

Path to Nuclear Weapons

Balancing Deterrence, Preemption, and Defense for South Korea

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In concept and in practice, alliances combine the capabilities of nation-states not simply for the sake of forming associations but essentially to preserve, magnify, or create positions of strength for diplomacy or war.

—Julian R. Friedman

Abstract

The US–Republic of Korea alliance has been crucial to South Korean security policy calculations, especially the component of extended nuclear deterrence. Recent Special Measures Agreement negotiations on sharing military cost suggests that the price for US extended deterrence is likely to increase in the years to come. In addition to the cost of the US–ROK alliance being put in the spotlight, North Korea’s insatiable appetite for nuclear weapons, including missiles of all ranges, arguments for South Korea’s nuclear weapons development and armament are surfacing in Seoul as they did in 2016 when North Korea conducted nuclear tests. This article examines policy options for South Korea by examining costs and benefits of the extended nuclear deterrence and nuclear weapons armament. Unless there is a crisis situation shocking enough to completely change the game and lead to disruption of the alliance relationship and its structure, or a change in North Korea’s level of violence and animosity, the shared values and goals between South Korea and the United States will make the nuclear path cost-prohibitive for South Korea.

Introduction

Despite the longstanding US–ROK alliance, there have been ongoing rounds of missiles tests of different ranges in addition to past nuclear tests by North Korea. Various policies of the South Korean government like the trust-building measures of previous administrations or the peace process of the current Moon administration have had dubious effects on North Korean policy decisions and are not as effective as the ROK leaders have envisioned.¹ There was an increased debate on developing South Korea’s own nuclear weapons in 2016 due to North Korean provocations: its fourth and fifth nuclear tests. A public poll in September of that year showed that 57.4 percent supported the idea of South Korean nuclear armament.² In addition, then-presidential candidate Donald Trump mentioned to the press the possibility of Asian allies’ nuclear armament, saying America is

spending too much on protecting its allies and raising questions about the future of the alliance.³ The very foundation of the US–ROK alliance, the concept of a security guarantee with a nuclear umbrella, was challenged.

Similarly, recent Special Measures Agreement (SMA) negotiations on sharing military costs have put the cost of the US–ROK alliance in the spotlight. The Trump administration's requested 5 billion USD per year, more than a 500-percent increase in payment, has drastically escalated the financial cost of the alliance and stirred anti-American sentiments in South Korea. This again fuels debates on alliance costs and the effectiveness of current arrangements, which in turn leads to support for independent self-defense and development for South Korea, including the pursuit of nuclear armaments.

As a formal treaty agreement, the US–ROK alliance was established in 1953 to target national security issues⁴ against a threat⁵ and to respond to preexisting and a constantly changing imbalance of threats.⁶ From the beginning, the two parties had a common interest in deterring North Korea and achieving stability on the Korean Peninsula and in the Indo-Pacific theater. Since then, the alliance has developed in such a way that South Korea has successfully established its own identity and interests within the US–ROK alliance, which has evolved toward comprehensive partnership.⁷ South Korean experts have argued the relationship has evolved from a blood alliance forged on the battlefields of the Korean War into a strategic alliance that provides strategic value in the region to the United States.⁸

When looking from the outside, especially from but not limited to the US perspective, these pro-nuclearization views present some significant challenges to the status-quo alliance structure that is a critical component of East Asian security dynamics and to the international nuclear nonproliferation regime. North Korea's rogue nuclear program; a militarily rising China, with its aggressive blue ocean strategy; and a declining but driven Russia pursuing conventional forces modernization do not help ease tensions in the Indo-Pacific theater. The region rife in geographic proximity to potential proliferators, the conflict-proneness of the regional territorial disputes, military arms races, and dramatic domestic politics. As scholars observe, the nuclear war scene is moving toward regional theaters.⁹ With support for nuclear weapons armament resurfacing and gaining support in Seoul, it is likely that the cumulative effect of such debate may potentially lead to the development of small nuclear powers who do not possess second-strike capability in East Asia—a second nuclear age, an Asian nuclear age.¹⁰

Acknowledging the pressing nature of the issue and the severity of the potential outcomes of nuclear weapons proliferation, this article explores the policy options for South Korea and investigates the costs and benefits of the US–ROK alliance and nuclear armament. In efforts to better understand what is at the core

of South Korea's security policy considerations, a simplified matrix is used to examine current security alliance arrangements and its challenges and to find implications for future US–ROK alliance policy and security relations in the region.

Framework: Nuclear Weapons and Deterrence

For South Korea, changing security settings have generated the security policy debate that essentially calls for a practical solution based on balancing deterrence, preemption, and defense. Fundamentally, South Korea has two security policy goals: (1) strengthening military preparedness to deter North Korean threats and to respond to potential attacks, and (2) pursuing peaceful unification with North Korea that has allegedly declared unification of the two Koreas under North Korean communism (적화통일, Jeok-hwa Tong-il) as its *raison d'être*. The very co-existence of these two concepts¹¹—security concepts and unification concepts—continues to complicate South Korean policy making and diplomatic initiatives toward North Korea.

Deterrence is defined as “power to dissuade,”¹² a preventive influence that uses negative incentives or more traditionally “the threat of retaliation to forestall a military attack.”¹³ Through the US–ROK alliance, the United States provides extended deterrence, which is an example of positive security assurances, “promises to respect or ensure the security of others.”¹⁴ There are four variants of assurance: deterrence-related assurance, alliance-related assurance, reassurance directed at potential adversaries, and nuclear proliferation-related assurance.¹⁵ In the case of South Korea, the positive security assurances fall under the category of nonproliferation-related security assurances, as well as alliance-related and deterrence-related assurance. Many argue the US nuclear umbrella is one of the drivers of a state's nuclear path along with the weakened Non-Proliferation Treaty, erosion of regional and global security, domestic politics, and aptitude to acquire technology.¹⁶ The reverse of these factors are what forestalled nuclear weapons proliferation among US allies for the past 75 years.¹⁷

Preemption here refers to countering a perceived imminent threat—to preempt an enemy's ability to attack one¹⁸ based on the belief that the adversary is about to attack and that moving first will be better than responding to an enemy's attack.¹⁹ Carrying out preemptive operations would require military readiness, consistent long-term strategy backed by military hardware, efficient command and control, and decisiveness and confidence in self-defense. For South Korea, which is part of a bilateral alliance structure, any military preemptive actions requires consultation with the United States. Different from deterrence, preemptive measures include actual military operations and require one to make a move before the adversary.

Defense is protecting oneself against attacks. Those in the South Korean domestic political arena have used the phrase *self-reliant national defense*²⁰ since the 1970s and did so more often in the Roh Moo-hyun administration. To achieve independent national defense, acquiring nuclear weapons is often suggested as a road to South Korea's autonomy in defense.²¹ However, for the most effective and affordable defense, South Korea needs to have good relations with the United States for nuclear extended deterrence and to update its overall conventional forces and missile defense systems. Amid the uncertainties posed by North Korea, it is a challenge for South Korea to balance the competing factors of the level of dependence on the United States, the level of self-reliance, deterrence and pre-emption, the domestic call for a nuclear weapons program, remain as a hedging state, and the level of conventional capabilities.

Utilizing the concept of extended deterrence, this article explores the security policy options for South Korea by analyzing the costs and benefits of the US–ROK alliance relationship that provide the nuclear umbrella versus the ROK acquiring independent nuclear weapons armament capabilities. In conventional terms, in order for the current nuclear umbrella strategy that was established in 1978 to stay in place, South Korea must maintain its nuclear-free status, the following conditions need to be met: the cost of nuclear weapons armament (N_c) is high, the benefit of nuclear weapons armament (N_b) is low; whereas, the cost of maintaining the alliance relationship (A_c) is low, the benefit of the relationship (A_b) is high. This leads South Korea to opt for the US nuclear umbrella over developing its own nuclear weapons. From this simple rationale, the hypothesis for this article is set as:

$$A_b > N_c > A_c > N_b$$

The foundation of the US–ROK alliance is the security guarantee including US extended nuclear deterrence; thus, here it is assumed that the current level or current form of alliance relationship does not exist without the nuclear umbrella component. Since possessing nuclear arms may imply South Korea's breaking away from this alliance, the equation above can be established.

Throughout this research, South Korea will be the subject of benefits or costs—when it benefits, the society in general benefits from the security policy decision. For the purpose of analysis, negative impacts of the policy decision are treated as costs, while positive impacts as benefits.²² This article does not rely on costs and benefits analysis; however, it borrows from the methods to conceptualize the security policy decisions in the South Korean case. Looking at each part of the equation above—alliance benefits, nuclear weapons armament benefits, alliance

cost, nuclear cost—this article will examine how the components of preemption, deterrence, and defense are at work.

South Korea's Nuclear Options

While Seoul has remained a strong supporter of the international nonproliferation regime, South Korea is also seen as a nuclear hedging state and one for the most successful latent nuclear powers—along with Japan and Taiwan.²³ The US extended deterrence has been critical in South Korea's security calculations²⁴ and also has been a supportive tool for curbing Seoul's willingness to go down the nuclear path.²⁵ As mentioned earlier, the alliance relationship may not remain the same with nuclear weapons development in South Korea or without extended nuclear deterrence provided by the United States. In this context, below are the possible costs and benefits that South Korea must face from having the US nuclear umbrella through the alliance and from pursuing independent nuclear weapons armament. What do these costs and benefits imply for the South Korean military capacity and security policy?

Alliance Benefits (Ab) and Alliance Costs (Ac)

The key benefit of the US–ROK alliance is the security guarantee through extended nuclear deterrence provided by US Forces Korea (USFK). Currently, South Korea hosts around 30,000 US military personnel. USFK consists of army elements (Eighth US Army), air elements (Seventh Air Force), naval, and marine forces under the United Nations (UN) Combined Forces Command (CFC).²⁶ In addition, under the Flexible Deterrence Option and Time Phased Force Deployment Data, more than 690,000 personnel, 160 battle ships, and 2,000 fighters can be deployed when necessary. At the 43rd Security Consultative Meeting in 2011, the Extended Deterrence Policy Committee was established, and the two parties signed the Tailored Deterrence Strategy in 2013. The presence of US troops and the resultant deterrent effect is the greatest benefit of the alliance and the extended nuclear deterrence.

The alliance has allowed South Korea to position itself at a tactically higher level in terms of modernized assets. In addition, the alliance sends a strong message to North Korea that South Korea has a militarily capable and strong friend having its back. Joint military exercises have been held annually until recently, including the Key Resolve and Foal Eagle in 2016 290,000 Korean military personnel participated in coordination with 15,000 USFK personnel.²⁷ In addition to military personnel participation, core nuclear strategic assets such as F-22 fight-

ers, B-2 stealth bombers, and the USS *John Stennis* nuclear aircraft carrier have been deployed to put pressure on North Korea.

However, to be on the receiving end of the extended deterrence also works against South Korea at times. North Korea belittles South Korea, using phrases in North Korean media referring to South Korean troops as a *puppet force* or to Seoul being under US control.²⁸ As seen in the recent US–North Korea dialogue, Pyongyang attempts to not recognize South Korea as an equal summit party. Earlier this year Chung Eui-yong, National Security Advisor for the Moon administration, passed along President Trump’s birthday message to North Korean leader Kim Jong-un, only to be mocked by North Korean media, which asserted that it has its own channels to communicate with Washington, that South Korea does not know its place, and that Seoul should not meddle in US–North Korean relations.²⁹ This anecdote shows how North Korea values direct interaction with the United States and puts less significance on South Korea’s role as the mediator for the United States and North Korea. It is in North Korea’s best interest to strike a deal with the United States, forgoing any South Korean involvement—another way of diplomatically provoking South Korea. In other words, Seoul’s open dependence on the United States in terms of nuclear tactics can be perceived by its northern foe as South Korea’s inferiority in weapons technology and in independent military forces.

Moreover, recent SMA negotiations signal an increase in alliance costs. The annual 5 billion USD contribution, which has ballooned from the previous 860 million USD South Korea paid in 2018,³⁰ was requested by the United States. President Trump’s cost consideration seems to have been one of the major factors in suspending joint military exercises around the time of the Trump–Kim meeting in 2018.³¹ The new budget negotiation makes the extended deterrence more costly than it has been and draws down the relative cost of acquiring nuclear weapons for South Korea.

Another aspect of the nuclear umbrella and the alliance relationship is that it requires continuous fine tuning of the command chain. This is also related to the issue of wartime operational control (OPCON) of ROK military forces. Since the Status of Forces Agreement signed in the 1960s, the wartime OPCON of military forces is in the hands of the US president. The debate on OPCON transfer has been going on for years without bearing any fruit. Because of this clause, USFK and the South Korean military have to be in sync at all times to avoid any possible organizational errors.

In addition, the cost of alliance includes a growing gap between conservatives and progressives in the domestic political arena of South Korea. This so-called South–South conflict (“남남갈등”) of pro-alliance conservatives and pro-independence

progressives leads to political confrontation between two sides and increasingly triggers social divide and segmentation that hinders long-term strategic policy making that is not swayed by political populism.

Nuclear Weapons Armament Benefits (Nb) and Nuclear Weapons Armament Costs (Nc)

While some argue how the US–ROK alliance is too valuable to risk over the arguments for South Korea’s nuclear weapons development,³² the supporters of South Korean nuclear armament believe that acquiring nuclear weapons will grant the country higher status in international society. This “prestige” factor of nuclear weapons³³ has been argued by rightist politicians like Chung Mong-joon³⁴ and is emotionally appealing to the public when he tries to show how all the strong states have nuclear weapons and, therefore, no one can ignore them. This argument stimulates South Korea’s sentiments toward independence or military self-defense and to some degree anti-American sentiments as well.

On a side note, the South Korean government called upon the United States to lend a helping hand in the early post–World War II era, and as Stephen Walt argued “the provision of economic or military assistance can create effective allies, because it communicates favorable intentions, because it evokes a sense of gratitude, or because the recipient becomes dependent on the donor,³⁵ it remains as a strong ally. However, with the restoration of self-confidence in South Korea through economic development and growing discontent with crimes committed by US troops, the government is now being criticized for being dependent on the United States. Because of this underlying mechanism, anti-American sentiments trigger antigovernment movements in South Korea. In the case of nuclear armament, the arguments for South Korea’s independence from the United States also gains support from those who are not satisfied with the government when conservatives are in power, especially when the government is blamed for the current situation in South Korea.

Putting these elements aside, from a tactical viewpoint, what does South Korea gain from possessing nuclear weapons? Pyongyang continues to provoke South Korea and threaten the world, showing that North Korea is far from giving up its nuclear bombs. Kim Sung-han argues that South Korea needs to develop a better tool for proactive deterrence to be prepared for additional North Korean threats in the future.³⁶ USFK has provided extended deterrence over the years; however, it may lack in securing preemption and the independent self-defense aspect of South Korea’s security policy. In this sense, nuclear options may seem attractive.

On the other hand, the same prestige factor can be counted toward the cost of nuclear armament in the international relations aspect. Despite some discrepancies in the 1970s, South Korea has been an active supporter of the global nonproliferation regime. With a policy and capability change embracing acquiring nuclear weapons, South Korea will face consequences—its diplomatic power will be damaged, and its status as an active supporter of global norms in the international political arena will be weakened. On a more practical level, with this move against the nuclear nonproliferation regime, South Korea may also face possible sanctions as has been the case with Iran and North Korea. It is ironic that the prestige factor can be both an encouragement and discouragement for nuclear armament.

Moreover, a nation needs second-strike capability to ensure the opponent perceives that any nuclear attack will lead to assured damage on its part, meaning stronger combat power is a prerequisite for nuclear deterrence to work. In addition to second-strike capability, a missile defense system and some type of a delivery system that can employ a nuclear warhead is also necessary. In this context, updating conventional weapons that can be actually used and strategic force structure is much more effective than nuclear armament. In other words, nuclear weapons alone do not effectively guarantee stronger military power, nor can one use nuclear weapons freely. This is a loophole in the argument for South Korea's nuclear weapons development.

Are the costs of a nuclear weapons program higher than the costs of having the nuclear umbrella provided by the alliance? ($N_c > A_c$)

As mentioned in the previous section, nuclear weapons require an advanced missile delivery system as well as investment in weapons research and development (R&D) that can support the execution of nuclear missions. This suggests that when calculating the costs of nuclear weapons armament, it is important to consider the costs of developing nuclear warheads as well as the costs of developing the support system for them. In essence, it is the comparison of the costs of developing a new system versus the costs of maintaining the current system. Without a doubt, South Korea will need to expand its defense budget and invest in R&D projects over a long period to form a complete system, and this is much more expensive than maintaining the current system.

Moreover, in addition to the technical aspect of developing nuclear weapons and the support systems, establishing a command chain and carrying out test runs are necessities. Since nuclear weapons would be a new type of strategic asset to South Korea, Seoul will need to figure out how it will proceed when nuclear weapons are required to be employed. Under current USFK and UN CFC in

Seoul, it is likely that even if South Korea manages to develop its own nuclear weapons, the final decision for their use would have to go through not only South Korean military but eventually through the US president due to the security treaty. This would be the same command chain used to carry out existing US nuclear extended deterrence measures, which lessens the appeal for an independent South Korean nuclear capability.

Unless there is a significant event that completely changes the current alliance structure and its calculations, South Korea's decision to develop nuclear weapons is unrealistic. It is, however, safe to assume that the cost of alliance for South Korea is likely to increase in the coming years, based on recent SMA negotiations on the defense cost sharing deal. If this trend continues, it is only a matter of time before South Korea's nuclear armament issue starts resurfacing again, as it did in 2016.

Other determining factors that could potentially bring about these changes are North Korea's unprecedented level of provocation or exhibition of the intentions for such, disruption of current command chain, unavailability of the current level of support from USFK, and failure of completing Kill Chain—South Korea's detection and preemptive strike doctrine—by 2023 as planned. South Korea and the United States share the common goals of keeping China engaged in solving the North Korean problem, changing current North Korean behavior, and eventually securing stability in the region. As long as these are firmly understood between the two allies, it will not be easy for South Korea to tip over to the nuclear armament side. It is also important at the same time that Washington understands and respects the South Korean urge to explore various policy tools—not just nuclear weapons but also its own missile defense system, precision-guided munitions, intelligence capacity, and so forth.

Relational issues should also be factored into setting the costs for South Korea's nuclear armament. How would US–China relations, Sino–North Korean relations, US–North Korean relations, and inter-Korean relations affect a South Korean nuclear armament scenario? If US–Chinese strategic competition intensifies to the level that requires escalation dominance or generates military confrontation, Sino–North Korea relations worsen to the extent where the Kim regime has nothing to lose, or US–DPRK relations hit the bottom and sour significantly, it could be in the interest of the US–ROK alliance to consider the NATO-style nuclear sharing option. When it comes to inter-Korean relations, more tension will naturally push for South Korea's nuclear option, whereas more peace talks will lead to diminished need for it. Yet, there is one condition where South Korean nuclear armament may be welcomed by the North under flourishing inter-Korean relations: withdrawal of US troops, the end of security alliance, and a step closer to North Korean-led reunification.

Conclusion

North Korea's insatiable appetite for nuclear weapons and missiles of all ranges makes achieving the dual goals of strengthened military preparedness for deterring North Korean threats and of pursuing peaceful unification with hostile North Korea more challenging for South Korea. While some of the factors may lead up to more intense nuclear confrontation on the Korean Peninsula or contribute to maintaining the status quo, the assumption throughout this article has been that North Korea will remain a hostile state with a strong drive to further develop nuclear capabilities.

Under such circumstances, it is natural for South Korea to consider all its security policy options and tools to balance deterrence, preemption, and defense to better respond to additional North Korean provocations. In this context, this article has examined costs and benefits of the extended nuclear deterrence provided through the US–ROK alliance and nuclear weapons armament. Arguments for South Korea's nuclear weapons armament may help South Korea to further advance its military tactics, but not under current settings. Nuclear weapons alone do not automatically promise stronger military power; there has to be a missile delivery system, various measures to carry the nuclear warheads, second-strike capability to support the nuclear assets, and a new command chain. Overall, expanding the military budget to fund R&D projects, restructuring the command chain, and so forth will be an expensive long-term option. This suggests that under the current system it will be much more costly for South Korea to develop its own nuclear weapons than to maintain the extended nuclear deterrence under the US–ROK alliance.

The US–ROK alliance has been crucial to South Korean security policy calculations, especially the component of extended nuclear deterrence. Unless there is a crisis situation shocking enough to completely change the game and lead to disruption of the alliance relationship and its structure, or a change in North Korea's level of violence and animosity, the shared values and goals between South Korea and the United States will make the nuclear path cost-prohibitive for South Korea. ❀

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Notes

1. Mentioned in the Dresden Declaration. Park Geun-hye administration's Trust Politik is built on three pillars of humanitarianism, co-prosperity through the building of infrastructure that supports the livelihood of people, and integration between the people of the two Koreas. The Korea Peace Process of Moon administration was initiated with declaring the end of war on 27 April 2018; it has three pillars of peace—first, no nuclear, and no regime change.

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