said in an interview with PBS Network on June 20, 2016, while serving as US vice president, that Japan could obtain nuclear weapons virtually overnight and China should not forget this (Choi, 2022). This suggests that the current Biden administration or the next US administration is highly likely to approve South Korea’s nuclear armament if it is in line with their strategic interests to contain China in East Asia.

6. Conclusion

According to Mearsheimer’s theory of offensive realism, under the anarchic international system, states struggle to

determine the best way to survive because they are not sure of the ultimate intention of other states. Eventually, their actions are expressed strategically to maximize power. In this process, states become more aggressive as they seek to weaken the power of other states while simultaneously sealing the superiority of their power. In order to maximize their relative power, states pursue national objectives, including achieving nuclear superiority. The reason states think and act aggressively toward their counterparts is because possessing more power than other states is the surest way to secure their own survival and safety in the anarchic international order.

If we are to predict the future behavior of South Korea according to the logic of offensive realism—in the face of the rapidly increasing North Korean nuclear threat—South Korea is highly likely to assume an offensive balancing strategy that maximizes its internal military power and, in this process, build its own nuclear weapons, if necessary. In the environment of an anarchic international system, South Korea, which is not aware of the ultimate intentions of North Korea except that it is armed with nuclear missiles, will eventually internally maximize all the military power it can acquire, including nuclear weapons, as a strategic means to ensure its own survival and security. In conclusion, as the threat from North Korea increases, South Korea will eventually think and act strategically according to a realist logic. In the end, the country will build its own nuclear weapons, if necessary, and achieve nuclear balance in the Korean Peninsula.

Lastly, regardless of how valid a social science theory is, it is extremely difficult to predict the future. Even the author cannot guarantee the relevance of this paper's method using Mearsheimer's theory of offensive realism in predicting South Korea's future actions and behavior. In fact, as a person who desperately longs for peace and stability in the Korean Peninsula as well as around the world, the author ends this study with the hope that the conclusion of this study, which predicts South Korea's nuclear armament that may lead to a serious security dilemma in the Korean Peninsula and Northeast Asia, is wrong.

References

- Bae, Myung-bok. (2013). "U.S. Professor Says, 'If South Korea Doesn't Trust the United States, It Should Develop Its Own Nuclear Weapons'." *The Joong Ang* (Feb. 23).
- Baker, Gerard and Alastair Gale. (2014). "South Korea President Warns on Nuclear Domino Effect: Potential Bomb Test by North Korea Would Have 'Huge Impact' on Regional Security." *Wall Street Journal* (May 29).
- Bennett, Bruce W, et al. (2021). *Countering the Risks of North Korean Nuclear Weapons*. (April). RAND Corporation.
- Bowers, Ian and Henrik StålhaneHiim. (2021). "Conventional Counterforce Dilemmas: South Korea's Deterrence Strategy and Stability on the Korean Peninsula." *International Security* 45(3): 7-39.
- Cho, Seong Ryoul. (2020). "A Study on North Korea Nuclear-Missile Threat and the ROK's Response Strategy." *Military Forum* 100(1): 7-74.
- Choi, Byeongkoo. (2022). "The Time Has Come to Pursue Potential Nuclear Capabilities." *Diplomatic Plaza, Korean Council on Foreign Relations XXII-2* (Feb 11).
- ChosunIlbo. (2021). "Former US Envoy to North Korea, Detrani, Says South Korea and Japan Could Build Nuclear Weapons if North Korea's Nuclear Weapons Are Allowed" (Oct. 18).
- Dong-A Ilbo. (2017). "Tillerson: The United States May Allow South Korea and Japan to Build Nuclear Weapons" (March 20).
- Dong-A Ilbo. (2020). "Kim Jong-in: 'When North Korea Adheres to Nuclear Weapons, We Should Also Consider Nuclear Armament'" (November 25).
- Ferguson, Charles D. (2015). "How South Korea Could Acquire and Deploy Nuclear Weapons." https://npolicy.org/books/East_Asia/Ch4_Ferguson.pdf (accessed on Jan. 3, 2022).
- HankookIlbo. (2019). "Stephen Biegun Put Simultaneous Pressure on North Korea and China by Mentioning 'Korea and Japan's Nuclear Armament' for the First Time" (Sept. 8).
- Hwang, Jihwan. (2021). "U.S. Extended Deterrence to Korea in Decline?: The Evolution of Extended Deterrence and Reassessment of Its Credibility." *National Strategy* 27(3): 27-52.
- JoongAng Ilbo. (2016). "Won Yoo-cheol Says 'We Need Nuclear Armament, Too'" (Feb. 16).
- JoongAng Ilbo. (2019). "U.S. National Defense University: Korea-Japan Tactical Nuclear Sharing Agreement Needed to Counter North Korea's Nuclear Weapons" (July 31).

- Kim, Jungsup. (2015). "The Reconstitution of Extended Deterrence Policy for the Korean Peninsula: Limitations of Nuclear Umbrella and Search for Conventional Deterrence." *National Strategy* 21(2): 5-40.
- Kim, Kyounghee. (2021). "Porcupine Theory and North Korean Leader Kim Jong Un's Strategy for Reunification of the Korean Peninsula." *New Asia* 28(3): 9-41.
- Kim, Sung-han. (2020). "Assessment of U.S. Extended Deterrence on the Korean Peninsula." *Journal of International Politics* 25(2): 33-59.
- Kim, Tae Hyun. (2017). "North Korea's Aggressive Military Strategy: Continuity and Change." *The Quarterly Journal of Defense Policy Studies* 33(1): 131-170.
- Kim, Taewoo. (2021). "Nuclear Non-First Use Promise and the Perforated Nuclear Umbrella." *Pennmike* (Nov. 22).
- Lee, Jin Myoung. (2017). "Is A U.S. Nuclear Umbrella Reliable?: A Quantitative Analysis on Nuclear Extended-General Deterrent of the U.S., 1945-2001." *Korean Journal of International Relations* 57(3): 133-181.
- Lee, Michelle Ye Hee. (2022). "South Koreans Overwhelmingly Want Nuclear Weapons to Confront China and North Korea, Poll Finds." *The Washington Post* (Feb. 21).
- Lee, Sang-min. (2021). "Dartmouth University Professor Says 'a Lot of Support on the Need for South Korea's Nuclear Armament Are in the United States'." *RFA* (Oct. 19).
- Lind, Jennifer and Daryl G. Press. (2021). "Should South Korea Build Its Own Nuclear Bomb?" *Washington Post* (Oct. 7).
- Mearsheimer, John, J. (1984/85). "Nuclear Weapons and Deterrence in Europe." *International Security* 9(3): 19-46.
- Mearsheimer, John, J. (1990). "Back to the Future." *International Security* 15(1): 5-56.
- Mearsheimer, John J. (1993). "The Case for a Ukrainian Nuclear Deterrent." *Foreign Affairs* 72(3): 50-66.
- Mearsheimer, John, J. (2000). "India Needs the Bomb." *New York Times* (March 24).
- Mearsheimer, John, J. (2014). *The Tragedy of Great Power Politics*. New York: W.W. Norton & Company.
- Newsis. (2022). "North Korea Introduces Rail-Mobile Missile Tactics, in an Attempt to Neutralize Pre-emptive Strike" (Jan. 15).
- Park, Hwee Rhak. (2017). "An Examination of the Probability of the U.S. Nuclear Extended Deterrence under the Advanced North Korean Nuclear Threat." *Journal of International Politics* 22(2): 85-114.
- Park, Hwee Rhak. (2020). "An Analysis on the Possibility of Proxy War of the US and China on the Korean Peninsula." *The 21st Century Political Science Association* 30(3): 51-72.
- Perper, Rosie. (2018). "There Is 'No Way' North Korea Could Trust the US and Give Up Its Nuclear Weapons." *Business Insider* (March 22).
- Pollack, Joshua H. (2022). "It's Pretty Remarkable to Hear Talk about Conventional Counterforce - That Is, Attacking Nuclear Weapons with Conventional Weapons." *Twitter*: Joshua H. Pollack@Joshua_Pollack (Jan. 11).
- Sagan, Scott D. and Kenneth N. Waltz. (2013). *The Spread of Nuclear Weapons: An Enduring Debate*. New York: W. W. Norton & Company.
- Sevastopulo, Demetri. (2016). "Donald Trump Open to Japan and South Korea Having Nuclear Weapons." *Financial Times* (March 27).
- SIPRI (Stockholm International Peace Research Institute). (2021). *SIPRI Yearbook 2021: Armaments, Disarmament and International Security* (Oct.).
- Tanter, Richard. (2017). "Donald Trump's Japanese and South Korean Nuclear Threat to China: A Tipping Point in East Asia?" *The Asia-Pacific Journal/Japan Focus* 15(7).
- Waltz, Kenneth N. (1981). "The Spread of Nuclear Weapons: More May Be Better." *The Adelphi Papers* 21(171).
- Waltz, Kenneth N. (1990). "Nuclear Myths and Political Realities." *American Political Science Review* 84(3): 731-745.
- Waltz, Kenneth N. (2012). "Why Iran Should Get the Bomb: Nuclear Balancing Would Mean Stability." *Foreign Affairs* 91(4): 2-5.
- Yonhap News. (2016). "North Korea's 'Successful Launch of Kwangmyongsong Satellite' ...Kim Jong-un's Direct Visit" (Feb. 7).
- Yonhap News. (2017). "[North Korea's 6th Nuclear Test] What If a 50kt Nuclear Bomb Explodes in Seoul?" (Sept. 3).

- Yonhap News. (2020a). “Comprehensive ‘South Korea-U.S. Joint Exercises Need to Be Resumed’ ... Oh Se-hoon Raises Nuclear Armament” (June 19).
- Yonhap News. (2020b). “CRS: South Korea and Japan May Feel the Need to Acquire Nuclear Weapons if They Do Not Trust the United States.” (May 8).
- Yu, Jinseog. (2018). “Kenneth N. Waltz’s Proliferation Optimism and North Korea’s Nuclear Weapons.” *Korea and World Politics* 34(2): 37-65.