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Assessing the Impact of the Ukraine War on South Korea's Hedging Strategy

Morgane S. Hamza

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Faculty Advisor: Professor Paul Staniland
Preceptor: Professor Linnea Turco

Abstract

The practice of international relations extends beyond bandwagoning and balancing. In between these approaches lies hedging, often characterized as a behavior exhibited by small states during periods of relative peace. This paper argues that hedging can also be adopted by middle powers when they find themselves surrounded by threats and competition, as evidenced by the case of South Korea and its current hedging strategy. The aim is to explore South Korea's transition from a strategy of soft hedging to one of hard hedging vis-à-vis the United States. The argument is as follows: In addition to the growing aggressiveness from North Korea, the Ukraine War has acted as an exogenous shock, prompting South Korea to recognize its vulnerabilities. This shock has influenced three key mechanisms: 1) The perception and need of the United States. 2) The national discourse. 3) Public opinion on nuclearization and the ROK-US alliance. These mechanisms, in turn, are expected to create variations within South Korea's national defense program, revealing a hedging behavior that aligns with what Scott A. Snyder might define as "internationalization plus autonomy".

Keywords

Hedging Strategy . Middle Powers . South Korea . ROK-US Alliance . Exogenous Shock . Ukraine War . North Korea . Nuclearization . National Discourse . Public Opinion

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I. Introduction

The common knowledge of hedging holds that it is mainly practiced by small states when facing the absence of threats from rising powers, significant ideological polarization, and intense competition within a region. This paper argues that middle powers can also hedge and do not require a peaceful environment to do so. It also adds the element of “exogenous shocks” such as COVID-19 or the Ukraine War, which can modify the hedging strategy used by middle powers. This research will explore the case of South Korea, which is an instance of a middle power using hedging despite being surrounded by threats. The question therefore concerns the impact of the Ukraine War on South Korea’s hedging behavior vis-à-vis its traditional ally, the United States.

Exploring such a topic will help to better understand how South Korea, a key player not only within the East Asian security landscape but also within the global economy as one of the top world exporters (Statista, 2022), practices international politics. The literature on hedging from middle powers has yet to be explored and theorized as studies focus on small states and do not acknowledge that hedging can be practiced even when a state is surrounded by threats. Thus, this article contributes to theory building within the literature on hedging as it aims to show that middle powers also hedge, specifically by studying the case of South Korea more in depth.

I chose South Korea because the current literature on hedging cannot fully explain its behavior. Indeed, despite the reinforcement of the US-ROK security alliance since President Yoon came to power in 2022, South Korea is still attracted to the rationale of autonomy which is translated in military self-help. The difference with previous efforts by South Korea to hedge against the United States is that now, South Korea is economically stable and continues to grow its strategic importance in the region and worldwide. Therefore, it is important to follow the variations in South Korea’s foreign policies and this article aims at examining how it adapted its

hedging strategy from former president Moon Jae-In to current leader Yoon Suk-Yeol. Doing so will not only provide knowledge on how a middle power like South Korea hedges while being threatened by external powers and the US-China competition, but also how exogenous shocks such as COVID-19 and the Ukraine War modified its behavior.

I argue that changes in the security landscape within a region (direct threats) as well as global security dynamics (indirect threats) push for a variation in middle powers' defense strategy and as a result, in the way they practice hedging. Direct threats to the homeland include close neighbors with which tensions can easily arise and diplomatic efforts are often needed to avoid escalation towards armed conflicts. However, indirect threats, events which are located far away but still have an impact, also matter. By exploring how both kind of threats influenced South Korea, I aim to build a theory on hedging and to argue against the following: first, the idea that hedging is limited to small powers; second, two of the three conditions given by scholar Lee Ji-yun about when middle powers use hedging. I will further expand on them in the literature review section.

When it comes to South Korea, neighbors such as China, Japan, and nowadays Russia, can be considered threats especially on economic and trade matters, but the main military threat to the homeland remains North Korea. I find that while the DPRK's behavior directly shapes the South Korean strategic response, the Ukraine war acted as a temporary force which pushed the ROK to further implement a new defense agenda. Consequently, the Ukraine War can be interpreted as a wakeup call, an intermediary signal that reminded the South Korean government to invest more in defense capabilities primarily to protect itself against the growing North Korean threat. I call that an exogenous shock. Thus, the Ukraine War can be seen as an accelerating factor pushing bureaucrats to focus on self-reliance to counter North Korea, despite

the emphasis of President Yoon on strengthening the ROK-US alliance. The Ukraine War acted the same way COVID-19 did under Moon's presidency, pushing South Korea to redistribute its government and defense budget accordingly.

To get a more precise perspective on South Korea's changing behavior, I analyze several mechanisms that I consider as impactful on its defense strategy and which I expect the Ukraine War to have changed. First, there is the ROK's need and perception of the United States' role in its protection. South Korea's decisions on intensifying hedging can reveal the nature of its current views on its main ally. Second, its national discourse changes with the transition in political leadership. It reveals what the new leader's threat perceptions are and thus, whether practicing stronger hedging becomes necessary. Finally, public opinion is important as it can put pressure on the government to design its foreign policies in a certain way. This article therefore explores how these mechanisms have changed since the outbreak of the Ukraine War, to what extent they have modified South Korea's defense strategy and thus, how South Korea has transitioned from soft hedging to hard hedging despite the rising threats surrounding it.

In sum, there are three assumptions: 1) The main factor which contributed to the modification of the ROK defense strategy is the growing aggressive behavior of North Korea; 2) The Ukraine War acted as an exogenous shock impacting the three mechanisms mentioned above despite occurring miles away from the East Asian region; 3) The three mechanisms have pushed South Korea to hedge more intensively to maximize its survival. The findings disclosed a paradox within its behavior. At first glance, the ROK is adopting a pro-American behavior by working on closer security ties with its ally. At the same time, however, it is also intensifying its own defense capabilities, which signals a will to develop a self-help strategy.

Indeed, the findings reveal that South Korea is currently involved in a more active and offensive behavior translated into a will to further develop better autonomous retaliatory capabilities and surveillance systems. By observing the Ukraine War, South Korea is learning and redefining its defense priorities with a focus on North Korea. For instance, it decided to invest in specific types of military and surveillance assets that are currently used in the conflict involving Russia and Ukraine. Among them, these involve high precision air capabilities, drones, satellites, and AI. (Jeong & Seo & Heo, 2023) Furthermore, because the Ukraine War revived the idea that conventional interstate war can still happen and changed the behavior of other states such as France and Germany which are suddenly increasing their defense budget and investing in modernizing their military capabilities (Mackenzie, 2022), it added another reason for South Korea to switch to a hard hedging strategy to focus on its survival. Following this trend, the Yoon administration announced that it will revitalize its own version of a military triad system called “Three-Axis” (Jung, 2023), and which will be discussed in a subsequent part of this paper. To do so, resources are being poured into the development of Korean-made technology, in science, space, and AI. (Shin, 2022)

This behavior also reveals that the confidence in the United States’ ability to protect it in case of an armed conflict with North Korea may have been a little shaken. (Snyder Scott, 2022) It is mostly noticeable when examining the national discourse, which first focused on the importance of building autonomous retaliatory means in the event of a North Korean attack. As soon as President Yoon came to power, he mentioned the possibility of a future nuclearization, which is highly supported by the public opinion. (Lee; Kim, 2023) However, the discourse changed after the Washington Declaration in which the United States emphasized on the nuclear umbrella it offers to South Korea. (Smith, 2023) The findings portray the United States

reassuring South Korea of its protection commitment by reinforcing previous agreements and drafting new ones. Therefore, it can be assumed that the United States is trying to contain South Korea from hedging against it. When it comes to public opinion on nuclearization and the ROK-US alliance, South Korea has its own trend which did not change significantly after the Ukraine War started, unlike the national discourse. (Lee S.S., 2023) Public opinion is therefore the least impacted mechanism from the exogenous shock.

The following section is the literature review, in which I will discuss the main assumptions of the hedging literature against which I argue in this article. I will also discuss the literature on alliance as it helps to understand why the ROK-US alliance matters. Finally, I will introduce the concept of internationalization plus autonomy to describe South Korea's recent behavior, which is drawn from scholar Scott Snyder's framework. Subsequently, to effectively address the research objectives, this paper will be organized into two distinct results sections and a discussion section.

The first results section explores the first mechanism. It examines whether the South Korean perception and need for protection from the United States has been intensified following the Ukraine War. By capturing to what extent South Korea modified its hedging strategy vis-à-vis the United States, this section evaluates whether the current Yoon administration is more inclined towards self-reliance compared to its predecessor. This analysis involves empirical data such as the defense budget allocation and redistribution, arms sales, as well as South Korea's defense agenda from 2020 to 2022.

The second part of this article delves into the two other mechanisms, namely the national discourse constructed by President Yoon and public opinion on nuclearization and the ROK-US alliance. Exploring these mechanisms provides insights into how South Korea practices hedging

in the aftermath of a change of leadership and a significant exogenous shock, distinct from the challenges posed by the COVID-19 pandemic due to its nature as a traditional security threat. The final section is a discussion section in which I will give my interpretation of the results, followed by the limitations I encountered while working on this paper, a conclusion, and ideas on future research topics.

II. Literature Review

There are two main state behavioral strategies recognized in the studies of international relations which are bandwagoning and balancing. Bandwagoning refers to a strategy where weaker states align themselves with a stronger and dominant state. Weaker states may bandwagon with a stronger power to gain protection, security, or benefits. On the other hand, balancing refers to a strategy where states seek to counterbalance or contain a stronger power by forming alliances with other states. Balancing can take two forms, which are internal balancing and external balancing. Internal balancing involves a state strengthening its own military capabilities and resources to deter potential threats. External balancing, on the other hand, entails forming alliances with other states to collectively counter the power of the opposite side. (Waltz, 1979, p. 67)

However, there is an emerging concept standing in between bandwagoning and balancing called hedging. Hedging, which refers to a behavior that mixes both cooperation and competition between states, has gained significant attention from scholars in recent years due to shifts in global power dynamics and increased uncertainty in the international system. (Kuik, 2021; Goh, 2007; Yuzhu, 2022; Wu, 2019; Lee, 2017; Haacke, 2019; Stiles 2018; Kim 2021).

1. The gaps in the literature on hedging

There are several gaps within the literature on hedging. First, scholars tend to blur the line between balancing and hedging. Second, hedging must be further explored and theorized. There is still some debate on some key aspects of its applicability when attempting to analyze real-life examples. Examining more case studies can help to understand how hedging is done in a practical theater and to contribute to theory building. For instance, the literature on middle powers' practice of hedging needs to be discussed. Therefore, I chose South Korea as a case study to build my counterargument against scholars Kuik's and Lee Ji-yun's assumptions.

Kuik argues that hedging is a strategy employed by small states. He defines hedging as a collection of strategies, considering it as a practical approach when the hedging state still possesses room for flexibility. However, once the threat becomes imminent, hedging gives way to balancing. He also suggests that hedging behavior can only occur under specific circumstances: the absence of an immediate threat, the absence of ideological divisions, and the absence of intense competition among major powers (Kuik, 2008, p. 165). Lee's framework is aligned with Kuik's argument, but Lee applies it to middle powers. In this article, I therefore argue against Kuik by following Lee's idea that middle powers can also practice hedging. However, I argue against Lee on the conditions needed for a middle power to use hedging.

According to Lee, middle powers hedge successfully when certain conditions are met. First, they should not face an immediate and impending threat from rising superpowers in their region. If such a threat exists, they must instead choose between either balancing against or aligning with the dominant power to ensure their survival. Second, the regional security environment should not be driven solely by ideological divisions or governed by inflexible blocs or alliances. Finally, for middle powers to adopt a hedging strategy, the regional security

environment must allow for some degree of flexibility. If there is intense competition between two or more major powers, middle powers would be compelled to take a side rather than pursuing a hedging approach. (Lee, 2017, p. 26)

In addition, Lee mentions several types of hedging strategies, which include direct balancing, dominance denial, limited bandwagoning, soft hedging, hard hedging, and double hedging. In this article, I argue against Lee by exploring how South Korea transitioned from soft hedging to hard hedging starting in 2022 with the change of government. Soft hedging involves middle powers which aim to enhance their influence over great powers and promote regional stability by leveraging the involvement of other major powers. In contrast, hard hedging places greater emphasis on indirect and direct balancing compared to soft hedging. It involves pursuing a hedging strategy that considers the traditional balance of power, preparing for the possibility of an adverse scenario. (Lee, 2017, p. 30)

As my findings will demonstrate when exploring South Korea's recent behavior, two of Lee's three conditions about middle powers hedging will not be satisfied. Specifically, I will show that middle powers do not necessarily need to choose balancing or bandwagoning with the dominant power instead of hedging when they are facing external threats from rising regional superpowers. I will also refute the argument that for middle powers to adopt a hedging strategy, there must be no intense competition between two or more major powers as they would be compelled to take sides. Such conditions do not apply to South Korea, at least from 2017 under Moon Jae-In to today with President Yoon. Indeed, South Korea is not only a direct neighbor of China, a rising superpower with whom disputes have already emerged, but it also practiced hedging vis-à-vis the United States and China while the US-China trade war was ongoing during the Trump administration. It did it sufficiently to pursue its own interests, without fully balancing

or bandwagoning with one or the other. Nowadays, its hedging strategy rather focuses on building up its autonomy while siding with the West.

2. The gaps in the literature on alliance

Although this paper focuses on further theorizing the concept of hedging, the literature on alliance provides a significant foundation for understanding why the ROK-US alliance influences South Korea's hedging strategy. However, it also contains several gaps. First, there is insufficient attention given to how domestic factors influence alliance formation and maintenance. Factors such as domestic politics, public opinion, bureaucratic dynamics, and leadership characteristics play significant roles in shaping a state's alliance decisions. However, the focus is often put on state-level analysis and a comprehensive understanding of alliance formation requires recognizing the interaction between domestic and international factors. Second, there is a lack of research on alliance dissolution. While considerable focus is placed on alliance formation and maintenance, the literature tends to overlook the processes and outcomes of alliance termination. This is particularly because there is an assumption that once a strong alliance is formed, it is highly unlikely to dissolve itself. However, the possibility needs to be kept in mind to better anticipate future state behaviors. Two fathers of the literature on alliances, Stephen Walt and Glenn Snyder, both highly contributed to the general knowledge and this article therefore aims to expand their work by exploring how South Korea navigates between its traditional ally the United States and its own interests.

In short, Stephen Walt offers a compelling set of factors that could explain the reasons behind states forging alliances. His central argument is that balancing, rather than bandwagoning, is more prevalent in the world of international relations. (Walt, 1987, p. 5) His comment about the United States is noteworthy as he says that, "Among other things, the predominance of

balancing behavior means that intervention in peripheral areas for the sake of credibility can be greatly reduced. Indeed, efforts to demonstrate US credibility through the frequent use of force are more likely to cause others to fear US ambitions or to question U.S. judgment." (p. 283)

However, in contrast to traditional realist notions of the balance of power, he proposes a balance-of-threat theory. This theory posits that alliances are established to counteract threats, not merely power. Factors such as geography, offensive capabilities, and perceived intentions contribute to the level of threat. (pp. vi - vii) Other mechanisms that trigger alliance formation are ideological rivalries, shifts in relative power, and the involvement of superpowers. (p. 14) Nevertheless, Walt argues that ideology does not exert as significant an influence as balancing. In fact, certain ideologies can divide rather than bring countries together. He also discusses the role of foreign aid which, on its own, is not a significant catalyst for alignment. (p. 5)

Glenn Snyder provides a comprehensive list of potential benefits and costs associated with alliances, which can explain why South Korea hedges in the first place. The advantages of alliances include, for instance, reinforced deterrence against attacks, increased defense capabilities, and non-security-related benefits and side payments. On the other hand, the costs of alliances comprise the surrender of autonomy and the potential for entanglement in conflicts that may not directly align with the state's interests. (Snyder, 2007, pp. 43-44) The surrender of autonomy, and I would add with it, the fear of abandonment by the United States can both explain why South Korea practices hedging despite being a middle power surrounded by threats and competition. Finally, in line with Walt, Snyder also emphasizes the significance of reputation in alliance maintenance. He suggests that, "If a state acquires a reputation for disloyalty, its ally does not react by leaving the alliance. It may, however, punish the disloyal state by refusing support the next time the latter needs it" (p. 314).

In sum, both reputation of allies and balance of threats have their importance in this article as they fit within the three mechanisms. Although these factors are not believed to be able to completely disintegrate an alliance, they can explain why South Korea is adopting a hedging approach towards the United States and why the United States must make efforts to reassure South Korea. Examining South Korea more in depth can also help to expand the literature on alliance by demonstrating the importance of domestic factors for alliance maintenance. Although this article will not fully examine all of the South Korean domestic factors mentioned by Snyder or the process of alliance termination, the fragility of South Korea's traditional alliance will still be demonstrated when examining national discourse and public opinion. As the next section will demonstrate, despite being a traditional ally, there was always discordance between the two.

III. Theory

This article will contribute to the literature through theory building, not only by arguing against Lee's conditions on when middle powers use hedging as well as Kuik's idea that it is limited to small states, but also by introducing a new element that can explain sudden changes in a state's hedging strategy: exogenous shocks. Before examining the impact of the Ukraine War on South Korea, it is important to understand that South Korea is not new to the concept of hedging. Scott A. Snyder (2018) gives an in-depth analysis on the history of South Korea's leaders and the explanations behind the variations of foreign policies that they chose to follow. His book demonstrates how South Korea employed hedging from the post-Korean war period, more or less intensively, depending on the three mechanisms I mentioned above, which are the need and perception of the ROK-US alliance, the national discourse, and public opinion. The rest of this section therefore focuses on South Korea's past hedging strategies and draws upon

Snyder's work. I use his concept of internationalization plus autonomy to apply my theory to the case of South Korea, which I will explain in a subsequent section.

South Korea has been practicing hedging since its first president Rhee Syung-Man who came into power in 1948, but the notion of self-reliance truly emerged under Park Chung-Hee. (Lee Junghoon, 2023, p. 1) At that time, South Korea appealed for additional military equipment from the United States to strengthen its armed forces, as well as for aid to build rifles and ammunition factories. (p. 6) It also asked for help to strengthen its air force to defend against North Korea. (p. 8) However, President Park also sought autonomy, but knew he had to first seek the United States' help. He therefore volunteered the ROK army to Vietnam (p.2), but the potential end of the war raised concerns as it would remove the main justification for the US to remain on the peninsula. As a result, self-reliance became a stronger focus and Park acknowledged the need for a long-term plan to strengthen the South Korean military in preparation for a potential withdrawal of US forces. (p.11)

This part of South Korean history demonstrates the importance of the two first mechanisms that shape South Korea's defense policies: the perception and need of the United States' protection and the national discourse. While Park had the will to develop a defense autonomy, he did not have the means. He therefore still aligned with the United States, but his perceptions changed. As the Nixon administration discussed a potential withdrawal of its army, South Korea revealed its fear of abandonment by its ally, which translated into an emphasis on self-reliance by Park Chung-Hee. In fact, the government intensified the design and development of the concept of autonomous defense by establishing a special government sector and an institute for firearms research and production. It founded the Agency for Defense Development (ADD) (Snyder, 2018, p.44) and Daewoo Precision Industries, who manufactured the Korean

arsenal. In fact, they are part of the legacies of Park Chung-Hee's efforts towards self-reliance which pushed Korea to design and produce its own rifles after the Vietnam War amid the threat of a US withdrawal, namely, the Daewoo K1 and K2 rifles. (SADJ, 2017) The latter, defined by Koreans as a mix between an AK47 and an M16 is still seen as a reliable rifle that South Korea continues to produce and use for its army. (Hogg, 2020)

The third mechanism, however, which is public opinion, had a lower influence on the government before South Korea's democratization in 1988. (Snyder, 2018, p. 51) It was after the government became democratic in nature that public preference became an important consideration for the leader when making decisions on foreign policies. Officially, Roh Tae-woo is considered the first democratically elected president and he chose to reinforce South Korea's hedging strategy vis-à-vis the US in line with public approval. (p. 54; p. 56) He is known for his Nordpolitik policy, which became the foundation of the Sunshine Policy promoted by his successor, Kim Dae-Jung.

Nordpolitik involved reaching out to North Korea's traditional allies, China and the Soviet Union, to normalize relations. (p.54) Roh Tae-woo took advantage of a relaxed international environment and South Korea's growing economic strength to expand diplomacy and improve relations with the Soviet Union, China, and by extension, North Korea. (p. 57) Kim Dae-Jung continued his efforts to normalize relations by promoting the Sunshine Policy, which aimed to encourage North Korea to end isolation and confrontation through engagement rather than coercion. To do so and in contrast with Nordpolitik, economic cooperation was separated from political matters. (pp. 87-89) International support from the United States, China, Russia, and Japan was crucial for the success of the Sunshine Policy. (pp. 102-106) However, the Sunshine Policy ultimately failed and ended up creating tensions with the United States as it

disagreed with South Korea's approach toward North Korea, which was seen as too gentle and risky by the George W. Bush administration. (pp. 96-100)

Under the next president's leadership, Roh Moo-Hyun, other complexities arose within the ROK-US alliance, moving it further away from the traditional bandwagoning alignment. In fact, domestic debates concerning the United States allowed President Roh to seek a "balanced and pragmatic diplomacy", pushing South Korea to intensify its hedging behavior. Public concern focused on whether the United States treated Korea with respect, considering its progress, democratization, and rising power. There was also a debate among politicians about South Korea's autonomy and the role of the US-ROK alliance in relation to South Korean aspirations for greater independence. As a result, Korean society was divided between viewing the alliance as a deterrent against North Korea or as an obstacle to inter-Korean reconciliation. (pp. 144-119)

However, the following leader, Lee Myung-bak, worked to revitalize the ROK-US security alliance as part of his "global Korea policy", by leading it towards a mutual benefits relationship based on trust, security, and peace. Close relations with the United States allowed South Korea to raise its international profile and contribute to global public goods. (p. 147-148) His successor, President Park Geun-Hye continued to prioritize close ties with the United States (p. 170-171), while the next president, Moon Jae-In, displayed a soft hedging tendency as he tried to navigate between the US and China to accommodate North Korea. The main aim of the Moon administration was to achieve peace with North Korea, at the risk of destabilizing relations with the US while moving closer to China. (Choe, 2017; Park Chan-kyong, 2021)

Examining South Korea's past political leaderships therefore confirms the relevance of the three mechanisms shaping its defense agenda policies. To argue against Lee's conditions and

to introduce the element of exogenous shocks, I analyze these mechanisms during the transition from the Moon to the Yoon administration drawing on Snyder's concept of internationalization plus autonomy, which describes a behavior based on the conviction to become more self-reliant but also practice a relevant amount of multilateralism. (Snyder, 2018, p. 9) I argue that this is what best describes the Yoon administration's behavior as it switched from soft hedging to hard hedging, while aiming at strengthening the ROK-US alliance. South Korea practicing internationalization plus autonomy reveals that Lee's framework cannot explain South Korea's behavior. Indeed, it is practicing hedging despite being surrounded by threats and by a rising power, China, which is still in intense competition with the US.

IV. Methodology

To analyze the variation in the defense strategy of South Korea from 2020 to 2022, I employ a mixed-methods approach combining qualitative and comparative research methods. First, I examine the defense expenditures from the 2022 defense strategy whitepaper which allows me to capture trends and patterns, and thus to identify the key areas of focus and the priorities of both administrations. Then, I examine the allocation of the defense budget by looking at data on arms exports and imports from the Stockholm International Peace Research Institute (SIPRI), and newspapers outlets. Understanding whether South Korea put more resources into exports or imports draws a picture of whether it is trying to get more self-reliant by promoting its locally made weaponry or if it continues to be heavily dependent on external powers when it comes to military arsenals. To complement the findings, I also analyze the arsenal of each branch of the South Korean military through the Military Factory website, which serves as an archive of the arms held by countries and their origin. Understanding the origin of weapons and machines South Korea has and is planning to produce gives an idea of whether it

shifted its focus to internal balancing and thus, whether it transitioned from soft to hard hedging. Moreover, understanding what types of weapons and other assets the government invests in can reveal whether the Ukraine War has had an impact on the decision-making process. Finally, I compare the 2020 and 2022 defense whitepapers published by the Korean Ministry of Defense and outline what were the differences between the Moon and the Yoon administration. To verify the accuracy of my findings, I cross-reference them with articles from news media of record such as the Korea Times, the Washington Post, and the New York Times. To explore further, I also examine the national discourse and public opinion by retrieving information from the leader's public speeches before and after the Washington Declaration, and from public opinion surveys such as the Unification Survey 2023 from the Korea Institute of National Unification (KINU) and the January 2023 survey from Hankook Ilbo.

Concerning the assessment of the empirical results, if South Korea focuses on military capabilities such as improving its intelligence and surveillance capabilities through drones and satellites and its air force capabilities, it can be assumed that it has learned from the Ukraine War and is building its defense capabilities to be able to fight better in case of any interstate wars in which it could be involved. In addition, if it focuses on producing more Korean-made arsenal while wanting to export more and continuing to interact with other states in addition to the United States, it can be expected that it is practicing hedging in the form of internationalization with autonomy. If I am wrong in that assessment, little variation should be noticed between the South Korean defense strategies from 2020 and 2022. Instead, it should be a continuation of the Moon administration efforts in tackling non-traditional threats and making peace with North Korea through negotiations via summit talks.

The following section focuses on the first mechanism, which is about the perception and need of the United States from South Korea. If findings reveal an intensification of hedging behavior from the Moon to the Yoon administration, it can be expected that the ROK became confident enough to practice, in Snyder's terms, internationalization plus autonomy. In addition, it would go against two of Lee's conditions about when middle powers hedge, which are: 1) They should not be exposed to threats from rising powers. 2) They should not be within a competitive landscape between two major powers.

V. Results

1. The perception and need of the United States

A. The defense budget

The first empirical data I examine is the South Korean government expenditure in the defense budget in relation to the government budget. (Ministry of Defense Whitepaper, 2022, p. 254) Figure 1.0 shows the general government budget (정부예산) and the defense budget (국방예산) over the period from 2009 to 2023. The relevant period for this article is from 2017 to 2023 as it includes Moon Jae-In's time in office from 2017 to 2022 and the transition to Yoon from 2022 to 2023. Two trends can be noticed. First, the overall Moon government expenditure increased significantly from 2017 to 2019 (from 3.6% to 9.5%) and slightly decreased from 2020 to 2022 (from 9.5% to 8.9%) while the defense budget increased from 2017 to 2019 (from 4.0% to 8.2%) and exponentially decreased from 2019 to 2022 (from 8.2% to 3.4%). Under the Yoon administration, however, the reverse happened. The general government budget decreased from 8.9% in 2022 to 5.1% in 2023 while the defense budget experienced an increase in its growth rate from 3.4% in 2022 to 4.4% in 2023.

[도표 6-15] 정부예산 및 국방예산 증가율 추이(본예산 기준)

단위 : %

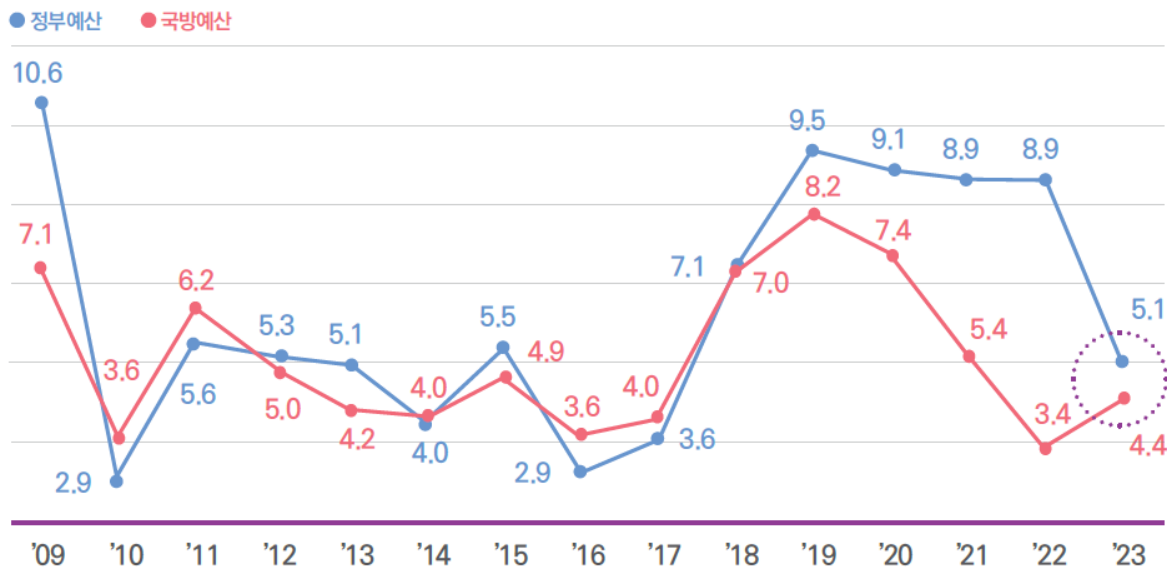


Figure 1.0 - Government and defense budget 2009-23 (National Defense Whitepaper, 2022)

The allocation of defense investments:

To further analyze not only the changes between the Moon and the Yoon administrations, but also how South Korea practice hedging vis-à-vis the United States, it is necessary to examine the way South Korea allocates its defense budget. Thus, I will examine its arms exports, imports, current arsenal, and its future investments.

B. Arms imports-exports

Between 2018-2022 and according to figure 1.1, South Korea was the 9th largest arms exporter in the world and the main recipients were the Philippines, India, and Thailand.

(Wezeman, Gadon, Wezeman, 2023, p. 2)

Table 1. The 25 largest exporters of major arms and their main recipients, 2018–22

Percentages below 10 are rounded to 1 decimal place; percentages over 10 are rounded to whole numbers.

Rank	Exporter	Share of global arms exports (%)		Per cent change from 2013–17 to 2018–22 ^a	Main recipients and their share of exporter's total exports (%), 2018–22					
		2018–22	2013–17		1st	2nd	3rd	4th	5th	6th
1	United States	40	33	14	Saudi Arabia	19	Japan	8.6	Australia	8.4
2	Russia	16	22	-31	India	31	China	23	Egypt	9.3
3	France	11	7.1	44	India	30	Qatar	17	Egypt	8.0
4	China	5.2	6.3	-23	Pakistan	54	Bangladesh	12	Serbia	4.5
5	Germany	4.2	6.1	-35	Egypt	18	South Korea	17	Israel	9.5
6	Italy	3.8	2.5	45	Qatar	24	Egypt	23	Türkiye	12
7	United Kingdom	3.2	4.7	-35	USA	20	Qatar	16	Saudi Arabia	7.7
8	Spain	2.6	2.5	-4.4	Australia	35	Saudi Arabia	19	Belgium	12
9	South Korea	2.4	1.3	74	Philippines	16	India	13	Thailand	13
10	Israel	2.3	2.6	-15	India	37	Azerbaijan	9.1	Philippines	8.5

Figure 1.1 - South Korea global arms exports 2018-22 (SIPRI, 2023)

Since Yoon came to power, it is recognized that the Ukraine War offered the Korean government the opportunity to increase its arms sales across the globe. (Cha, 2022) In fact, it has been reported that “South Korea’s arms exports rose 140% to a record \$17.3 billion in 2022.” (Tiwari, 2023) Korean-made arms exports became a priority for South Korea in its quest for autonomy (Park Yoon-bae, 2023), and one of the most recent arms deal agreements validates that behavior. It was signed with Poland amid the Ukraine War (Choi, 2022), which attracted criticism from the international community as South Korea refuses to sell arms to Ukraine in a direct manner. (Lee Christy, 2023) The explanation given by the Yoon administration is that Korean law does not permit the sale of weapons to states that would use them for lethal purposes, which means war zones. (Lee and Kim, 2023) Indeed, in its Foreign Trade Act Article 5 called the “Restrictions of Trade and other Special Measures”, a state at war is considered a special measure that needs restriction. (KLRI, 2016)

Figure 1.2 shows that South Korea ranked 7th largest arms importer for the period 2018-2022. Its main suppliers are the USA, Germany, and France; (p. 6) sales are limited to arms linked to air force such as aircraft and long-range missiles. (p. 9)

Table 2. The 40 largest importers of major arms and their main suppliers, 2018–22

Percentages below 10 are rounded to 1 decimal place; percentages over 10 are rounded to whole numbers.

Rank	Importer	Share of global arms imports (%)		Per cent change from 2013–17 to 2018–22 ^a	Main suppliers and their share of importer's total imports (%), 2018–22					
		2018–22	2013–17		1st	2nd	3rd			
1	India	11	12	-11	Russia	45	France	29	USA	11
2	Saudi Arabia	9.6	10	-8.7	USA	78	France	6.4	Spain	4.9
3	Qatar	6.4	1.5	311	USA	42	France	29	Italy	14
4	Australia	4.7	3.6	23	USA	73	Spain	19	Switzerland	3.0
5	China	4.6	4.2	4.1	Russia	83	France	8.1	Ukraine	5.6
6	Egypt	4.5	4.5	-5.3	Russia	34	Italy	19	France	19
7	South Korea	3.7	2.2	61	USA	71	Germany	19	France	7.9
8	Pakistan	3.7	3.0	14	China	77	Sweden	5.1	Russia	3.6
9	Japan	3.5	1.2	171	USA	97	UK	1.9	Sweden	0.3
10	United States	2.7	2.0	31	UK	24	Netherlands	13	France	11

Figure 1.2 - South Korea global arms imports 2018-22 (SIPRI, 2023)

As we will discuss below, there can be two reasons for that. First, South Korea does not focus on building its own aircraft since it has traditionally relied on external powers to supply them. Second, until recently, South Korea was restricted by the US from building its own long-range missiles. Thus, imports may slowly decline under the Yoon administration if it continues to focus on exporting Korean-made arms while improving its autonomy.

C. The South Korean military arsenal

This section is based on information mainly provided by the website Military Factory. The Yoon administration aims at producing four new infantry firearms manufactured in South Korea by the Korean company SNT Motive. The first one is a Modular Submachine Gun (SMG) called SNT Motiv STSM21, which will be put in service in 2024. The second one is the SNT Motiv STC16, a Modular Assault Rifle which is considered a Korean version of the Western-

made AR-15 and will also be put in service in 2024. Lastly, for the same year, there will be a new General Purpose Machine Gun (GPMG) called SNT Motiv K16. In addition, there will also be a new Korean-made Designated Marksman Rifle (DMR), the SNT Motiv STSR23, which will be released in 2025. All these firearms are still under development and are the focus of Korean government efforts to modernize the Korean military.

In contrast, no new investments have been made in the production of active machinery for ground forces. The most recent machine in the list is a Korean-made Armored Personnel Carrier (APC) called the ROTEM KW1 Scorpion developed by Korean company Hyundai ROTEM and in service since 2017, which means that it was developed during Park Geun-Hye's presidency. It is notable that foreign produced machinery was purchased in the 1900s from America, the Soviet Union, Germany, Italy and Sweden, with the exception of the 2007 purchase of the American Mine Resistant Ambush Protected (MRAP) Vehicle called the Navistar International Maxxpro. Moreover, there are in total 10 Korean-made and 10 USA-purchased machinery, which means that the ROK never fully relied on American resources.

The navy is another important branch of the South Korean military, and their arsenal is almost entirely Korean-made except for two Diesel-Electric Attack Submarines purchased from Germany in 1971 and 2007. The rest of the arsenal was produced by South Korean company Daewoo Shipbuilding & Marine Engineering (DSME) in collaboration with Hyundai Heavy Industries (HHI). The most recent navy machinery is a Diesel-Electric Ballistic Missile Submarine, the ROKS Dosan Ahn Chang-ho (SS-083), which was produced in 2016 and was deployed in 2022 after several years of testing. (Lee Juho, 2022) Moreover, it is known that as part of a series launched in 2020 under the Moon administration, DSME and HHI aim to complete nine submarines and ships to be completed by 2030. This category is known for being

the first navy arsenal built from new indigenous technologies which include 76% of local resources according to the Defense Acquisition Program Administration (DAPA). This series is being completed progressively. For instance, the next one called Ahn Mu (SS-084) will be ready to be commissioned in 2024. (Chang, 2023)

In contrast, the air force has significant US-bought arsenal due to its history of being highly dependent on the United States after the Korean War. The air force stock is as follows: Of 29 active aircraft, 15 aircraft come from the United States, 5 from South Korea, and the rest from external powers such as France, Israel, Spain (partnership with Indonesia and France), Canada, Australia, and the Soviet Union. The fact that slightly more than 50% of the arsenal comes from the US, including the most recent aircraft put into service in 2016, reveals that South Korea is still dependent on the US when it comes to air power. The fact that there are 5 Korean-made aircraft developed by the Korean Aerospace Industries (KAI) demonstrates that there is still an effort, though minimal, from the ROK to build its own aircraft. However, the Yoon administration's defense priority is still given to the infantry and navy arsenal as the most recent Korean aircraft, which was put in service since 2015 and called KAI KC-100 (Naraon), was developed for commercial purposes only.

Nevertheless, examining all these differences is not sufficient to understand whether South Korea switched from soft to hard hedging by following an internationalization plus autonomy behavior. It is necessary to analyze the focal points of the defense strategies of 2020 and 2022 to understand the potential impact that an exogenous shock has on a state's hedging strategy. I expect that while COVID-19 shaped an important part of the Moon administration's decisions, the Ukraine War did so for the Yoon Administration.

D. The National Defense Strategy of the Moon administration

The 2020 National Defense Whitepaper sets out significant concerns on the part of the Moon administration about the US-China competition both on trade and on security within the South China Sea, COVID-19, and rising uncertainty in the international security environment more generally. As a result, it is directly mentioned that cooperation with various countries to fight COVID-19 and contain China is a priority. However, it also mentions the importance of new partnerships including the One Belt One Road Initiative, not only to serve South Korean interests but to also expand its influence. It also highlights transnational and non-military security threats, such as cyber threats, terrorism, and natural disasters, as important international security threats. (pp. 8-9) Lastly, it mentions the threats of North Korea's nuclear weapons and missiles and China's rapid military modernization. (p. 12)

The goals of 2020 were the following: 1) To reach a peaceful resolution of the North Korean nuclear issue and establishment of permanent peace. 2) To contribute to peace and prosperity in Northeast Asia and the world. 3) To protect the safety and life of the people. (pp. 34-35) The six key principles of the defense strategy of 2020 rest on the following: 1) The establishment of a strong defense posture against all-round security threats. 2) The development of a strong and complementary ROK-US alliance and promotion of defense exchanges and cooperation. 3) Building a strong military that supports peace on the Korean Peninsula through strong promotion of defense reform. 4) The establishment of a transparent and efficient defense management system. 5) The establishment of a morale-rich military culture that can be trusted by the people. 6) The establishment of a foundation for peace settlement by building military trust between the two Koreas and promoting arms control. To reach these goals, it discusses the need for stronger multilateralism with various partners, the need to improve communication and

negotiation with North Korea and the adoption of a smart power strategy which is part of the defense reform 2.0, which I will develop below. (pp. 37-42)

A focus on multilateralism as a soft hedging strategy

South Korea discusses multilateralism by strengthening political and economic cooperation with India, ASEAN, and Eurasian countries, and promoting regional cooperation. The United States remains the main ally; however, the defense strategy used by the Moon administration reveals that it is practicing soft hedging by navigating between all countries, including China. This behavior goes against the earlier mention of containing China. Overall, the agenda is focused on a contribution to peace, stability, and common prosperity in the region through institutionalization and through addressing global security issues such as infectious diseases, natural disasters, refugee issues and so on. Thus, South Korea actively participates in humanitarian and peacekeeping missions. (p. 10)

A quest towards peaceful negotiations with North Korea

Moon Jae-In's highest hope was to reach peace with North Korea. The document often refers to successful past events such as the inter-Korean summit, the Panmunjom Declaration, the Pyongyang Joint Declaration and 9/19 Military Agreement. All these agreements served as a non-aggression declaration to improve inter-Korean relations, which revitalized important interactions that were put on hold for years such as the joint manufacture in the Kaesong Industrial Complex. (p. 20) However, after the collapse of the North Korea-US summit in Hanoi in February 2019, US-North Korea relations reached a stalemate. (p. 22) The 2020 defense strategy therefore heavily focused on how to unfreeze negotiations through the regularization of inter-Korean dialogue, the expansion of exchanges and cooperation in various fields, and the enactment of inter-Korean agreements. However, to be able to do so and to avoid worsening the

relations with the DPRK, South Korea adopted a strategy based on a military readiness and defensive posture translated by the Defense Reform 2.0 combined with smart power.

The Defense Reform 2.0

This program is based on the prioritization of defense industry investment and restructuring of the Korean army. In fact, the Defense Reform 2.0 is focused on four areas including military structure, national defense management, barracks culture, and defense business. In addition, it prioritizes integrating smart defense innovation, including cutting-edge science and technology of the 4th Industrial Revolution, into all areas of national defense. (p. 44)

Defense management reform aims to realize an advanced defense management system by enhancing efficiency, reliability, and openness. To this end, it includes the adjustment of the quota of military generals (reduction of the number of second lieutenants and sergeants to expand the civilian workforce) with a focus of available resources on senior officers to emphasize talented professionalism through long term service; higher quality training to form an elite-based military force; shortening of mandatory service; expansion of the proportion of female soldiers; enhancement of public participation and communication in civilian-military relations; and so on. The reform thus includes efforts to change the barracks culture aimed at raising soldiers' morale through human rights and welfare. (Jang, 2018)

In addition, the United States and South Korea aim at developing a customized deterrence strategy based on joint research to find ways to deter North Korea from nuclear and missile threats. This also includes an allied comprehensive countermeasure strategy called 4D strategy, which is composed of the following stages: Detect (based on Intelligence, Surveillance, and Reconnaissance (ISR)); Disrupt; Destroy and Defend. Part of such a strategy is the 'Korean missile defense system' which consists of an early detection of launched missiles and warnings to

minimize damage. (National Defense Whitepaper, 2020, pp. 60-62) The Moon administration places a key focus on South Korea's C3 (command, control, communications) to intercept missiles and provide an opportunity for de-escalation.

The only strategy that could be interpreted as offensive in nature could be the Kill-Chain and the KMPR (Korea Massive Punishment and Retaliation) systems. However, they are mentioned only once and described as a "strategic strike system" that aims at building the South Korean ability to respond to asymmetric threats in addition to the United States' support, especially regarding reconnaissance and air capabilities. (p. 61) In fact, the support from the United States is recognized as imposed on South Korea. For instance, the Kill-Chain system has existed since 2013 but remains dominated by the United States' support for the following reasons: First, Korea lacks reconnaissance satellites to identify any threat from North Korea as early as possible. Second, the United States has blocked South Korea from developing the necessary capabilities to build such a system since 1979 through a missile restriction guideline. However, this prohibition was lifted in June 2021, which allows the Yoon administration to develop a more aggressive strategy towards North Korea. As we will examine in the 2022 defense strategy, the so called "three axis system", including the Kill-Chain and the KMPR, will be revitalized and further fused with a more developed Korean Air and Missile Defense (KAMD) system to become more independent from the United States. (Jung, 2023)

E. The National Defense Strategy of the Yoon administration

The Yoon government, in response to people's demands, has set a national vision of 'a global pivotal nation that contributes to freedom, peace and prosperity'. (National Defense Whitepaper, 2022, p. 36) To do so, it is actively striving to play a responsible role in the international community with all countries. However, in February 2022, as Russia invaded

Ukraine, Korea-Russia defense exchange and cooperation has been temporarily slowed down. The ROK government supports Ukraine's sovereignty and territorial integrity and condemns Russia's armed invasion as an act in violation of the UN Charter and international law. (Pardo & Kim, 2023, pp.1-3) Thus, it has had to modify its defense strategy following the invasion, which proves that the Ukraine War acted as an exogenous shock. In a quest toward global peace, the government now aims at normalizing inter-Korean relations through a more pro-active and offensive strategy.

The first difference in the 2022 defense whitepaper is the focus on the reorganization of the relationship between power and competition within the international community. The situation of current international relations is described as very unstable. It mentions the growing competition between China and the United States and the Ukraine War as elements that increased uncertainty within the international community. Moreover, it mentions territorial disputes and non-traditional security threats such as diseases, natural disasters, cyber-attacks, and terrorism on which it will expand on the previous administration efforts. Concerns about the Taiwan Strait and semi-conductors are also clearly stated as an opportunity for South Korea to strengthen its cooperation with the United States and other states when it comes to research on such technologies and resources. (National Defense Whitepaper, 2022, p. 2 and p. 8)

Another important aspect of the difference with the previous administration is the will to strengthen unity around the North Atlantic Treaty Organization as a response to the Russian threat following its invasion of Ukraine in February 2022. It also announced that it will work for the development of Korea-US-Japan Security Cooperation to deter and respond to North Korea's evolving nuclear and missile threats. (MOFA, 2023) This is novel as under Moon Jae-In's presidency, tensions further emerged between South Korea and Japan over historical disputes.

Consequently, compared to 2020, 2022 reveals important efforts from both the United States and South Korea to strengthen their relations. For instance, the US reassured its ally that it is maintaining 28,500 US troops in Korea, which made it clear that it is committed to providing extended deterrence. (National Defense Whitepaper, 2022, p. 15) The paradox, however, is that because South Korea feels less constrained by the United States, it practices hedging in a more obvious way, which is reflected in its 2022 Defense strategy.

To begin with, the Yoon administration uses a new tone regarding North Korea. While the Moon administration abstained from using negative terminology vis-à-vis its neighbor, the Yoon administration has clearly identified North Korea as an “enemy” (Lee Michael, 2023). It even mentions the necessity to teach its soldiers to view North Korea as an enemy, with the following line: “To ensure that soldiers clearly recognize that the North Korean regime and the North Korean military are our enemies.” (National Defense Whitepaper, 2022, p. 94) Consequently, it has switched from a rather defensive stance to an offensive strategy.

Three goals are mentioned. First, it acts to protect national sovereignty and territory, and to promote public safety against all kinds of threats. Second, it aims at preparing for a unified future while establishing peace on the Korean Peninsula. However, the strategy will no longer rely on waiting for the North to negotiate through discussion forums but rather, South Korea aims at being more proactive by, for example, modifying denuclearization policies in close cooperation with allies and international organizations. Third, the ROK has a will to lay the foundation for prosperity in East Asia and expanding its global role for peace, its national power and status. To do so, it will rely on the ROK-US alliance and its values and norms such as freedom, democracy, and human rights. At the same time, however, the government bases itself on the following keynotes: 1) By practicing diplomacy that puts national interests first. 2) By

promoting strong national security through strong national defense. 3) By establishing inter-Korean relations based on principles of reciprocity. 4) By proactively securing economic and security interests. 5) By responding to threats in a preemptive manner. (pp. 36-38)

As a result, and to increase its military power, the ROK has six priorities. The first is the establishment of an omnidirectional defense posture and the expansion of response capabilities. The ROK military is firmly maintaining its military readiness posture against North Korea based on the ROK-US combined defense posture. However, it sees a need to improve its self-response and deterrence capabilities. Second, priority is given to fostering advanced science and technology forces through Defense Innovation 4.0. A third priority is the rapid development of the ROK-US military alliance on defense cooperation. There is no doubt that the Yoon administration focuses on strengthening interactions with its ally. For instance, a new 11-day exercise project called Freedom Shield 2023 was designed to improve coordination between the two militaries. (USFK, 2023) Fourth is a safe, transparent, civil-military mutually beneficial national defense operation to respond to changes in social conditions and the needs of the people. Fifth is the creation of a defense culture suitable for future generations focusing on improving the salary, food, clothing, and shelter of military service recruits to meet their expectations and improve the human rights protection system within the military. Finally, the last priority is given to fostering the defense industry as a national strategic industry, which means to ensure that the defense industry can lead the growth of the national economy while leading the development of a strong military in science and technology. This will be translated as strengthening global competitiveness in agricultural, technological and defense exports. (National Defense Whitepaper, 2022, pp. 42-43)

From that perspective, the core of the ROK defense strategy is based on an intensive promotion of its Defense Innovation 4.0 strategy, which applies cutting-edge science and better technology. Before discussing the new program, however, the Yoon administration mentions that there was a need to transition from Defense Reform 2.0 because it was based on the premise that the threat from North Korea would gradually decrease. Thus, the goal was to reduce the number of standing troops and it focused on military elitism in all areas of national defense. Among the achievements were the disbandment of the target units, the reduction of troops, and the shortening of military service. However, the lack of success of the reform concerns the practical use of advanced science and technology, which is considered insufficient. (p. 106) It is problematic because it has not yet filled the potential combat power vacuum that may have been created from the reduction of the standing forces from the Moon administration defense policies. To solve that problem, as well as the lack of power resources and the maximization of combatants' survivability, the Yoon administration drafted Defense Innovation 4.0. (pp. 129-130)

Defense Innovation 4.0

The defense innovation 4.0 is categorized as “an operational concept on the destruction of North Korean nuclear weapons and missiles before they are launched.” (KBS World, 2023) To do so, efforts will be made in new combat strategies, practical education, and training, but also in further investments in science and technology, the priorities being in the fields of AI and space. This program is therefore heavily based on not only investing in research in science and technology, but in directly implementing them in the ROK army. Such efforts at strengthening its national defense capabilities are also in response to the slowdown in global economic growth, the decline in the working-age population, and the deterioration of national financial conditions. Therefore, it can be seen as an extension of Moon Jae-In's strategy as the biggest part of the

defense investment remains focused on military elites, science, and technology. However, it is more offensive in nature and is especially focused on three categories: the Korean-style three axis system, AI, and space (National Defense Whitepaper, 2022, pp. 107-110), which reveals a shift of focus from a C3 to a C4i (command, control, communications, computers, and intelligence) system.

The Korean-style three axis combat strategy

This system is purely designed as a retaliatory system to counter North Korean nuclear and weapons of mass destructions threats, which reveals the offensive nature of the 2022 defense strategy. It consists of three elements: Kill Chain, Korea Air and Missile Defense (KAMD) and Korea Massive Punishment and Retaliation (KMPR). (pp. 57-62) Kill Chain refers to the command/launch/support means to detect threats quickly and accurately. It is therefore based on detection and disruption and thus includes surveillance, reconnaissance, and ultra-precision technologies. It is the first axis as the KAMD and KMPR can be activated only in case of an identified threat. The Kill Chain system explains why South Korea now aims at investing in surveillance technologies such as satellites and certain types of missiles, which I will further discuss below. If activated, the KAMD consists of a response from the Korean Air force to intercept any incoming missiles from North Korea using precision technology such as beams. It exists to minimize damage and is thus considered as the first line of defense. If it fails to suppress the threat, the KMPR which is based on punishment and retaliation is the following step. It involves ultra-precise strikes with the ability to completely suppress the enemy. (Jung Doyeong, 2023) In short, the whole three axis system gives to South Korea the ability to have its own denial strategy independently from the United States.

Manned/Unmanned AI systems

This part of the program, along with space, reveals the influence that the Ukraine War has had on prompting the drafting of a new defense strategy. Observation of the conflict and military tactics has highlighted the importance of AI-based technology, especially the efficiency that drones and satellites can deliver on the battlefield. (Jeong; Seo; Heo, 2023) As a result, Defense Innovation 4.0 includes a step-by-step transition to an AI-based manned/unmanned combined combat system. To this end, in accordance with the “Defense Unmanned System Development Plan” established in 2022, the foundation for strengthening jointness and stable operation between manned and unmanned systems will be created, and pilot units for each service will be operated, verified, and evaluated before the potential deployment. The Yoon government is therefore aiming at developing autonomous weapon and surveillance systems with AI technology to replace standing soldiers. (National Defense Whitepaper, 2022, p. 111)

Several steps are mentioned in the 'Defense AI Development Model' established in July 2022. First, it aims at developing a 'remote control type' of AI, which will be helpful for surveillance and reconnaissance and will help to reduce the number of soldiers stationed at the DMZ. Second, it aims at creating a 'semi-autonomous', unmanned combat vehicle. Finally, the third stage is about developing an 'autonomous' AI system, which implements 'intelligent command decision support system' and 'hyper-connected combat system'. (p. 115) In addition, the Ministry of National Defense in cooperation with the Ministry of Trade, Industry and Energy, established the 'Civil Drone and Robot Demonstration Test Center' for idle military training. This center promotes the introduction of drones and robots in the military and contributes to the development of the national industry by verifying its usefulness. Moreover, the Air Force aims at demonstrating the Korea-Urban Air Mobility (K-UAM) aircraft project launched by the Ministry

of Land, Infrastructure and Transport in February 2022. Even if it is aimed at commercialization and for public-private purposes, it is designated as a test bed for the 'K-Drone System Demonstration Project'. (pp. 113-114) Thus, it is highly likely that such technology will be used for military purposes in the future.

Space for intelligence purposes

Finally, in contrast to the Moon administration, the Yoon administration aims at increasing its power by focusing intently on its national space program. Efforts are being directed into the creation of a defense space development ecosystem through the establishment of a space power system with advanced science and technology applied for jointness-based 'defense space power development', deepening and expanding the ROK-US and international space cooperation. Four categories exist in the expansion of the ROK space power program: information support, space domain awareness, space control and space power projection. Space information support is about surveillance, reconnaissance, and communication activities necessary for joint operations. Space domain awareness is about the identification of space risks and threats. Space control refers to preparation against hostile activities in the space domain such as jamming satellites. Lastly, space power projection aims at securing various launch platforms. (pp.123-124)

Aside from the cooperative aspect of the program, it involves the government's autonomous purchase of satellites and rockets used for intelligence purposes in response to the lifting of the missile restriction guideline from the United States. Consequently, the South Korean government plans "to launch five surveillance satellites in partnership with Space X by 2025, with the first launch planned for the end of 2023." and has already tested space rockets in March 2023. (Kang, 2022, April 10) This behavior validates its efforts to build an autonomous kill-chain system, an efficient space situational awareness system at the national level and a C4I

system. Moreover, to have high-speed and large-capacity information distribution capabilities as well as military satellite communication, the Yoon administration promotes the establishment of a low-orbit satellite communication system. For such purposes, it invests in national space-related government agencies such as the Korea Aerospace Research Institute and the Korea Astronomical Research Institute. (National Defense Whitepaper, 2022, p. 127 and p. 131)

In the next section, I explore two other mechanisms, the national discourse and public opinion on nuclearization and ROK-US alliance. Examining how leaders and citizens react to the United States can reveal how South Korea practices hedging at a diplomatic and international level. Doing so will also reveal whether the Ukraine War has impacted both mechanisms to the same extent. The results reveal that the ROK discourse varied to a higher degree than public opinion. In fact, the exogenous shock created a need from South Korean officials to be reassured by the United States. They switched from a narrative of becoming more autonomous, notably by reviving the nuclear debate, to strengthening ties with the United States. The Washington Declaration is among the main drivers that provoked that change, which reveals a temporary success in the US mission to reassure its ally about its commitment.

Public opinion, on the other hand, seems to have remained stable as the support for the ROK-US alliance did not decline, unlike the demand to build South Korean nuclear capabilities. No sudden spike towards a certain opinion arose after the outbreak of the Ukraine War. However, it is important to note that public opinion revealed mixed results, which sometimes differ from one research center to another. South Koreans have a set of different opinions concerning their national security, which can also be linked to generational gaps. Thus, depending on who is surveyed, the vision of how South Korea must act to defend itself may vary. This article therefore only shows a general trend of what South Koreans may think.

2. The national discourse and public opinion

The South Korean discourse is a case in point of the hedging strategy adopted by the Yoon government. On one hand, it is based on reinforcing the US-ROK alliance and on the other hand, it is oriented toward a narrative of a pursuit of autonomy and self-help. In this section, I will present the overall discourse of the Yoon administration since the beginning of the Ukraine War. Moreover, I will examine the third mechanism, public opinion, together with the national discourse to evaluate whether they align or not, and whether they both demonstrate hedging vis-à-vis the United States.

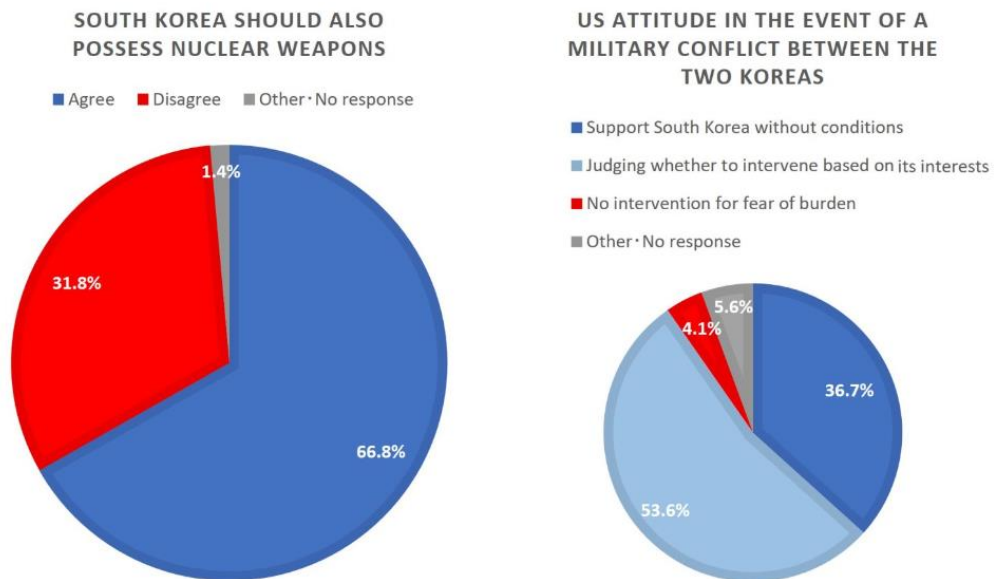
The nuclear debate and the ROK-US Alliance

The revival of the nuclear debate reflects the connection between the ROK discourse and public opinion. The question of whether South Korea should have its autonomous nuclear capabilities is not a new one, but it did not reemerge for a long time. In the 70s, threatened by the withdrawal of American troops, Park Chung-hee's strategy adapted to these potential changes by pursuing two new initiatives. First, he sought ways to establish relationships with the communist bloc, particularly China and the Soviet Union. Second, he initiated an independent arms buildup, including the development of a covert nuclear weapons program. When the United States discovered Park's efforts to develop nuclear weapons, it severely strained the U.S.-ROK alliance and brought it to the brink of collapse. (Snyder, 2018, p. 21) Since then, South Korea has emphasized North Korean denuclearization and enjoyed the United States nuclear umbrella without strong opposition, although it is not satisfied by how the US manages it. Indeed, the Yoon administration has revived the debate about nuclearization. In January 2023, he declared: "It's possible that the problem gets worse, and our country will introduce tactical nuclear weapons or build them on our own," and "If that's the case, we can have our own nuclear

weapons pretty quickly, given our scientific and technological capabilities.” (Choe Sang-Hun, 2023), which is in line with the public opinion.

In a poll from January 2023 (figure 2.0) from Hankook Ilbo, 66.8% of South Korean citizens felt that South Korea should possess its own nuclear weapon. From the same figure, it also shows a mixed confidence in the US commitment to protect South Korea in case of a military conflict with North Korea. Indeed, only 36.7% of those surveyed believe that the United States will support South Korea without conditions while 53.6% replied that it will intervene only if it is aligned with its interests. (Yang, 2023)

Figure 1. Results of a January 2023 *Hankook Ilbo* poll of South Korean citizens on ROK nuclear weapons and US military intervention.



Source: Moonjoong Kim, "70 Years of Korea-US Alliance Public Opinion Survey," *Hankook Ilbo*, <https://www.hankookilbo.com/News/Read/A2022122712090002350>, January 2, 2023. (Translated by UK Yang.)

Figure 2.0 - ROK nuclear weapons and US military intervention (Hankook Ilbo, 2023)

Before exploring further, it is noteworthy to examine other surveys to verify the variation within these numbers. The KINU Unification Survey 2023 reveals the following. First, as Figure

2.1 shows, while most of the Korean public support the idea of South Korea building its own nuclear capability, the numbers went down from 71.3% in October 2021 (the highest percentage of support since 2014) to 60.2% in April 2023. It is also important to note that KINU itself mentions the results of other reports which may contradict their data. It mentions different percentages showing the population is supportive of a South Korean nuclear arsenal, which goes as follows: “[...] Chicago Council on International Affairs (71.0%), the Asian Institute for Policy Studies (70.2%), SAND Institute (74.9%), the Institute for Peace and Unification Studies of the Seoul National University (55.5%), the UniKorea Foundation (68.1%), and the Chey Institute for Advanced Studies (76.6%) [...]” (pp. 20-22)

1. The Necessity of South Korea's Nuclear Armament

<Figure II - 1> Public Opinion in favor of Nuclear Armament

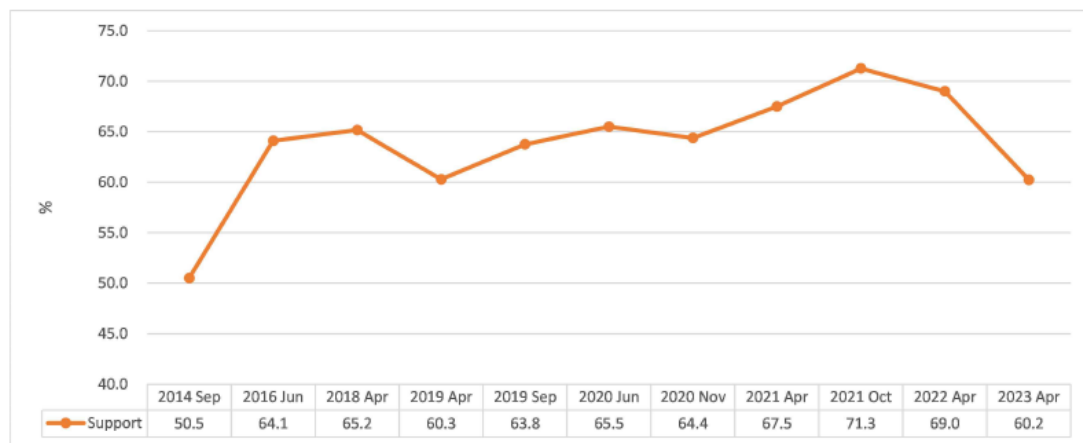


Figure 2.1 – The necessity of South Korea’s Nuclear Armament (KINU, 2023)

Concerning the ROK-US alliance, the questions asked were different from Hankook Ilbo, which may therefore limit our understanding of how South Koreans truly view the US commitment in case of an attack from North Korea. KINU did not ask about whether the public believes it will intervene with conditions, without conditions, or at all. However, it asked

whether South Koreans trust in the US extended deterrence in case of a nuclear attack from North Korea. The results show that 72.1% of respondents trust the nuclear umbrella policy. (p. 14) Despite this high level of trust, however, it is noteworthy to examine the following poll about US-China competition. KINU asked whether South Koreans would prefer the US or China as the winner of their competition, which means becoming the hegemon of the region. Interestingly, while support for the US, although the highest, dropped by around 6%, support for a dominant China rose by 3.7%. (p. 72) These results may suggest that South Koreans, despite high trust in the ROK-US alliance, are less in favor of the US continuing the competition with China within the East Asian region. In turn, that may explain why they may support hedging against the United States.

However, fully aware of the mixed opinions that South Korea holds, the United States feels the need to reassure its long-term ally without forgetting its self-interests. As mentioned earlier, there was the Washington Declaration in April 2023, a ROK-US interaction in which the expansion of the US nuclear umbrella was agreed upon on the condition that South Korea does not develop its own nuclear capabilities. The expansion includes the creation of the Nuclear Consultative Group (NCG) between the governments of the United States and South Korea, which will facilitate consultations about nuclear matters between the two leaders. By forming this group, the United States and South Korea will be able to collaborate on planning and implementing joint responses to any nuclear actions by North Korea. (Snyder, 2023)

In addition, as part of the agreement, the United States plans to deploy nuclear submarines in South Korea as a defense line against any potential nuclear attack from the North. In fact, the first one called the USS Michigan reached its destination on June 15th, 2023. (Kim & Kim, 2023) However, such a move makes no strategic sense as it reveals the location of a

machine that is supposed to be stealthy. Thus, it can be interpreted as a symbolic gesture to reassure South Korean officials and public, which seems to have been effective. (Lendon, 2023; Smith A., 2023) Since the Washington Declaration, President Yoon changed his discourse which is now in opposition with public opinion on the question of nuclearization. In a speech in May 2023, while visiting Harvard Kennedy School, he replied to a student comment concerning nuclearization and concluded that he does not support the public's idea of South Korea building its own nuclear weapons in response to the North Korean threat. (Smith James, 2023)

However, the Washington Declaration slightly reassured South Korean citizens on the ROK-US alliance. As the KINU Unification Survey 2023 reveals, the trust in US extended deterrence before and after the ROK-US Summit increased from 68.7% to 75.6%. (p. 91) However, the concern is about how long it will remain like that. As for the proportion of people in favor of South Korean nuclearization, it only increased from 59.9% to 60.6% (p. 90). Such results means that despite trust in the ROK-US alliance, South Korean citizens continue to support nuclearization. Public opinion therefore supports a hedging behavior towards the United States, revealing the paradox of South Korea's strategy which focuses on strengthening its relations with Washington while exercising autonomy.

VI. Discussion

The perception and need of the United States

Examining the extent of the Yoon administration's hedging behavior offered valuable insights into shifting South Korean perceptions and needs of the United States. The results demonstrate that it focuses heavily on internal balancing following the Ukraine War and rising North Korean threats, which in turn reveals a will to become more autonomous relative to its ally. The first elements explored in this paper were the defense budget, arms export-imports and the

ROK arsenal. The following trends showed up. First, the Yoon administration redistributed its budget from the government budget to the defense budget. Second, it focuses on expanding arms exports (Park Yoon-bae, 2023) while keeping imports focused on air force support, which remains an important diplomatic tool with the West. Third, it is planning to develop four new Korean made infantry firearms in only two to three years, which shows where the redistribution of the defense budget goes to. In comparison, only the Under-Barrel Grenade Launcher (UBGL) named SNT Motiv STG40 was developed under Moon's presidency. (Military Factory, 2023) However, the intense focus on building new indigenous submarines started from the Moon administration and is continued by President Yoon. This suggests that while South Korea was focused on a defensive posture primarily aiming at deterrence, it is now pouring resources into weaponry that is more retaliatory in nature. These variations therefore demonstrate a transition from soft to hard hedging through military modernization.

Moreover, the 2020 National Defense whitepaper revealed that the whole program was based on a crisis management system, which means that it aimed to maintain peace. The military adopted a full-defensive posture and put effort into avoiding any escalation of conflicts towards war. By establishing a preemptive military disaster preparedness posture, South Korea aimed at protecting the lives and safety of soldiers and citizens by promptly providing troops better equipment and training and by actively participating in international cooperation activities. The strategy switched from a troop-intensive unit structure to an elite structure based on advanced science and technology to improve the South Korean response capabilities to any kind of security threats. The ROK military was therefore standing to react only as a last resort and to conduct operations in preparation for an all-out war to achieve victory with 'minimum damage in the shortest time'. (National Defense Whitepaper, 2020, p. 41) In comparison, the 2022 defense

strategy appears to adopt a more offensive approach by reallocating resources towards a conventional counterforce strategy based on retaliation and punishment by denial.

It further suggests that the defense strategy was influenced by the Ukraine War in a manner akin to how the program was shaped by COVID-19 in 2020. The conflict therefore acted as a pivotal tool triggering the variation in the ROK strategy. In fact, examining the 2022 National defense whitepaper revealed a focus from the ROK towards traditional concepts of protection including its sovereignty and territory. Moreover, investing in self-reliant military technology and training its army with Korean-style strategies not involving the United States to retaliate against North Korea are signs of a stronger hedging strategy. The paradox is that it is at the same time strengthening its ties with the US, albeit mostly relative to technology such as sharing information on electronic manufacturing such as for microchips or non-traditional security threats such as cyber. (Choi Soo-hyang, 2023; Warburton, 2023) Concerning conventional power, aside from joint exercises with the United States, South Korea seems to focus on its internal development in an autonomous manner. Perhaps, as it happened with Park Chung-Hee, the ROK is aiming at developing itself as fast as possible under the protection of the United States, knowing that it cannot be fully independent yet.

Another aspect to consider is that South Korea seems to be practicing internationalization with autonomy under Yoon's presidency. The fact that it automatically focused on its space program after the lifting of the missile restriction guidelines by the United States in 2021 further reveals its nature as a practitioner of hedging. It can be assumed that because of constraints from the United States that prevented the ROK from developing fully autonomous defense capabilities, the latter had little choice but to allocate its investments in other projects in which it could practice soft hedging. The Ukraine War has prompted the international community to rethink the

importance of self-reliance in the field of security; this is perhaps a reason why the United States now allows South Korea to invest independently in its kill-chain program. As a result, South Korea did not hesitate to allocate its resources in its military and technology modernization although the level of uncertainty within its security landscape keeps rising.

The national discourse and public opinion

As the results demonstrate, the national discourse under Yoon's presidency changed as North Korean threats and the Ukraine War continue. The most noticeable variation concerns President Yoon's discourse on nuclearization before and after the Washington Declaration. However, it can be expected to switch again depending on the United States' credibility vis-à-vis its nuclear umbrella expansion. The promises made in the Washington Declaration are credible and persuasive, but the main question is whether it is durable. (Chung, 2023) I expect the Washington Declaration's credibility to face a challenge regarding the ability of both governments to maintain visible efforts in strengthening deterrence against North Korea. The Biden administration will probably shift its focus to other concerns such as the conflict in Ukraine, competition with China, and domestic matters. Similarly, the Yoon administration will be confronted with its own domestic and foreign political challenges. Moreover, as discussed above, South Korea is already focused on revitalizing its three-axis system, which means that it may prioritize building its autonomous retaliatory capabilities before elaborating a stronger joint system.

When examining public opinion, however, there is a discrepancy between the recent government's decision to work more closely with the United States on nuclear matters and South Korean citizens. When it comes to nuclearization, the Washington Declaration appeased South Korean officials but not the citizens. As indicated by the results from Hankook Ilbo's surveys,

most of South Koreans are still invested in the idea that their country needs its own nuclear program, which is perhaps linked to the fact that they doubt the United States' commitment. (Grady, 2023) Some reports from other research centers validate such trends, as mentioned by KINU, but it is noteworthy that because KINU does yearly surveys and uses the same set of questions since 2019, its own findings may be more accurate. They demonstrate that the support for South Korea's nuclearization in fact continuously decreased since 2021. However, the significance of such results may be difficult to assess and despite the decline, more than 50% of people surveyed are still in support of nuclearization. Thus, most of the South Korean public continue to show no strong opposition to that idea, despite the rising support for the ROK-US alliance since the Washington Declaration.

Such mixed results reveal that despite trust in the United States, a considerable portion of South Koreans believe that the ROK still needs to hedge by pivoting towards a self-help strategy when it comes to nuclear capabilities. Thus, it can be expected that the public, in addition to South Korean leaders, will continuously seek political reassurance from the United States. In fact, the United States is aware that it must pay attention to its ally and reassure it by demonstrating its will at the leadership level. (Schifrin; Warsi; Sagalyn, 2023) However, at the time of writing, the Yoon administration continues to practice internationalization plus autonomy and public opinion seems to remain in favor of a more autonomous South Korea while keeping a strong ROK-US alliance. Therefore, both the national discourse and public opinion validate the paradox further highlighted following the Ukraine War, in which South Korea seeks to become more independent while also strengthening its ties with the US.

In sum, this paper demonstrated that the first mechanism, the perception and need of the United States, was the most impacted by the Ukraine War. As expected, South Korea transitioned

to hard hedging focused on internal and external balancing, mixing autonomy and multilateralism. Public opinion appears to have been the least triggered by the Ukraine War as there have been no important shifts since its outbreak. However, the national discourse has shown less stability. Although it changed after the Washington Declaration, President Yoon's discourse at the beginning of the Ukraine War was heavily focused on reviving the debate around nuclearization. The reason could be that the exogenous shock from the Ukraine War reminded South Korea about its own vulnerability to a North Korean nuclear attack despite the presence of the US. Panic about its survival therefore pushed South Korea to revive the debate around nuclearization. There is also a possibility that due to the shock, the Yoon administration revived the debate to push the US to reassure them and thus, to strengthen the ROK-US alliance.

Ultimately, besides validating the fact that exogenous shocks have an impact on hedging, the three mechanisms demonstrated that South Korea, under Yoon's presidency, practices hard hedging through internationalization plus autonomy. In turn, this paper confirms that a middle power surrounded by rising power threats and by competition between major powers can still practice hedging.

VII. Limitations

I acknowledge several limitations. First, there is the issue of data availability. For instance, I could not find the national defense whitepapers in English. There was also an issue of data accuracy such as for arms exports, imports, and public opinion, which differ depending on the selected research center. This may come from potential biases, but also from the government withholding information for national security purposes. In this regard, I expect that certain data such as the list of South Korean current and future arsenal may not be fully complete. Moreover, as I am not a native Korean speaker, I had to combine Korean and English resources and may not

have grasped the full meaning behind South Korea's behavior. Thus, I encourage native Korean researchers to further share their knowledge with other scholars around the world to promote the field of international relations. Finally, the lack of direct interviews with South Korean officials makes it challenging to fully comprehend the extent to which the Ukraine War has influenced the shift towards a hard hedging strategy.

VIII. Conclusion

To conclude, this paper demonstrates that South Korea never fully committed to the United States by exploring how it has practiced and is currently practicing hedging. Examining the exogenous shock from the Ukraine war and its impact on the three mechanisms that pushed South Korea to modify its behavior reveal that it used these new security dynamics to transition from soft hedging under Moon's presidency to hard hedging with the Yoon administration.

The first mechanism, the perception and need of the United States' protection, seems to have been the most impacted by the Ukraine War and North Korea's growing aggressiveness. Indeed, South Korea intensified its hedging behavior by redistributing its defense resources towards a more autonomous strategy. However, it is worth mentioning that the Moon administration was constrained by COVID-19 and its efforts to navigate between the United States and China to accommodate North Korea. In addition, restrictions such as the United States' Missile Restriction guideline which blocked the ROK from developing its own rockets may also have prevented it from practicing internal balancing. However, since the ban has been lifted, amid the growing threats from the DPRK and the Ukraine War, South Korea did not hesitate to modify its behavior towards a more obvious hedging strategy. It now strives to develop self-reliant military capabilities through its Defense Innovation 4.0 program.

Regarding the two other mechanisms, national discourse was temporarily impacted. Although President Yoon builds his speeches on strengthening its alliance with the US, the Ukraine War seems to have prompted ideas based on self-help such as South Korea's nuclearization which emerged again under his presidency. South Korea suddenly needed reassurance proven by his shift of discourse after the Washington Declaration. However, although public opinion appeared to have been the least impacted by the Ukraine War, it also needed to be reassured due to mixed opinions about nuclearization and the ROK-US alliance. While some reports indicate a marginal improvement in trust towards the US commitment, the majority of South Koreans continue to support nuclearization, underscoring a persistent sense of skepticism.

Furthermore, the behavior of the ROK validates the fact that it currently practices what Snyder called internationalization with autonomy as it practices hard hedging by mixing internal and external balancing. This article successfully argues against Kuik's argument that hedging is limited to small powers and provides a counterargument to Lee's two (out of the three) conditions on when a middle power uses hedging. Studying South Korea in-depth confirms that middle powers can use hedging although surrounded by rising powers and direct threats (China and North Korea), as well as while being in an environment of competition between major powers (here the US and China).

Finally, it is worth mentioning that South Korea may not be a unique instance. I invite scholars to further explore the literature on hedging not only by studying middle powers, but also by adding the element of exogenous shocks as a factor that can either enhance or diminish the intensity of hedging. In addition, there is still work to do on the case of South Korea as it is located in a dynamic environment. For instance, this article did not explore the role of China on

South Korea's hedging behavior following its growing assertiveness through its modern militarization, its military presence in the Spratly Islands and verbal threats to invade Taiwan. Due to the complexity of the topic, the challenge to access reliable data on China and the language barrier, it should be part of a future research project.

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