

The background of the entire page is a blurred, overlapping image of three national flags: the South Korean flag (Taegeukgi) on the left, the North Korean flag in the center, and the United States flag on the right. The flags are slightly out of focus, creating a sense of depth and international context.

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38 NORTH

38 NORTH SPECIAL REPORT

Detering a Nuclear North Korea

What Does the Theory Tell Us?

Terence Roehrig
David C. Logan
October 2024

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Deterring a Nuclear North Korea

What Does the Theory Tell Us?

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Executive Summary

Deterrence has long been the centerpiece of security strategy on the Korean Peninsula. Over the past two decades, however, the security situation has undergone a fundamental change—deterrence now must account for a Democratic People’s Republic of Korea (DPRK or North Korea) armed with nuclear weapons and the ballistic missiles capable of delivering them.

These developments have raised questions about whether deterrence will remain effective on the Korean Peninsula and, by extension, whether deterrence theory is still relevant as a guide to policy generally. Indeed, many analysts have raised important concerns about deterrence and nuclear dynamics, observing that North Korea’s nuclear weapons may weaken US extended deterrence commitments, erode conventional deterrence on the peninsula, blur the lines between nuclear and conventional war and increase the likelihood of large-scale North Korean military aggression.

While these concerns and others are crucial considerations, we argue that deterrence theory remains useful in addressing these challenges and responding to the changing security dynamics on the Korean Peninsula. We also assert that deterrence against North Korea is stronger than some fear.

In this report, we reassess deterrence dynamics on the Korean Peninsula by drawing on deterrence and international relations theory to identify the core components of effective deterrence—clear demands, credible threats and credible assurances—that are essential for deterrence success, with all established from the perspective of the deterrence target. We then assess the state of each of these components on the Korean Peninsula today.

Despite significant changes to security dynamics on the Korean Peninsula, we believe deterrence theory remains a helpful guide for policy. Furthermore, it is our assessment that while the ROK-US defense posture needs regular review and adjustments, strategic deterrence is not as fragile as many observers have argued. Instead, the more serious challenge will come from the possibilities of lower-level North Korean aggression and the accompanying dangers of miscalculation, accident and inadvertent escalation that also require reassuring the Republic of Korea (ROK or South Korea) of the US defense commitment and strengthening the alliance.

Core Elements of Deterrence: Clear Demands, Credible Threats and Credible Assurances

Successful deterrence requires three elements, all of which must be established from the perspective of the deterrence target. Each of these elements can be difficult to achieve, and actions that are taken to strengthen credible threats may undermine credible assurances to the adversary. Moreover, different actors may misperceive the same signals, which can also potentially undercut deterrence. Here, we review each of the three elements, drawing on the literature to identify the requirements for effective deterrence on the Korean Peninsula.

Requirements for Successful Deterrence

First, deterrence requires a clear demand about what action the target should not take. This demand must be mutually intelligible for both the deterrer and the target, and the demand must be something the target can plausibly fulfill. North Korea poses numerous security challenges that the ROK-US alliance seeks to deter. The primary demand is clear: deterring North Korea from engaging in large-scale conventional aggression or nuclear use. Yet the process of setting deterrence goals has at times been hampered by the tendency to lump together a wide array of North Korean actions under the unanalytic heading of “provocations.” It may not be possible to deter all behaviors, and some provocations may be undeterrable at a reasonable cost. In the end, a clear conception of what can and should be deterred is essential. Chief among these should be deterring and deescalating to avoid the costliest outcome—a large-scale conflict in Korea.

Second, deterrence requires credible threats, such that if the target does not refrain from the objectionable act, it will either fail in achieving its goal or pay significant costs after crossing the line. Credible threats depend on clearly demonstrating the capability and resolve to fulfill the threat if the target does not comply. Regarding capability, North Korea would be faced with overcoming a high level of military power, including a modern and capable ROK military, the ROK-US alliance, a revitalized United Nations Command (UNC), and the US nuclear umbrella should it seek to challenge the alliance. If North Korea were to attempt to take on this array of military strength, the likelihood of any conflict going badly in short order is high, making it equally likely that Pyongyang would need to escalate to nuclear use, an action that would almost certainly lead to the end of the Kim regime. Thus, the odds of success are very low, given the military power North Korea would face. Importantly, Kim Jong Un is likely well aware of this outcome.

Concerning resolve, North Korean hopes of military success against ROK-US capability might be premised, in large part, on the use of nuclear threats to discourage US assistance, resulting in a quick victory over the South. DPRK leaders may believe that decoupling the alliance is possible through nuclear threats and assess that if taking on South Korea alone, it could succeed. Yet, this judgment relies on confidence that the Korean People’s Army would be able to go on the offensive and sustain operations that would lead to victory over a modern and capable ROK military that would certainly rise to defend the country. When viewing the full picture of the credibility of ROK-US deterrence, North Korea would face significant obstacles if it chose to challenge the alliance. The risks would be high and the consequences grim for North Korea if it embarked on this path.

Third, deterrence requires credible assurances to the adversary. As Thomas Schelling, one of the architects of modern deterrence theory, observed: “To say, ‘One more step and I shoot,’ can

be a deterrent threat only if accompanied by the implicit assurance, ‘And if you stop I won’t.’”¹ Threats must be conditional on the target’s good behavior so that the promised punishment will not result regardless of its actions. Otherwise, the target is not offered a true choice and may believe it has nothing to gain from acceding to the deterrent demand. Both scholarly and policy discussions of deterrence have systematically discounted the importance of assurances to the target state. However, credible assurances are just as necessary for deterrence as clear demands and credible threats. Providing credible assurances in Korea has proven particularly difficult. North Korea and the ROK-US alliance are simultaneously seeking to deter each other, and both sides have little confidence in their adversary’s assurances to refrain from striking, even if they behave. Senior officials on both sides have noted the challenges of establishing credible assurances or “trust” on the peninsula.

Finally, for all three elements, effective deterrence requires that they are established from the target’s perspective. It does not matter whether the deterrer believes their demands are clear and their threats and assurances credible; it only matters if the target believes them. Thus, deterrence theory reminds us that the only judgment that matters is North Korea’s assessment of credible deterrence.

Deterrence Dilemmas

Tensions Between Deterrence and Reassurance

The US defense commitment to South Korea is an example of extended deterrence, where a security guarantee seeks to deter aggression against an ally. Extended deterrence rather than deterring an attack on oneself is always more challenging. While professing support for an ally is easy during peacetime, deterrence in a crisis becomes far more difficult when the risks and costs are more tangible and immediate, particularly if the adversary is armed with nuclear weapons. Over the past few years, the United States has undertaken numerous measures to reassure South Korea of its commitment to ROK security, including increasing the size and scale of military exercises and the periodic deployment of strategic assets to the peninsula, largely intended to reassure the South rather than deter the North. Washington and Seoul have also held several high-level meetings that ended with agreements to demonstrate the “ironclad” nature of the alliance through increased economic and technological cooperation along with deeper security planning, such as the Washington Declaration and the formation of the Nuclear Consultative Group that upgraded, packaged and promoted existing mechanisms for improving defense cooperation, especially concerning nuclear deterrence.

But while efforts to reassure the ally and deter the target are linked, they may be distinct and sometimes in conflict. The target of deterrence, the adversary, is different than the “target” for reassurance. The motives, perceptions and assessments of their security situation may be vastly different, particularly if the power relationships among the players have significant asymmetries. Actions taken to reassure an ally may have little impact on an adversary who is already sufficiently deterred. Excessive measures to reassure may inadvertently increase the adversary’s insecurity and threat perceptions in ways that prompt it to further increase its military capability, which can make crises less stable and escalation more likely. Moreover, given South Korea’s security worries, there will likely be continuing fears that “it’s not enough” regarding US gestures of resolve, prompting Seoul to further increase its own conventional capabilities that further fuel an arms race and undercut stability.

Though both sides may share a common goal in avoiding large-scale conventional conflict, there may still be security dilemma dynamics at play based on mutually reinforcing perceptions of threat. North Korean reactions to ROK-US military exercises indicate a significant insecurity on the part of Pyongyang, even though those exercises are aimed at shoring up the alliance's defense capabilities. Conversely, South Korea's poor strategic geography makes it particularly vulnerable to the prospects of North Korean aggression and makes South Korea more likely to view DPRK provocations as deeply threatening.

Managing Risk and Escalation

A second dilemma for a successful deterrence strategy is managing the challenges of risk and escalation. Following through on the threats to retaliate if deterrence fails carries risk; though the target has already disrupted the peace, the defender's response to a deterrence failure raises the possibility of continuing the conflict or escalating to higher levels of violence, with both posing the likelihood of significant costs. Credible deterrence requires the target to be convinced of the certainty of the defender's response; yet to follow through means the costs could increase dramatically, particularly if nuclear weapons are part of the calculus. Deterrence threats and the responses should deterrence fail must consider whether the retaliation should be proportional to the act or escalate with the intent to raise the costs further to lay down a marker for future deterrence.

For South Korea, any threat to respond occurs with the risk of starting a broader conflict, which would be particularly costly given the proximity of Seoul to the North Korean border. Should a clash escalate, North Korea could quickly launch rockets and long-range artillery rounds with devastating effect. Over the years, and despite Seoul's vulnerability, South Korea has often been more willing to respond to North Korean actions with direct strikes on the DPRK, while Washington has been reluctant for fear of sparking a wider war. The most likely path to large-scale conflict on the peninsula today is not the failure of strategic deterrence in the face of deliberate North Korean aggression but, rather, the escalation of a crisis. While deterrence against a large-scale conventional or nuclear conflict appears strong, it may prove more challenging to deter lower-level aggression. Escalation risks are more pronounced given the profound strategic distrust and poor communication that pervade relations on the peninsula. The maturation of North Korea's nuclear weapons capabilities might further embolden low-level aggression if North Korean leaders believe that nuclear weapons can provide a shield against significant retaliation.

In Korea, the advent and continued growth of North Korea's nuclear weapon and missile capabilities have dramatically altered the security dynamics and raised serious concerns for stability and the outcome should deterrence fail. Successful deterrence remains central to ensuring peace and stability on the peninsula, and important adjustments have been made to bolster deterrence while enhancing reassurance. Yet, strategic deterrence is not as fragile as some suggest, and more attention needs to be devoted to risk reduction and decreasing tensions, along with addressing concerns regarding miscalculation, accidents and inadvertent escalation. In addition, more thinking must be done to address lower-level security concerns, particularly in the gray zone involving conventional forces and deterrence by denial considerations.

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Keywords: deterrence, nuclear weapons, North Korea, US foreign policy, signaling, escalation, international relations theory

Introduction

At the September 2022 meeting of the Supreme People’s Assembly (SPA), Kim Jong Un provided an emphatic reminder of the Democratic People’s Republic of Korea (DPRK) nuclear ambitions. Challenging the United States to continue sanctions for the next 1,000 years, Kim [proclaimed](#): “There will never be any declaration of ‘giving up our nukes’ or ‘denuclearization,’ nor any kind of negotiations or bargaining to meet the other side’s conditions.” He continued, “As long as nuclear weapons exist on Earth and imperialism remains...our road towards strengthening nuclear power won’t stop.” The day before Kim’s speech, SPA delegates had passed a new law that expanded on North Korea’s self-proclaimed status as a nuclear weapons state, replacing a previous, shorter codification from 2013 and identified the conditions under which North Korea might use nuclear weapons. Thus, Kim [declared](#): “Through stipulating our nuclear power policy in a law, our country’s status as a nuclear weapons state has now become irreversible.”

Deterrence has long been the centerpiece of defense on the Korean Peninsula, but over the past two decades, the security situation has undergone a fundamental change—deterrence now must account for a DPRK armed with nuclear weapons and the ballistic missiles capable of delivering them to local and long-range targets, a circumstance that is unlikely to change in the foreseeable future. Yet, these dynamics have raised questions about whether deterrence will continue to work on the Korean Peninsula and, by extension, whether deterrence theory is still useful as a guide to policy generally.

Indeed, analysts have raised important concerns about deterrence and nuclear dynamics, observing that North Korea’s nuclear weapons may weaken US extended deterrence commitments, erode conventional deterrence on the peninsula, blur the lines between nuclear and conventional war and increase the likelihood of large-scale North Korean military aggression.² While these concerns and others are crucial considerations, deterrence theory remains very useful in addressing these challenges and responding to the changing security dynamics on the Korean Peninsula.

Some scholars and analysts, however, have argued that deterrence on the peninsula has been severely weakened, and, coupled with the inability of the United States to prevent North Korea from enhancing its nuclear capabilities, has revealed the weaknesses of deterrence theory in guiding policy here and elsewhere.³ One analyst, for instance, in assessing nuclear deterrence dynamics in Korea, argues that a “confluence of changes to technological, domestic and strategic landscapes has destabilized nuclear deterrence, and it would be dangerous to maintain a continued, unquestioning reliance on it.”⁴ Another expert, [observing](#) that “China, as well as new members India, North Korea, and Pakistan are all expanding and improving their arsenals,” concludes that “Deterrence is not as stable as believed, and is becoming less so.” In short, many have argued that deterrence on the peninsula is in danger, and that traditional deterrence concepts and theory are far less relevant for crafting solutions.

While the security environment is changing in dramatic ways, we believe deterrence theory continues to provide an important foundation for future thinking about extended deterrence policies in Korea. Deterrence theory remains highly relevant, not only for helping to ask the correct questions, but also to arrive at the best possible answers. The challenges present in Korea

are rightfully demanding a recalibration of how to implement deterrence to maintain peace and security, including the reconsideration of central elements of the deterrence posture. Yet, deterrence theory remains crucial to help guide this assessment. In short, though the security context in Korea has changed, the fundamentals of deterrence remain critical for any adjustments to this new reality.

Many excellent reports have been produced over the past few years assessing how deterrence on the Korean Peninsula is changing and providing recommendations to strengthen what is often argued to be the shaky state of deterrence now that North Korea has developed a credible nuclear capability.⁵ In this report, we examine the state of deterrence on the Korean Peninsula through the lens of deterrence theory and provide some insights for future Republic of Korea (ROK) and US defense policy.

While other actors, including China, Russia and Japan, influence nuclear and deterrence dynamics on the Korean Peninsula, and there is concern for the simultaneity problem where a conflict in the Taiwan Strait or elsewhere becomes linked to a Korea crisis, we restrict our analysis to those actors that are most influential: North Korea, South Korea and the United States.⁶ It is our assessment that while the ROK-US defense posture needs regular review and adjustments, strategic deterrence is not as fragile as many observers have argued. Instead, the more serious challenge will come from the possibilities of lower-level North Korean aggression and the dangers of miscalculation, accident and inadvertent escalation that also require reassuring South Korea of the US defense commitment and strengthening the alliance.

The remainder of this report will examine and apply deterrence concepts and theory to the Korea case and assess the three elements of deterrence—clear demands, credible threats and credible assurances to the adversary—that are essential for deterrence success. Next, it will address the role of interests and perceptions in deterrence and two important dilemmas for deterrence—the challenge of simultaneously deterring adversaries and reassuring allies and the escalation risks that are present when trying to implement a strong deterrence posture. We conclude with some observations on theory and deterrence in Korea.

Deterrence Defined

Before assessing deterrence dynamics on the Korean Peninsula, we begin by providing some basics through a review of the literature. Deterrence is a subset of a broader category of coercive strategies that seeks to change a target's behavior through a combination of threats and assurances. In the case of deterrence, states utilize threats to convince an adversary to refrain from taking an unwanted action.⁷ The goal is to pose the likelihood of high costs should the enemy choose to cross the “red line” so that the costs exceed the perceived benefit of doing so. The defender tries to convince the target that the costs of the unwanted action outweigh the benefits. Though the defender takes concrete actions to construct a deterrence posture and may believe that the target will be restrained, the only assessment that matters is whether the target is convinced. Moreover, the target must be assured that while taking the unwanted action will prompt a bad outcome, restraint will achieve a tolerable result. If the target believes it will be punished regardless, it has little incentive for restraint.⁸

Another form of coercive diplomacy is compellence, whereby an actor attempts to stop or reverse an action already taken. Compellence can be accomplished either by threatening to take an action should the target continue its behavior or initiating coercive action such as launching one cruise missile every day until the target accedes to the demands.⁹ A compellence strategy often entails setting a timeline for compliance along with threats to escalate the punishment should the objectionable behavior continue beyond the deadline. In any case, the process is similar to deterrence—altering the decision-making calculus of the target state so that the costs of maintaining the action are too high relative to the benefits. Moreover, the target must also have sufficient assurance that once it reverses its problematic actions, the pain will stop.

Conventional wisdom suggests that successful deterrence is an easier task to achieve than compellence.¹⁰ To comply with a deterrence demand, the target state needs only to do nothing to avoid punishment and does not necessarily require any public explanation or acknowledgment that it was deterred. For compellence, the ending or reversal of an action already taken provides a visible sign of acquiescence that may be politically embarrassing or require explanation to a domestic audience, both of which could have serious political consequences for the target state's leadership. As we illustrate later, these dynamics can be seen on the Korean Peninsula, given the significant challenges of compelling North Korea to give up its nuclear weapons program.

The US defense commitment to South Korea is an example of extended deterrence, where a security guarantee seeks to deter aggression against an ally. No one doubts a state will defend itself, but extended deterrence is always more challenging. It is easy for a state to profess its commitment to defend an ally during peacetime when the costs of doing so are merely hypothetical. But in a crisis when the risks and costs are more tangible and immediate, particularly if the adversary is armed with nuclear weapons, would a state truly come to an ally's defense? Defenders go to great lengths to demonstrate the certainty of their commitment, but there is inherent doubt in extended deterrence, and that will always hang over the US security guarantee to South Korea. It is also important to note that the term “extended deterrence,” as used in discussions with US allies in Asia, often refers solely to nuclear deterrence and the US nuclear umbrella. However, extended deterrence, in theory, encompasses the totality of the commitment, including political, economic and military signals, which is an important reminder that extended deterrence is multidimensional and is not solely about nuclear weapons.

Another important distinction in deterrence theory is the difference between deterrence by denial and deterrence by punishment.¹¹ Deterrence by denial aims to convince the target that they would fail in achieving their goal or that success would entail unacceptable costs. Deterrence by denial is typically associated with a strong defense. Whether building walls or maintaining a strong military, states have sought to deter by posing the likelihood of defeat in battle or putting up such resistance that even if they might ultimately lose, the costs of victory and the possibility of a long war of attrition would be sufficiently high that the attacker would decide this conquest is not worth it.¹²

A deterrence-by-denial approach requires close attention to the military balance between the adversaries. Should the challenger make significant improvements to its military capability while the defender remains stagnant, over time, the challenger may decide that the costs have been lessened to an acceptable level and deterrence will fail. Thus, successful deterrence by denial requires regular assessments of the military balance and the associated risks and costs

to the challenger of initiating an attack. However, an important consideration of deterrence by denial is the possibility that excessive additions to the defender's military capabilities in the name of defense will create a classic security dilemma where efforts to improve deterrence will be viewed as offensive and provocative by the adversary. On the Korean Peninsula, deterrence by denial includes bolstering frontline defenses to convince Pyongyang that any invasion of the South would fail, or drag them into a long war they could not sustain. There have been several occasions over the years, for example, in 1979, when ROK-US assessments of the military balance changed, raising fears that deterrence had weakened. These concerns prompted efforts to redress deficiencies to ensure North Korea would not be tempted to challenge deterrence.¹³

The second path, deterrence by punishment, bases its threats on the ability to inflict unacceptable costs on an adversary should it decide to cross a red line. In earlier days of warfare, navies could threaten to pummel a city, and with the advent of airpower, militaries could evade ground defenses to bomb cities and factories to impose punishment.¹⁴ The advent of nuclear weapons increased exponentially the level of pain a state could inflict on an adversary; the careful calculations of the military balance required for deterrence by denial were no longer necessary.¹⁵ Nuclear weapons made the potential costs massive, immediate and obvious. Moreover, with nuclear weapons, states could threaten punishment even if they lost the conventional fight and if they had only a small number of nuclear weapons so long as some of them were sufficiently survivable for retaliation or could be launched before they were eliminated.¹⁶ The pain would not result after a lengthy war of attrition but within minutes. For Korea, deterrence by punishment includes convincing North Korean leadership that an attempted invasion would result in the end of the North Korean regime. In turn, Pyongyang also has the ability to use deterrence by punishment through the artillery and rocket systems that could pound Seoul and through its nuclear and missile capabilities that can reach targets in South Korea and the United States, all a reminder that both sides are using deterrence strategies simultaneously.

Improvements in the accuracy and power of conventional weapons, along with the integration of conventional and nuclear options in planning, have blurred the distinctions between denial and punishment strategies. Cruise missiles, Joint Direct Attack Munitions (JDAM), and “bunker busters” offer conventional options to hit industrial sites, buried targets and leadership centers in ways that avoid the collateral damage of nuclear weapons but can be punishing strikes on high-value targets. Moreover, the possibility of using tactical nuclear weapons early in a conflict has raised further questions regarding conventional-nuclear integration. States with small nuclear arsenals that seek to deter powerful adversaries with conventional and nuclear options fear a first strike with these types of weapons that could take out their nuclear deterrent and ability to respond to an attack. Thus, in Korea and elsewhere, the distinctions between denial and punishment, along with conventional and nuclear weapons, may be less clear.

Requirements for Successful Deterrence

Successful deterrence requires three elements: clear demands, credible threats and credible assurances, with all established from the perspective of the deterrence target. Each of these can be difficult to achieve, and actions that are taken to strengthen credible threats may undermine credible assurances to the adversary. Moreover, different actors may have different perceptions of the same signals, which can also potentially undercut deterrence. Here, we review each of the

three elements, drawing on the literature to identify the requirements for effective deterrence on the Korean Peninsula.

Clear Demands

First, deterrence requires a clear demand about what action the target should not take. This demand must be mutually intelligible for both the deterrer and the target, and the demand must be something that the target can plausibly fulfill. Offering a lengthy list of demands may overwhelm the target and dilute the effectiveness of the deterrence strategy while obscuring the most important actions that must be deterred. Structuring a hierarchy of objectionable DPRK actions does not mean excusing or ignoring its lower-scale aggravations. Rather, when crafting a deterrence strategy, leaders must think carefully about exactly what they seek to deter, whether the DPRK action has a reasonable chance of being deterred, and whether deterrence is even the best approach. For instance, a target may be unable or unwilling to comply with all the demands because doing so will expose it to further predation in the future, undercutting attempts to obtain a positive response if it behaves.

Thus, applying deterrence theory on the Korean Peninsula requires that we begin by asking what are the unwanted actions that South Korea and the United States seek to deter and may be able to deter concerning the DPRK? While a straightforward and seemingly easy question, the answers have often been a broad array of items. At the top of the list are deterring invasion and major combat operations by North Korea, the central goal of the ROK-US alliance since the Korean War armistice. Since the 1980s, deterrence has also included the goal of dissuading North Korea from acquiring nuclear weapons and the ballistic missiles to launch them. However, following North Korea's first successful nuclear test and the maturation of its nuclear weapons capabilities, denuclearization has now become a compellence problem, with little chance of coercing North Korea to relinquish its nuclear program while preventing conflict and nuclear use remain deterrence challenges.¹⁷

Successive US presidential administrations have also believed that deterrence could play a role in restraining the growth of the North's nuclear and missile programs through sanctions and conducting exercises. Some analysts have argued that Pyongyang needs to pay some type of price for its numerous tests in hopes of deterring future efforts, yet it is unclear what costs could be imposed that would be effective without risking escalation.

Despite coercive actions taken against North Korea for its weapons development over the decades, Pyongyang has remained unfazed, and its nuclear and missile programs continue to grow. In fact, the overall strategy of seeking to deter North Korea's nuclear ambitions points to the paradox of deterrence as a nonproliferation strategy. If states acquire nuclear weapons primarily for security concerns, the threats inherent in a deterrence strategy will only exacerbate these worries and drive the would-be proliferator more quickly to its goal. Thus, the simultaneous use of deterrence, counterproliferation and defense strategies can often be at odds so that the second- and third-order effects must be factored into these approaches to avoid having one strategy undermine another.

In the Korea case, setting deterrence goals has been hampered by the tendency of some analyses to lump together a wide array of North Korean actions under the unanalytic heading of "provocations." **Table 1** below lists North Korean provocations ordered from least to most

concerning. Officials and analysts often include in the category of provocations everything from a nuclear test and ballistic missile launch to military exercises, cyber thievery and inflammatory rhetoric. For instance, [one study](#), while distinguishing between levels of severity, categorizes nuclear weapons tests, ballistic missile launches, assassination attempts, and exchanges of gunfire all as “provocations.” Analysts sometimes include North Korea’s “harsh rhetoric” alongside other forms of provocation.¹⁸ While analysts and officials likely recognize these differences, there is a tendency to conflate higher with lower-priority security goals. In turn, this tendency can complicate efforts to prioritize among them and to assess whether a deterrence strategy is even the appropriate approach for each North Korean action.

Table 1. North Korean provocations by type and in order of severity

	Type of Provocation	Examples
Signaling Activities	Inflammatory rhetoric and saber rattling	Kim Yo Jong advising the incoming Biden administration: "If it wants to sleep in peace for (the) coming four years, it had better refrain from causing a stink at its first step." March 2021
		Kim Jong Un called ROK President Yoon Suk Yeol, "a confrontation maniac" and his government a group of "gangsters" while reiterating North Korea would use nuclear weapons preemptively if necessary. July 2022
	Military exercises and parades	Live-fire artillery exercise, October 2022
		75th Anniversary of Workers' Party Parade, October 2022
		Short-range missile launch, December 2023
Capabilities Testing	Satellite launches	Missile and airplane exercise, November 2022
	Missile test launches	May, August and November 2023
	Nuclear tests	Multiple launches in 2022, 2023 and 2024
Gray Zone Operations	Aggressive/risky air, land, or maritime operations	Six nuclear tests: 2006, 2009, 2013, January and September 2016 and 2017
		Demilitarized Zone (DMZ) mine incident, 2015
		North Korean drones cross the DMZ, December 2022
	Cyber attacks	Northern Limit Line (NLL) crossing by DPRK patrol boat, April 2023
		Sony hack, 2014
		Bangladesh's national bank theft, 2016
	Maritime incursions	WannaCry 2.0 ransomware, 2017
		Gangneung submarine infiltration, 1996
Limited Use of Force	Naval clashes along the NLL	Sokcho submarine incident, 1998
	Small-scale guerrilla actions	Naval clashes: 1999, 2002, 2009 and 2010
		Blue House raid, 1968
	Limited conventional aggression	Infiltration tunnels, 1970s
		Seizure of the USS Pueblo, 1968
	Terrorist acts	Shootdown of the US EC-121 reconnaissance plane, 1969
		Shelling of Yeonpyeong Island, 2010
Large-scale Use of Force	Major ground invasion	Bombing of Korean Air (KAL) Flight 858, 1987
	Nuclear weapon use	Rangoon assassination bombing, 1983

Table: Terrence Roehrig and David Logan • Created with Datawrapper

North Korea poses numerous serious security challenges that South Korea and the ROK-US alliance seek to deter. Most troubling are major combat operations or the use of nuclear weapons. Other concerns include the use of limited force, gray zone operations and intimidation through nuclear threats to coerce some alteration of the status quo.¹⁹ For example, North Korea has long disputed the West Sea maritime boundary called the Northern Limit Line (NLL)²⁰ and could begin another campaign to challenge the legitimacy of the line or, worse, seize one of the ROK islands along the line under the cover of nuclear threats.²¹ Indeed, in June 2023, the US National Intelligence Council [released](#) a declassified portion of an intelligence estimate that argued while Pyongyang was much less likely to utilize its nuclear capability solely for deterrence or for an overt offensive strategy through the use of force, “through 2030, Kim Jong Un most likely will continue to pursue a strategy of coercion, potentially including non-nuclear lethal attacks, aimed at advancing the North’s goals of intimidating its neighbors, extracting concessions, and bolstering the regime’s military credentials domestically.”

DPRK security challenges continue in other areas. Weapons testing, especially nuclear weapons and ballistic missiles, are problematic both because they defy UN Security Council (UNSC) resolutions that prohibit these actions but also because they allow North Korea to advance its nuclear and missile capabilities. North Korea has conducted six nuclear weapons tests since the first in October 2006, and analysts have been predicting a seventh test, likely a tactical nuclear weapon, for several years. When activity around DPRK testing sites indicates the possibility of a test, strong warnings are issued by South Korea and the United States that North Korea will pay a price should it decide to follow through. Though North Korea has refrained from testing a nuclear weapon since its last in 2017, it is doubtful if ROK-US deterrence has been the decisive factor in its restraint.

Deterring ballistic missile launches has been an even more daunting challenge. Over the past three years, North Korea has conducted well over 100 missile launches of various types and ranges. While [most](#) were ballistic missiles, some of the launches included hypersonic glide vehicles along with cruise missiles, which are not covered by UNSC sanctions. The launches of proven systems such as short-range ballistic missiles were largely protests to alliance actions or a part of DPRK military exercises, while launches of longer-range missiles were efforts to improve or develop new missile capabilities. In addition, after several failed attempts, on November 22, 2023, North Korea successfully placed a military surveillance satellite in orbit, prompting another round of international condemnation. After these missile launches, Seoul, Washington and Tokyo have imposed new rounds of economic sanctions and threatened more should North Korea test again. Over the past year, China and Russia have blocked any further multilateral sanctions through the UN Security Council. Moreover, Chinese and Russian [enforcement](#) has been increasingly lax, making the ability to dissuade further missile or satellite launches through the imposition of sanctions even less effective.

North Korean actions in cyberspace have also been troublesome. A recent [analysis](#) of 273 DPRK cyberattacks against nearly 30 countries found that the chief goals of Pyongyang’s hacking are information espionage and financial theft, not destructive and disruptive cyber actions. For instance, led by Kimsuky, APT 37 and the Lazarus Group, North Korean hackers are [estimated](#) to have stolen \$1.7 billion in cryptocurrency in 2022, close to 45 percent of the global total of crypto theft for that year. While economic sanctions have taken a toll on the North’s economy, it has been able to steal millions through cyber thievery. Though analysts have devoted significant

effort to the application of deterrence concepts to cyberspace, numerous questions remain regarding the feasibility of deterrence in this domain.²²

Despite this wide array of North Korean provocations, the primary goal of ROK-US deterrence has been made clear in recent leader statements and strategy documents: deterring nuclear use. In the 2018 and 2022 Nuclear Posture Reviews of the Trump and Biden administrations, the United States declared any nuclear attack by North Korea “against the United States or its Allies and partners is unacceptable and will result in the end of that regime. There is no scenario where the Kim regime could employ nuclear weapons and survive.”²³ This was followed by the bilateral [Washington Declaration](#) in April 2023 that reiterated “any nuclear attack by the DPRK against the ROK will be met with a swift, overwhelming and decisive response.” More recently, at South Korea’s 75th Anniversary of Armed Forces Day, President Yoon [declared](#) “If North Korea uses nuclear weapons, its regime will be brought to an end by an overwhelming response from the South Korea-US alliance.”

With the goal of denuclearization unreachable for now, preventing nuclear use has become the central objective of ROK-US deterrence. But what then of the other types of provocative DPRK actions? For these other concerns, successful deterrence will require clear demands to stop unacceptable North Korean behavior that Pyongyang also understands and are plausible for the regime to fulfill. Having a long list of items included under the label of “provocations” will make it difficult to craft a clear and convincing deterrence strategy. For example, South Korea’s previous defense minister, Shin Won-sik, [declared](#), “Punishment is deterrence and deterrence is peace. If North Korea provokes us, we will punish them immediately, strongly and until the end to crush the enemy’s will and capability to conduct additional provocations.” Certainly, a major use of force is included within this matrix of concerns, but it is not clear what other actions would fall under this deterrence threat and other threats like it.

Successful deterrence should begin with a clear identification and prioritization of the provocations that the United States and South Korea seek to deter. Chief among these are North Korean nuclear use and large-scale conventional aggression. These are also, by virtue of their costs and clarity, perhaps the easiest to deter. By contrast, less severe provocations, such as cyber hacking and gray zone operations, which fall between peace and war and capabilities testing, because of their lower costs and visibility, are more challenging deterrence targets.²⁴ These actions can be less costly for the aggressor and harder to identify and attribute. In addition, their lower level of severity makes it harder to establish the credibility of coercive threats in response. This is perhaps partly reflected in the distribution of these provocations over time, as illustrated in **Table 1**.

While less severe provocations have become common in recent years, more severe actions, particularly those involving the use of military force, have not occurred for some time. Moreover, different behaviors may require different deterrent policies, including separate mixes of demands, threats and assurances, and deterrence, in fact, may not be the proper response for many of these actions. Indeed, it may not be possible to deter all adverse behaviors, and some of the provocations may be undeterrable at a reasonable cost to the defender. Yet, having a clear conception of what can and should be deterred is essential. As other analysts have rightly observed, “the more urgent question today [when it comes to North Korea] is less what the United States [and South Korea] wants than what it can reasonably live with—that is, what

it needs.”²⁵ Chief among these should be deterring and deescalating to avoid the costliest outcome—a large-scale conflict.

Credible Threats

Second, deterrence requires credible threats, such that if the target does not refrain from the objectionable act, they will either fail in achieving their goal or pay significant costs after crossing the line. At its core, deterrent threats are part of a psychological process that attempts to alter the calculations and decision making of the target by manipulating its interests and perceptions. To succeed, the defender must have an understanding of what the adversary values and what it fears. Threats to take away or destroy something the defender may think has value but is of little worth to the target will likely fail. Conversely, the defender may not truly appreciate what has the most value for an adversary, so while a particular threat may impose some level of cost, there may be other factors in play that counter this assessment. For example, a defender might threaten costly military action. However, the target’s leader may also have a tenuous domestic political situation to consider. Depending on the dynamics of what may likely be a crisis situation, the target leader may face higher domestic political costs, possibly a coup or lost election, for not crossing the red line, even if the chance of success is low.²⁶ Even in North Korea, leaders must consider domestic politics in their decision making.²⁷

Credible deterrence threats have two components—capability and resolve.²⁸ Whatever threats are made to raise the costs of an action, the target must believe that the defender actually has the capability to carry out those threats. The defender must also convince the target that they have the necessary resolve to fulfill the threats should deterrence fail, a particularly challenging task in extended deterrence. We now turn to a more detailed assessment of the capability and resolve components on the Korean Peninsula.

Capability. While deterrence on the Korean Peninsula rests on several factors, analysts typically start with an assessment of the conventional military balance. North Korea possesses a large conventional military force with 1.2 million personnel and devotes a great deal of its scarce resources to defense. Precise numbers on DPRK’s defense budget are unavailable, but the US Department of State has [estimated](#) that North Korea’s military expenditures from 2002 to 2012 ranged from 22 to 27.2 percent of its gross domestic product (GDP). In January 2023, North Korea [reported](#) its defense spending for the year would be 15.9 percent of GDP, though the veracity of this number is uncertain. However, the size of North Korea’s economy is [estimated](#) to be around two percent of South Korea’s, making its military expenditures much less compared to the South.

In several categories, North Korea has significant advantages in the amount of military hardware.²⁹ However, much of this equipment, particularly its tanks and combat aircraft, would not fare well against ROK/US forces. Many of these assets are old Soviet models dating back to the 1950s and 1960s, with only a small portion of the force consisting of more modern versions. The Korean People’s Army (KPA) also lacks fuel and spare parts to support combat operations for any length of time and would have a difficult task sustaining the logistics requirements for any major operations that last beyond 30 to 60 days.³⁰

While the KPA has numerous problem areas due to age and outdated technology, several parts of their force are very troubling. The number of artillery and rocket systems that are pointed at

Seoul are well-known and a serious threat. In the opening hours of an offensive, North Korean forces could wreak horrendous destruction on the Seoul metropolitan area before ROK and US forces might be able to quell this threat. A 2020 RAND [study](#) found that “with little warning, the DPRK could cause thousands of casualties in just a minute and more than 100,000 in an hour” with its artillery and rocket systems. At sea, North Korea’s surface fleet is large but composed mostly of small, low-tech coastal patrol vessels, though Kim Jong Un has committed to improving the capability of his fleet. Its submarine force, though outdated, is one of the largest in the world at 71 boats and could greatly complicate efforts to flow forces and supplies into Korea by sea during a conflict.

Most concerning is North Korea’s growing nuclear weapon and missile programs. Current estimates indicate the DPRK may have sufficient fissile material for up to 90 nuclear warheads, with possibly 50 assembled for delivery, largely on its medium-range ballistic missiles. While having operationalized warheads for short- and medium-range ballistic missiles, it is not clear if this is also the case yet for intercontinental ballistic missiles (ICBMs). Pyongyang continues to work on this challenge and may, in fact, be able to arm an ICBM with a nuclear warhead despite not having demonstrated the capability to this point.³¹

North Korea also has an ambitious missile program, developing an array of different types, launch platforms and ranges of ballistic missiles, including land-based and submarine-based versions, in addition to cruise missiles and hypersonic glide vehicles. For the alliance and extended deterrence dynamics, the DPRK’s achievement of an ICBM that can reach the continental United States is critical. For more than 60 years, the United States could come to South Korea’s defense without fear of North Korean retaliation on the US homeland. Pyongyang’s ICBM capability now raises the prospect, though unproven and uncertain, of a nuclear strike that might make Washington hesitate to defend South Korea. Raising the possibility of “[decoupling](#),” would the United States really [trade](#) San Francisco for Seoul? The nuclear challenge has been further complicated by North Korea’s [progress](#) on ballistic missile submarines, revealing a prototype in September 2023 of a modified Soviet ROMEO-class submarine that has ten missile hatches, four large tubes for submarine-launched ballistic missiles and the remaining six for cruise missiles. It will take considerable time for North Korea to develop a ballistic missile submarine capable of blue water operations and to field sufficient numbers of these boats for a continuous and survivable secure second-strike sea-based deterrent. However, Pyongyang is sure to continue working on growing the numbers and improving the operational skills of this portion of its fleet.

On the ROK-US side of the capability ledger, four components are in play to deter North Korea. First, South Korea has built a strong and modern military. The 2023 ROK defense budget stood at \$47.9 billion, an amount that is significantly larger than North Korea’s entire GDP.³² In many categories, the South Korean armed forces have state-of-the-art equipment, including tanks, howitzers, ballistic and cruise missiles, combat aircraft, warships and submarines, among others, that make up a formidable force in its own right.

At the same time, the size of the ROK military has [declined](#) from 620,000 active duty personnel in 2017 to 500,000 in 2022, with the number slipping further to 480,000 by the end of 2023 as the Ministry of National Defense was unable to reach its force goal of 500,000. Maintaining personnel numbers has been a challenge due to South Korea’s declining population, which

has one of the world's lowest fertility rates.³³ Demographic trends will exert greater pressure to compensate through technology and automation while raising the possibility of [including](#) women in conscription requirements. Another personnel concern has been the decreasing lengths of service in all branches of the ROK military to 18 to 21 months, depending on the branch.³⁴ Reduced largely over objections from youth, the shorter enlistment period may have an impact on training and long-term skill retention. Though these numbers raise important concerns, it is not clear how much difference they will make in Pyongyang's deterrence calculations, given the overall strength of the ROK military.

Second, South Korean military strength is supported by approximately 28,500 US forces stationed on the peninsula, which include a rotational Stryker Brigade Combat Team, an artillery brigade, a helicopter attack squadron, two F-16 fighter wings and a squadron of A-10 close-air support aircraft. These forces provide immediate combat power to defend South Korea but are also a signal of the follow-on US support that would flow in from outside Korea. Should war break out, these forces would be assisted in short order by US assets in Japan along with other units that, in time, would follow from other locales.

Third, combined US and South Korean forces would receive assistance from the United Nations Command (UNC) sending states. An attack on South Korea would be a violation of the Korean War armistice and likely trigger military support from member states of the UNC, to include possibly the United Kingdom, Canada, France, Australia and New Zealand, among others. Over the past decade, there has been a concerted effort to [revitalize](#) the UNC and increase the level of involvement of those who came to South Korea's defense in 1950. Support assistance from Japan is also likely, in part through its hosting of the seven UNC-Rear bases through which aid to South Korea would flow in support of operations on the peninsula.

Finally, the capability equation would also include consideration of the US nuclear umbrella that could be brought to bear in a Korean conflict.³⁵ Though the use of nuclear weapons is a last resort and one of many options the United States has to successfully defend South Korea, Pyongyang should never discount the possibility of a nuclear response or the dangers of nuclear escalation should it initiate a conventional war, even if it also possesses nuclear weapons.

When summing up the capability portion of a credible deterrence commitment, South Korea, the ROK-US alliance, a revitalized UNC and the US nuclear umbrella bring a great deal of military capability to the table to raise the costs and successfully deter a major North Korean military operation.³⁶ Though only Pyongyang can decide whether this is sufficient capability for the first portion of a credible ROK-US defense posture, North Korea would be faced with overcoming a high level of military power should it seek to challenge deterrence. If North Korea were to attempt to take on this array of military power, the likelihood of any conflict going badly in short order is high, making it equally likely that Pyongyang would need to escalate to nuclear use to save the regime. However, using nuclear weapons would be the death knell of the Kim family rule, and Kim Jong Un is likely well aware of this outcome. Thus, the odds of military success are very long, given the military power North Korea would face.

Resolve. The other component of a credible deterrence commitment is resolve; when issuing threats, the defender must convince the target of its determination to implement these threats should a red line be crossed. In many respects, resolve is the more difficult element of credibility. Capability assessments provide some measure of objective data, while assessing resolve entails

the far more elusive characteristics of intent. Statements of commitment or a belief that past actions demonstrate resolve may be insufficient to convince the target, particularly if the target believes the stakes are higher for its interests.³⁷

Resolve is even more challenging in extended deterrence. The defender must demonstrate to the adversary that it will come to the ally's defense should deterrence fail. Allies have used numerous methods to demonstrate the "ironclad" nature of their relationship, including security treaties, economic and military aid, and economic cooperation and integration.³⁸ Yet, when a crisis occurs, despite these indicators, the defender may decide that the costs of supporting its ally are simply not worth the benefits. To strengthen the political and economic displays of resolve, states may resort to the stationing of ground troops on the ally's territory to demonstrate the certainty of its commitment.³⁹ Land forces, instead of air or naval units, are an important distinction. In a crisis, ships and aircraft can easily move elsewhere to avoid the conflict, leaving the ally to fend for itself. Ground troops provide a tangible signal of a commitment that are less easy to retract and can act as a "tripwire" that more of the defender's forces are likely to follow.⁴⁰ Moreover, ground forces can be combat assets that contribute to the immediate defense of the ally.

In an extended deterrence relationship, demonstrating resolve is a constant challenge. Allies are regularly asking for reassurances that the defender will make good on its promise to protect, a topic we will explore further in our next section. Here, we ask the crucial question—what is North Korea's assessment of US resolve, and does Pyongyang believe the relationship is "ironclad" and credible? Does South Korea's repeated questioning of the US defense commitment also affect Pyongyang's assessment of US resolve? Again, only North Korea's assessment matters in deciding whether deterrence will be successful, and it is difficult to answer these questions with certainty. In the months before the Korean War, Kim Il Sung believed that whatever informal commitment the United States had given to South Korea, it was not convincing and believed his forces could seize the South before Washington joined the fight, presenting a *fait accompli* that the United States was likely to accept.⁴¹ Yet, the United States and the UNC coalition did join the war and were able to turn the tide, though the conflict eventually ground to a stalemate.

After the armistice ended the fighting, several measures were taken to demonstrate a more credible defense commitment, including the conclusion of a formal security treaty, US economic and military aid, the deployment of US conventional forces, initially, 63,000 including two combat divisions, and the US deployment of tactical nuclear weapons to Korea from 1958 to 1991 along with including the South under the US nuclear umbrella. Another element of the US defense commitment that is often underappreciated is the close integration of the command-and-control structure of ROK and US forces under the Combined Forces Command (CFC).⁴² Established in 1978, CFC is a highly integrated command structure with the United States in the lead that sends an important signal of US resolve, making it far more difficult for the US to abandon its commitment to South Korea.⁴³

US command of CFC also plays another role. As ROK military capabilities have grown over the years, Seoul has a much greater ability to act independently, responding as it chooses to North Korean actions. US control of CFC and operational control of allied forces during conflict, wartime OPCON, gives the US a degree of control over ROK responses to lessen the chance for escalation and triggering a wider war.⁴⁴ An important question here is what impact does

the US lead of CFC have on North Korean assessments. On the one hand, knowing the United States is likely to restrain ROK responses to DPRK actions may give Pyongyang greater latitude to challenge South Korea and the alliance, knowing the chances of escalation are less. On the other hand, the US possession of wartime OPCON demonstrates a closer ROK-US security relationship that likely strengthens deterrence. Efforts to transfer wartime OPCON to Seoul have been in the works for close to 20 years but have been delayed on several occasions. If and when the transfer occurs, the deterrence and restraint dynamics on the peninsula may change as well, giving South Korea a freer hand, but it is not clear how Pyongyang's behavior will be affected by the change given that ROK-US cooperation will remain close though CFC would be under ROK command.⁴⁵

Over the years, the alliance has had its highs and lows but has remained a critical part of the US "hub and spoke" alliance system.⁴⁶ Recent measures taken by the Moon Jae-in, Yoon and Biden administrations have sought to grow an alliance that is closer, not only on military and security matters but also as a research and development partnership along with closer economic cooperation. These measures show that even after four years of an administration that had less enthusiasm for allies, the relationship recovered.⁴⁷

As noted earlier, the chief challenge to US resolve in its alliance with South Korea is the DPRK's ability to reach the US homeland with a nuclear weapon to decouple the alliance. Over the past few years, the United States and South Korea have taken numerous steps to provide concrete evidence of US resolve, including a return to the scale and frequency of past military exercises, increased numbers of high-level meetings and statements that display the solidarity of the alliance, and closer collaboration on defense planning, particularly on nuclear issues. Though questions about resolve will always remain in any extended deterrence relationship, especially when both sides have nuclear weapons, the United States has gone to great lengths to demonstrate a close commitment to South Korean security.⁴⁸

North Korean hopes of military success against ROK-US capability might be premised, in large part, on discouraging US assistance that could result in a quick victory over the South. DPRK leaders may believe that decoupling the alliance is possible through nuclear threats and assess that if taking on South Korea alone, it could succeed. Moreover, it is possible that North Korea could miscalculate its chances of a quick victory, similar to Moscow's blunder in invading Ukraine. Yet, this judgment relies on confidence that the KPA would be able to go on the offensive and sustain operations that would lead to victory over a modern and capable ROK military that would certainly rise to defend its country. With growing ties to Russia and historic support from China, Pyongyang might believe assistance would be forthcoming. However, these hopes may be questionable if North Korea instigates the conflict.

Moreover, the assumption that North Korea's nuclear capability would decouple the alliance is a risky proposition with severe consequences should Kim Jong Un be wrong. Failing to achieve its goals with conventional forces and the likelihood of a war of attrition all but ensure that North Korea would soon be compelled to use nuclear weapons, an action that would seal the end of the regime.

When viewing the full picture of the credibility of ROK-US deterrence, North Korea would face significant obstacles if it chose to challenge the alliance. The risks would be high, and the consequences grim for North Korea if it embarked on this path. As a result, while many

assessments raise questions about the credibility of deterrence on the Korean Peninsula and the need to strengthen deterrence, when viewing security through the lens of deterrence theory, strategic deterrence is not as fragile as some argue and, in fact, is robust. Yet deterrence theory also reminds that the only judgment that matters is North Korea's assessment of credibility.

Costs and Risks. When crafting credible threats, there are some important cautions for defenders to consider. Before issuing threats, defenders must assess the potential costs and risks they are willing to undertake if deterrence fails, and they must carry out the threats.⁴⁹ It is easy to issue threats to retaliate during peacetime, yet a defender may underestimate the costs of implementation should deterrence fail. If the threat entails military action, following through can begin an escalation spiral with deadly consequences that the defender seeks to avoid. Consequently, the defender may be faced with a difficult choice of following through on high-priced threats that carry the risk of escalation by the target state or being forced to back down, undercutting its reputation and overall ability to issue credible threats in the future. In Korea, the vulnerability of Seoul to a North Korean counterstrike casts a long shadow over any ROK/US threats to retaliate against the Kim regime.

Moreover, the defending state also faces a general consideration of whether its threats should be a proportional response or seek to escalate, believing this is necessary to send a message to the target. If the target believes that the costs to the defender are high or only sustainable for a short period of time, the target may doubt the credibility of the threats. Similarly, the target may decide that it can wait out the defenders until they tire with a calculation that it can endure short-term pain for a longer-term benefit. For instance, threats to impose economic sanctions are intended to offer the prospect of pain for the target but are also well known to have costs for the threatening state.⁵⁰ All of these decisions raise the prospect of significant risk that the defenders must consider when constructing their deterrence strategy.

Another caution concerns the linkage of threats to stability. While deterrence seeks to maintain the status quo and coerce the target from taking an unwanted action, deterrence threats can also be overly provocative in ways that may undercut stability, particularly if the threats pose the possibility of taking out a target state's ability to deter the defender. Successful and stable deterrence is often built on the uncomfortable reality that both sides are vulnerable. Thus, deterrence is typically interactive between two or more adversaries and is multidirectional with the likely presence of security dilemma dynamics where actions taken by one state to improve its security through what it views as largely defensive measures are seen by adversaries as threats to its security, prompting a counter response.⁵¹

In the Korean case, both North and South Korea have exchanged threats of decapitation strikes and preemption if an attack appeared imminent. In 2016, during a particularly tense time on the peninsula resulting from DPRK nuclear testing, South Korea officially announced the formation of the Korea Massive Punishment and Retaliation Plan (KMPR) that would become part of a three-pronged strategy to deal with North Korea's nuclear weapons threat. The other two components are Korea Air and Missile Defense (KAMD) and Kill Chain; together, they are labeled today as the "ROK 3K Defense System." Kill Chain is [intended](#) for preemptive strikes on North Korean targets "when there are clear signs of nuclear and missile use by North Korea." KMPR posed the certainty of large-scale ROK retaliation using missiles and aircraft to strike DPRK military facilities but also to target Kim Jong Un and North Korean leadership in a

decapitation strike, essentially a deterrence by punishment strategy. According to a media report, ROK defense analysts [note](#) that Pyongyang would be divided into districts and destroyed if Kim Jong Un is believed to be hiding there. ROK military officials also announced the creation of a special forces brigade dubbed the “decapitation unit” that could be utilized for this effort.

North Korea has countered with announcements of its own version of a preemption and decapitation doctrine that are often tied to protests against ROK-US military exercises. In 2016, North Korean media reported Kim Jong Un’s supervision of drills simulating strikes on the Blue House, then South Korea’s presidential office, and that these would be undertaken at the “[slightest sign of intrusion](#).” In another response to ROK-US spring exercises, Kim [called for](#) a “preemptive nuclear strike of justice” should the North be threatened. Complaining about the fall 2016 Ulchi Freedom Guardian exercise, a North Korean military spokesperson [remarked](#) that if US and South Korean forces “show the slightest sign of aggression” the DPRK is ready to respond with a “Korean-style pre-emptive nuclear strike.”

The latest addition to Pyongyang’s pronouncements, likely a response to South Korea’s 3K System, is contained in the September 2022 law that provides five justifications for the use of nuclear weapons. Among these scenarios are an attack or imminent attack by nuclear weapons, or other weapons of mass destruction (WMD), and a nuclear or non-nuclear attack imminent or underway against state leadership or nuclear command and control systems. The law also [notes](#) that if the command-and-control system is “placed in danger” from an attack by hostile forces, “a nuclear strike shall be launched automatically and immediately to destroy the hostile forces.” The law lowers the threshold of nuclear use by claiming a justification to preempt with nuclear weapons but can also be read as North Korea’s counter to fears that a preemptive strike could take out its leadership and nuclear deterrent, a mission that could be accomplished with nuclear or conventional weapons.

International law acknowledges the right to “anticipatory self-defense” so long as there is a necessity to act defensively and that the response is proportionate to the threat.⁵² However, if both sides in an adversarial relationship make strident, public declarations of these plans, should tensions rise to dangerous levels with serious concern for conflict, there is [strong motivation](#) to be the first to strike. These kinds of pressures severely [undercut](#) crisis stability and worsen an already dangerous and fragile security situation.

Credible Assurances to the Adversary

Third, deterrence requires credible assurances to the target that if it complies, that the threats will not materialize. As Schelling noted, “To say, ‘One more step and I shoot,’ can be a deterrent threat only if accompanied by the implicit assurance, ‘And if you stop I won’t.’”⁵³ Both scholarly and policy discussions of deterrence have systematically discounted the importance of assurances to the target state.⁵⁴ However, credible assurances are just as necessary for deterrence as clear demands and credible threats.⁵⁵ And, as with the other elements of deterrence, assurances are only effective if the target believes them.

Recent studies have begun to verify the importance of credible assurances to convince a target that it will avoid pain if it refrains from aggression.⁵⁶ Credible assurances are even more important when powerful actors seek to deter weaker states because strong states often underappreciate the reputational costs a target will incur from conceding to a coercive threat.⁵⁷

The importance of credible assurances in deterrence can be seen throughout the post-World War II history of the Korean Peninsula. Tom Christensen has shown that insufficiently credible assurances partially contributed to the outbreak and escalation of the Korean War as the United States was unable to credibly assure Communist leaders that US military presence in the region and its alliance with Japan would not be used to attack North Korea in the future.⁵⁸

The challenge of establishing credible assurances continues today. Equating credible assurances with trust, General Vincent Brooks, former Commander of United States Forces Korea, [observed](#) that “without trust we’ll find it difficult to move forward” with improved relations in Korea, and similarly, former North Korean Foreign Minister Ri Yong Ho [remarked](#) that “Without any trust in the US there will be no confidence in our national security and under such circumstances there is no way we will unilaterally disarm ourselves first.” Yet on a number of occasions, Washington and Seoul have offered assurances to Pyongyang that included scaling back or canceling exercises, disavowals of aggressive intent and promises to refrain from the use of force that at the time offered some chance of building trust but were unsuccessful demonstrating the challenge of making assurances that are credible to an adversary.⁵⁹

Moreover, North Korea, South Korea and the United States are seeking to simultaneously deter each other, and both sides have little confidence in their adversary’s assurances to refrain from striking, even if they behave. As James Fearon has [argued](#), the problem on the Korean Peninsula “isn’t that we can’t trust them. It’s that they can’t trust us.” Consequently, the lack of credible assurances, as perceived by both sides, will remain a problematic element of deterrence in Korea for years to come.

There are several challenges to credibly assuring the adversary. First, actions taken to enhance the credibility of threats (a necessary element of deterrence) may undermine the credibility of assurances to the target. Persistent, over-the-top threats to punish the target if deterrence fails can make it very difficult for the target, particularly if it is weaker, to view messages of assurance as reliable. Second, Todd S. Sechser notes, “although a challenger might want to promise that today’s threat will be the last, these promises will lack credibility if the challenger possesses the ability to project military power, since it could easily return with additional demands if it ever changes its mind.”⁶⁰ Third, the inherent tension between threats and assurances is likely exacerbated by the tendency of both sides to adopt worst-case assumptions and question the credibility of any assurances. Finally, defenders may face domestic political obstacles to establishing credible assurances. For instance, Meriel Hahn and Peter Harris argue that US domestic politics prevent US policy from offering the concessions necessary for North Korean denuclearization and that these domestic political obstacles have only strengthened over the last two decades.⁶¹

In addition to these inherent challenges to creating credible assurances in any deterrence relationship, there are particular features of the US-DPRK relationship which further undermine credible assurances. Spencer Bakich argues that a deficit in signaling capacity, including a “biased intelligence portfolio, lack of diplomatic-military integration and inflexible military doctrine and war plans,” inhibited US attempts to credibly signal to North Korea in the 2017 crisis between the two states.⁶² North Korean leaders have witnessed multiple governments that abandoned nuclear weapons or nuclear weapons programs and subsequently suffered regime change or invasion, such as Iraq and Libya, further undermining security guarantees aimed at

encouraging denuclearization. In response to US military action in Libya, North Korea's *Korean Central News Agency* [stated](#) that “‘Libya’s nuclear dismantlement’ much touted by the US in the past turned out to be a mode of aggression whereby the latter coaxed the former with such sweet words as ‘guarantee of security’ and ‘improvement of relations’ to disarm itself and then swallowed it up by force.”

Finally, efforts by South Korea and the United States to communicate demands, threats and assurances are complicated by North Korea’s opaque decision making processes and domestic political institutions, coupled with the lack of formal diplomatic relations and communication channels connecting Pyongyang with Seoul and Washington. As a result, both sides must rely on estimates and perceptions that may or may not be correct readings of intent and whether deterrence signals have been received as intended.

Deterrence: Interests and Perceptions

For ROK-US deterrence on the Korean Peninsula, only one actor decides whether deterrence is successful—North Korea—which makes understanding Pyongyang’s interests and perceptions crucial to formulating and implementing deterrence policy.⁶³ Similar to other coercive strategies, deterrence requires the “unhappy cooperation” of the target.⁶⁴ The clarity and credibility of demands, threats and assurances are all in the eye of the beholder, and if the target misunderstands any of these, then deterrence may fail, regardless of how clear and credible the deterring state finds its own signals.⁶⁵

Effective deterrence must begin with an assessment of the interests and beliefs of the target to be deterred. There are admittedly significant challenges to understanding North Korea;⁶⁶ the regime is a personalist, totalitarian state with tight control over information. It has limited connections to the outside world and no formal diplomatic relations with South Korea or the United States. The history of inter-Korean and US-DPRK relations is beset with misperceptions, blunders and bluffs, further complicating efforts to develop an accurate picture.⁶⁷

However, despite these challenges, it is possible to formulate a rough appreciation for North Korean interests and perceptions by analyzing regime behavior and employing what former US National Security Adviser H.R. McMaster called strategic empathy.⁶⁸ To craft effective policy, it is essential to view the interests and motives from the perspective of others, especially when they are adversaries. Strategic empathy does not mean one is sympathetic or in agreement with these positions but that an understanding of how another sees the world is crucial to providing effective policy responses.

The DPRK has an array of interests and goals that are largely consistent with most states seeking security, prosperity and respect, while other interests are uniquely North Korean and consistent with a repressive authoritarian system focused on internal control as well as external security. There is broad consensus among analysts that the primary aim of North Korean leaders is ensuring the survivability and affluence of the Kim family regime and other ruling elites. The distinction here is crucial for understanding DPRK behavior. The aim is to preserve the rule of the Kim family, along with its political and economic interests, but not necessarily for the benefit of the North Korean people. Maintaining the well-being of elites at the expense of the

general population is a crucial effort to ensure their loyalty and give them a stake in the regime's longevity. As we discuss below, this means protection from both internal and external threats is the regime's central interest.

While ensuring the economic interests of the regime along with those of party and military elites, Kim Jong Un has also periodically expressed concern for the overall economic development of the country. In 2013, Kim introduced the byungjin line that sought to simultaneously acquire nuclear weapons and grow the economy. On a few occasions early in his tenure, he also introduced economic reforms and, more recently, devoted resources to the goals of building housing and light industry, though the success of these efforts remains to be seen. Kim Jong Un was successful in developing his nuclear and missile capabilities, thanks to the diversion of a large share of state resources, but the broader economy continues to struggle. As one measure of these difficulties, a 2022 UN report [noted](#) that 10.7 million, or 40 percent of the population, is undernourished and in need of food assistance. While economic growth is important, North Korean leaders will often sacrifice the well-being of the populace for the interests of the regime.

Another goal has been North Korea's quest for respect and international status.⁶⁹ Developing nuclear weapons and advanced missile systems moved the DPRK into an exclusive club. Having nuclear weapons is a significant achievement to bolster the regime's domestic credibility while also elevating its status internationally, in the minds of North Korean leaders, and is perceived as improving its ability to pursue its interests from a stronger position.⁷⁰

Finally, an interest of both Koreas since the division in 1945 has been reunification, but in January 2024, North Korea made an abrupt change to its position. For decades, North Korea sought the goal of reunification of the peninsula under North Korean leadership, with the Constitution declaring "reunification of the country as the nation's supreme task" and in 1950, invading the South to achieve that goal. However, by the 1990s, while continuing its public commitment to reunification, including signing several North-South agreements that address unification, Pyongyang had likely discarded the objective as unrealistic.⁷¹

However, in 2024, Kim Jong Un formally [scrapped](#) the goal of reunification, declaring South Korea as its "principal enemy" and saying, "we cannot go along the road of national restoration and reunification together with the ROK clan that adopted as its state policy the all-out confrontation with our Republic, dreaming of the 'collapse of our government' and 'unification by absorption.'" He followed with a commitment to remove any reference to reunification from the DPRK constitution, disbanding all government organizations tasked with reunification responsibilities, and ordered the destruction of the reunification arch in Pyongyang, calling it an "eyesore." Though there remains concern that North Korea might use force or nuclear coercion to achieve reunification, the ability to achieve this goal, and even if initially successful, to maintain control over the South is highly doubtful and likely evident to the leadership in Pyongyang. Thus, reunification is a threat to North Korea's goal of regime survival and has now been formally discarded in favor of coexistence.

A greater appreciation of the interests and perspectives of North Korean leadership helps to assess the risks of deliberate North Korean military aggression and to better understand North Korean behavior. Despite the agreement among analysts on North Korea's concern for regime survival, they often fail to appreciate the diversity of threats to that survival. As Patrick Cronin highlights, the regime likely perceives a range of dangers, including external invasion,

military coup, elite political factions, domestic uprisings and economic collapse.⁷² Historically, authoritarian regimes have been more likely to collapse from within. In the post-World War II period, only four percent of autocratic regimes collapsed due to foreign intervention, compared to 35 percent from coups and 25 percent from popular uprisings.⁷³ North Korea has long confronted domestic challenges that might raise fears of coups or uprisings.⁷⁴ Officials are still periodically purged in the name of coup-proofing or promoting the political superiority of the leader, suggesting the Kim regime may still fear domestic challenges to its rule.⁷⁵

Over the past decade, a particular concern has been the influx of “ideological pollution” in the form of music, videos and other media, largely from South Korea and the United States, that challenge state media control and the regime’s narrative. North Korea’s quick and tight COVID-19 lockdown, while a response to the health crisis, also likely had political motives, intending to seal off the country from the growing threat of outside information. While North Korea has squelched past intrusions of outside information, Benjamin Katz Silberstein [notes](#):

The COVID-19 pandemic has also given ammunition to those within the state apparatus who wish to see stronger crackdowns on both economic and social misbehavior; likewise, the strict border controls—withstanding their disastrous economic results—may partially stem from the security state using the pandemic to further political interests.

The government followed by ramping up punishments and the enforcement of laws curtailing the sale and possession of foreign media. In addition, the lockdown sealed off both legal and illegal commerce with China, which had a devastating effect. In many respects, the COVID-19 lockdown did more to punish the North Korean economy than the enforcement of UN sanctions. Again, there was also likely a political motive as halting Chinese trade curtailed the growing accumulation of wealth and power for those North Korean entrepreneurs, the *donju*, involved in these activities, who were another internal threat to the regime. Thus, despite placing a major strain on the DPRK economy, the COVID lockdown reasserted greater political control by reining in the marketization and decentralization of the economy and returning power to the state.⁷⁶

Further, as Cronin notes, “External and internal threats may also be mutually reinforcing” in ways that increase the regime’s security fears and help make sense of North Korean behavior.⁷⁷ Research suggests that political elites are able to exert greater control of the military when confronting external threats.⁷⁸ One recent study finds that “a country in a militarized confrontation with another state is about 60 percent less likely to experience a coup attempt in the subsequent year.”⁷⁹ Maintaining and managing an antagonistic relationship with South Korea and the United States help the Kim regime undercut internal threats by catering to domestic hawks and providing a rationale for maintaining tight political control through a national security state that emphasizes the need for internal cohesion to fend off external threats. In this way, North Korea might resort to external aggression, not in response to perceived changes in its external security environment, but rather to respond to potential internal threats.

While information on North Korean decision making is extraordinarily difficult to come by, there is evidence that North Korean leaders perceive an array of these internal and external threats. Some analysts have [argued](#) that North Korean claims to develop nuclear weapons to deter and defend against possible South Korean and US aggression are a “false narrative” and “nonsensical.” They highlight the reduction in the size of the South Korean military,

the withdrawal of US nuclear weapons from the peninsula, the consistent South Korean-US statements that military exercises are defensive in nature, and the repeated security assurances provided by US administrations to the North Korean regime as evidence of lessening security threats to the DPRK.⁸⁰ Yet, these actions are also often accompanied by ROK-US threats and exercises to use decapitation strikes and open discussion of undermining regime stability and fomenting the downfall of the regime.⁸¹ These threats also undercut security assurances and assertions that exercises are only defensive, which North Korea has received in the past.

It is difficult to know for certain how North Korean leaders assess their security environment, but DPRK rhetoric and behavior suggest they see serious security challenges. For example, after several years of scaled-down ROK-US joint military exercises (JME), in 2022 these drills resumed to previous levels with some billed as the “largest ever.”⁸² Though Pyongyang’s response to military exercises, including these post-COVID drills, has varied, a 2021 study by Jordan Bernhardt and Lauren Sukin note that the pattern of North Korean responses to these JMEs provides evidence that North Korea views them as threatening. They find that “North Korea systematically responds with aggression to South Korean JMEs” and that “the intensity of North Korea’s responses to JMEs is driven by the severity of the threat particular exercises pose, indicating that North Korea responds to JMEs as serious security threats.”⁸³

Moreover, the ROK-US capabilities that undergird credible deterrence threats by definition are intended to be perceived as threatening so as to alter North Korea’s cost-benefit calculus. Whether or not these threat perceptions are accurate, they may well be sincere and help provide possible explanations for North Korea’s continued reluctance to moderate its actions.

North Korean leaders and official documents directly link the country’s nuclear forces to regime insecurity. In the September 2022 SPA speech, Kim [stated](#): “What the United States tries to achieve is not merely to remove our nuclear weapons; its final objective is to overthrow our government some day by inducing us to abandon the nuclear weapons and further give up our capability of exercising the right to self-defence.” Consequently, Kim argued “we can never give up the nuclear weapons” and that “we have come to possess by law a war deterrent as a means for defending the state.” This language echoes past statements, including remarks delivered to the United Nations by North Korea’s foreign minister stating that “[North Korea’s] national nuclear force is, for all intents and purposes, a war deterrent for putting an end to [the] nuclear threat of the US and for preventing its military invasion.”⁸⁴

While this rhetoric certainly is part of an effort to build favorable narratives for both domestic and international audiences, it may also reveal North Korean perceptions. Indeed, threats issued by North Korean propaganda toward external targets are most likely when perceived adversaries conduct combined military exercises or take steps that may be seen as undermining North Korea’s nuclear deterrent.⁸⁵ These threats are not merely “cheap talk”; they systematically reveal regime threat perceptions, and as the volume of these threats increases, so does the probability of North Korea engaging in military provocations.⁸⁶ Moreover, recent DPRK statements are often couched in language that indicates it will respond if it is attacked, an important qualifier and reminder that Pyongyang is also implementing a deterrence strategy. Thus, Kim Jong Un has [stated](#) that our defense measures are “not a means of preemptive attack for realizing unilateral ‘reunification by force of arms’ but the capabilities for legitimate self-defence,” and “we will never unilaterally unleash a war if the enemies do not provoke us...If the enemies ignite a war,

our Republic will resolutely punish the enemies by mobilizing all its military forces including nuclear weapons.”

In addition to specific references to deterrence, Kim Jong Un has also identified a second mission for DPRK nuclear weapons. In an April 2022 statement, he [declared](#): “If any forces try to violate the fundamental interests of our state, our nuclear forces will have to decisively accomplish an unexpected second mission.” The September 2022 law that clarified DPRK nuclear doctrine [added](#) that its nuclear forces “are a powerful means for defending the sovereignty, territorial integrity and fundamental interests of the state....” Though the “second mission” and “fundamental interests” have not been fully defined, these statements are also a reminder that North Korea likely views its nuclear weapons capability as largely a deterrent, but should deterrence fail, all options are on the table; this language should not be surprising for any state’s defense posture. Further, if North Korea were intent on using its nuclear weapons for coercive or offensive leverage, then proclaiming its defensive purpose would undermine those goals as it would undercut the credibility of nuclear signaling for coercive purposes. This is particularly true for an isolated state with little left to lose diplomatically by violating norms related to issuing nuclear threats.

Faced with this array of challenges, weaknesses and threats, it is hard to see how North Korean leaders would find large-scale conventional aggression valuable for accomplishing their goals. The US intelligence community appears to agree that North Korea is unlikely to use its nuclear weapons for offensive purposes. The June 2023 National Intelligence Estimate [argued](#) that while “North Korea most likely will continue to use its nuclear weapons status to support coercive diplomacy,” it is “much less likely that Kim will choose an offensive pathway in which he seeks to use force, including the possible use of nuclear weapons, to split the US-South Korea alliance and establish clear political and military dominance on the Peninsula.”

Deterrence Dilemmas

Successfully deterring an adversary is a difficult endeavor. Extended deterrence is particularly challenging because the defender is simultaneously seeking to deter an aggressor while also reassuring its ally. Though these two elements of extended deterrence are closely linked, they can also be at odds. Moreover, making the threats that are the core of deterrence, and more importantly, the decision to carry them out should deterrence fail, raises a host of unnerving challenges with the possible risks of further escalation. In this section, we address two of these challenges: the difficulties of simultaneously deterring North Korea while also trying to reassure South Korea that the US defense commitment is solid and credible and the challenge of offering credible threats that consider the costs and dangers of possible escalation should they need to be implemented if deterrence failed.

Deterring Adversaries and Reassuring Allies: Different Goals?

Deterrence on the Korean Peninsula illustrates the dynamics of what has been dubbed the Healey Theorem, which suggests that reassuring allies is more difficult than deterring adversaries. Former UK Defense Minister Denis Healey, reflecting on the US role in Europe, observed that “It takes only five percent credibility of American retaliation to deter the Russians but ninety-five

percent credibility to reassure the Europeans.”⁸⁷ Over the past few years, the United States has undertaken numerous measures directed primarily at reassuring the South rather than deterring the North. For example, after several years of scaled-back exercises to accommodate diplomatic efforts and as a result of COVID-19, in the fall of 2022, South Korea and the United States resumed large-scale military exercises, increasing their size and frequency along with having greater integration of strategic assets in the drills.

Significant efforts to reassure South Korea have also occurred through numerous high-level meetings, including the Moon-Biden summit in May 2021, followed by two more with the Yoon and Biden administrations, the first in May 2022 when Biden visited South Korea and in April 2023 with Yoon’s journey to Washington. The joint statements from these meetings were lengthy and ambitious with the expected affirmation of “the US extended deterrence commitment to the ROK using the full range of US assets, including nuclear, conventional and missile defense capabilities,” along with other measures to strengthen deterrence. The meetings have also been noteworthy for their aim to broaden the ROK-US relationship, including initiatives that strengthen economic and technology cooperation through joint efforts to address climate change, supply chains, pandemics and cybersecurity, among others. While these measures are not directly related to Korean Peninsula security, they do provide another demonstration of the depth of the relationship and the strength of ROK-US bonds.

Key measures addressed during the summits related specifically to extended nuclear deterrence and planning. During the first summit, Seoul and Washington announced the reactivation of the Extended Deterrence Strategy and Consultation Group, which had not met since 2018. During the press conference that concluded the second summit in 2023, Biden [remarked](#), “Our mutual defense treaty is ironclad, and that includes our commitment to extended deterrence...that includes the nuclear threat and—the nuclear deterrent,” a sentiment [reiterated](#) in their summit joint statement.

The most significant outcome from the April 2023 summit regarding deterrence was the promulgation of the Washington Declaration. In the months leading up to the summit, pressure had been growing in South Korea for either the return of US tactical nuclear weapons or building a ROK nuclear weapon to counter North Korea’s growing nuclear arsenal. ROK public opinion surveys were [showing](#) strong support for an indigenous nuclear weapons program that ran counter to long-standing US policy of nuclear nonproliferation, including among allies. The Washington Declaration was an effort to reassure South Korea of the US nuclear commitment and head off Seoul’s nuclear aspirations. [Characterized](#) as a “software update” by Ankit Panda, the declaration upgraded, packaged and promoted existing mechanisms that focused on consultation and planning, including a [commitment](#) by the United States to “make every effort to consult with the ROK on any possible nuclear weapons employment on the Korean Peninsula,” planning to integrate ROK conventional forces into US nuclear operations, increased joint operational planning, a renewed South Korean commitment to remain in the Nuclear Non-Proliferation Treaty, and perhaps most importantly, the creation of a bilateral Nuclear Consultative Group (NCG) for nuclear and strategic planning.

It is important to note that closer integration of ROK conventional forces may serve multiple purposes. First, it is an important step to implement the Pentagon’s concept of “integrated deterrence” to increase the strength of the US defense posture through greater collaboration

with allies. The measure also likely has a second purpose. While the primary goal of extended deterrence is to protect allies, it may also play a role in restraining them. Consequently, the second purpose may also have been [intended](#) to limit South Korea's ability to operate independently by further enmeshing ROK-US military planning.

In the lead-up to the summit, some of the discussion in South Korea had centered on the creation of a NATO-like Nuclear Planning Group (NPG) that deals with all NATO nuclear matters and a nuclear-sharing arrangement whereby the United States deploys nuclear weapons to bases in Europe and some NATO members share the mission of delivering the weapons in dual-capable aircraft. However, the nuclear weapons, as well as any decision to use them, remain under US control. While the NCG follows the NATO NPG model regarding planning and consultation, the Washington Declaration did not include deployment or sharing of the mission of delivering nuclear weapons.⁸⁸ While some in South Korea were disappointed in this arrangement, believing it did not go far enough and tied South Korea's hands from acquiring an indigenous nuclear capability, the measure provided important assurances to South Korea of the US defense commitment and added another layer to the credibility of that obligation. For a time, the Washington Declaration did help tamp down the ROK's desires for its own nuclear weapons. However, the issue never went away and has [resurfaced](#) in South Korea with renewed enthusiasm.

While efforts to reassure and deter are linked, they may be distinct and also sometimes be in conflict. The target of deterrence, the adversary, is different than the "target" for reassurance. The motives, perceptions and assessments of their security situation may be vastly different, particularly if the power relationships among the players have significant asymmetries. Actions taken to reassure an ally may have little impact on deterring an adversary. Thus, have the increases in ROK-US nuclear planning had much effect on North Korea's perception of the US "ironclad" commitment?

In addition, efforts to reassure the ally of the defender's commitment may be viewed by the adversary as "piling on" and can potentially undercut the credible assurances to the adversary that are necessary for successful deterrence. If displays of military strength are extreme and suggest to an adversary that regardless of whether they behave or not, military action and punishment may be forthcoming, they will do little to promote a stable deterrence situation.

Instead, excessive measures to reassure may inadvertently increase the adversary's insecurity and threat perceptions in ways that prompt it to further increase its military capability, which can make crises less stable and escalation more likely. Moreover, given South Korea's security worries, there will likely be continuing fears that "it's not enough" regarding US gestures of resolve, prompting Seoul to further increase its own conventional capabilities that further fuel an arms race and undercut stability.⁸⁹

As noted earlier, if both sides of a deterrence relationship have "loud," public declarations of capability and intent toward preemption doctrines and decapitation strikes, in a crisis, there will be a strong incentive to be the first to strike and hence, undercut crisis stability. For another example, there has often been a call for the increased presence of US strategic assets, including the use of nuclear-capable bombers and submarines as demonstrations of the US commitment and the nuclear umbrella. The result can be a version of what Glenn Snyder called the "alliance security dilemma."⁹⁰ Actions taken by South Korea and the United States that are believed to be

purely defensive and intended to bolster deterrence while reassuring Seoul may be viewed in Pyongyang as provocative and threatening.⁹¹ In turn, North Korean actions that it may believe are intended to reinforce deterrence will be perceived as threatening and prompt a response from the alliance.

Though both sides may share a common goal in avoiding large-scale conventional conflict, there may still be security dilemma dynamics at play based on mutually reinforcing perceptions of threat. As discussed above, North Korean reactions to South Korean joint military exercises indicate a significant insecurity on the part of Pyongyang, even though those exercises are aimed at shoring up the South's defensive capabilities. Conversely, South Korea's poor strategic geography makes it particularly vulnerable to the prospects of North Korean aggression and to view DPRK provocations as deeply threatening.

Another consideration regarding the interplay of deterrence and reassurance is that excessive attention to reassurance may miss important areas where deterrence preparation and signaling are lacking.⁹² Thus, the focus on reassurance may do far less to improve strategic deterrence while giving insufficient attention to other important deterrence considerations. In the Korean case, most of the attention has been focused on strategic deterrence and reassurances to South Korea concerning the North Korean nuclear threat. As a result, deterrence at the strategic level is relatively secure, but the extensive attention to this area misses the need to address other levels, particularly conventional deterrence and gray zone actions where other more dangerous and likely scenarios await.

Risk and Escalation

A second dilemma for a successful deterrence strategy is managing the challenges of risk and escalation. Following through on the threats to retaliate if deterrence fails carries risk; though the target has already disrupted the peace, the defender's response to a deterrence failure raises the possibility of continuing the conflict or escalating to higher levels of violence, with both posing the likelihood of significant costs. Credible deterrence requires the target to be convinced of the certainty of the defender's response; yet to follow through means the costs could increase dramatically, particularly if nuclear weapons are part of the calculus. Deterrence threats and the responses should deterrence fail also need to consider whether the retaliation should be proportional to the act or escalate with the intent to raise the costs further to lay down a marker for future deterrence.

For South Korea, any threat to respond occurs with the risk of starting a broader conflict, which would be particularly costly given the proximity of Seoul to the North Korean border. Should a clash escalate, North Korea could quickly launch rockets and long-range artillery rounds with devastating effect. Over the years and despite Seoul's vulnerability, South Korea has often been more willing to respond to North Korean actions with direct strikes on the DPRK, but Washington has been reluctant for fear of sparking a wider conflict.⁹³ For example, in 2010 after the North Korean shelling of Yeonpyeong Island, South Korean anger was palpable and in addition to returning artillery fire, ROK officials were ready to escalate with airstrikes on North Korean targets that went beyond DPRK artillery positions. US officials were very concerned with how this might play out and then-US Secretary of Defense Robert Gates noted in his memoirs:

We were worried the exchanges could escalate dangerously. The president, [Secretary of

State] Clinton, [Chairman of the Joint Chiefs] Mullen, and I were all on the phone often with our South Korean counterparts over a period of days, and ultimately South Korea simply returned artillery fire on the location of the North Korean's batteries that had started the whole affair.⁹⁴

Of course, there are also risks in taking an insufficiently robust action or not responding at all, which emboldens the perpetrator or others to conduct subsequent actions that challenge the security of the defender and its ally. In fact, the aggressor may perceive a limited response as a signal of weak resolve and an opportunity to escalate its pressure further. Central to deterrence is the target's assessment that crossing a red line will impose the certainty of unacceptable costs. Yet, credible threats must be carefully calibrated to assess the risks and stakes should the conflict escalate, including an assessment of the risks and stakes of the adversary. In turn, the target will be making similar calculations with the chance that either one or both sides will misperceive the other side's assessment.

In addition, the ability to manipulate and demonstrate a tolerance for risk is the core of brinksmanship that, if handled successfully, can lead to a tense but effective outcome in a crisis. In the Korean case, many assessments maintain that the North is willing to tolerate an inordinate amount of risk to the point of being irrational, making it a very difficult adversary to deter. Over the years, Pyongyang's behavior has supported this assessment on many occasions, as the list of provocative North Korean actions is long. Yet, these actions have also often remained within the limits of "gray zone" operations where DPRK actions seek to challenge the status quo but can be dialed back if they incite an unacceptable response. Moreover, Jung H. Pak, former Deputy Assistant Secretary of State and CIA analyst, [offered](#) this assessment in 2020 of Kim Jong Un's rationality: "Over the years, the US intelligence community has firmly concluded that Kim is rational and his primary purposes for having nuclear weapons are deterring rivals, maintaining his country's international status, and securing his regime's survival."

While deterrence theory typically makes an assumption of leaders being relatively rational, for North Korea, past assessments by leaders and analysts have often pointed to an assumption of irrationality, which, by definition, makes successful deterrence near impossible since there is little chance to influence Pyongyang's cost-benefit calculation under those conditions. Though the debate over North Korea's intentions and tolerance for risk continues and fewer analyses challenge Kim's rationality, these factors, particularly assessments of credibility, risk tolerance, rationality and the dangers of escalation, remain crucial calculations, not only for themselves but also for their adversaries and are susceptible to misperception in a crisis that can lead to deadly outcomes.

The most likely path to large-scale conflict on the peninsula today is not the failure of strategic deterrence in the face of deliberate North Korean aggression but, rather, the escalation of a crisis. While deterrence against a large-scale conventional or nuclear conflict appears strong, it may prove more challenging to deter lower-level aggression. In the past, North Korea has regularly engaged in provocative behavior, including ones that have turned deadly. For example, incidents similar to the sinking of the ROKS *Cheonan* or the shelling of Yeonpyeong Island and other maritime gray zone activities aimed at changing the status quo in the Yellow Sea may be future concerns.⁹⁵ Each of these actions and the crises they produce are significant not only in their own right but also because they have the potential to escalate into a larger conflict. Escalation risks

are more pronounced given the profound strategic distrust and poor communication that pervade relations on the peninsula. The maturation of North Korea's nuclear weapons capabilities might further embolden low-level aggression if North Korean leaders believe that nuclear weapons can provide a shield against significant retaliation.⁹⁶

Conclusion

The security environment is changing, not only in Korea but regionally and globally, which will require adjustments to how we think about and implement deterrence strategies. Some have suggested that these changes require a radical rethink of deterrence to cope with these new realities. However, we have argued here that traditional deterrence theory continues to provide important guidance, not only for asking the right questions, but also for determining correct answers.

Our analysis has several implications for scholarship on deterrence and alliance dynamics, as well as for policy on the Korean Peninsula. First, in terms of policy, the analysis suggests that, contrary to recent warnings, deterrence on the Korean Peninsula is stronger than many think. A deterrence failure would result in significant costs for South Korea and the United States, particularly given the vulnerability of Seoul to North Korean artillery along with its growing nuclear capability. However, despite the devastating costs for South Korea, any conflict on the peninsula would be catastrophic for North Korea and the Kim regime. Further, it is unclear how North Korea could view large-scale conventional aggression as promoting any of its core objectives. A resumption of large-scale fighting on the peninsula would be devastating for South Korea, but a conflict would also likely be the end of the Kim regime, and it is hard to imagine Pyongyang could see otherwise.

While reunification under Pyongyang's leadership had been an oft-repeated rhetorical objective, seeking to achieve that goal offers the likelihood of a disastrous outcome that jeopardizes the central objective of regime survival. North Korea's rejection of reunification appears to indicate that it is publicly acknowledging this reality. The prospects of deliberate North Korean large-scale military aggression are, therefore, small. Rather, the most likely path to large-scale conflict involves strategic miscalculation or crisis escalation. Thus, ROK-US policy needs to focus on moving toward greater strategic stability and building mechanisms for crisis management, as well as maintaining a robust deterrence posture to avoid the costliest outcome.

Second, in terms of scholarship, the analysis suggests that, in the nuclear realm, there are inherent limits to pursuing deterrence, defense and counterproliferation simultaneously. Since North Korea's first nuclear test in 2006, the United States has simultaneously tried to deter North Korean nuclear use and large-scale conventional aggression, develop ballistic missile defense capabilities to defend against a potential North Korean nuclear strike that undercuts its deterrent, and attempt coercive diplomacy to convince Pyongyang to give up its nuclear pursuits. However, the policy steps meant to enhance the credibility of deterrence and defense—particularly strengthening local conventional military capabilities and imposing comprehensive sanctions—may undermine counterproliferation efforts by increasing threat perceptions in North Korea in ways that strengthen the perceived value of Pyongyang's nuclear deterrent and weaken assurances that force will not be used regardless of its actions. In short, while deterrence is

central to security on the Korean Peninsula, there are many security challenges that will require a separate approach from deterrence.

Finally, given the potential tradeoffs between deterring North Korea and assuring Pyongyang it won't be punished if it behaves, on the one hand, and reassuring South Korea of the US defense commitment, on the other, South Korea and the United States should tailor their signaling so they do not undermine these goals. Recently, the United States has opted for visible signals of commitment to South Korea with military assets to assuage South Korean fears of abandonment, including flights by strategic bombers near and over the peninsula, port calls by US aircraft carriers and SSBNs to South Korean ports.⁹⁷ While these steps may reassure Seoul, their visibility may also heighten North Korean threat perceptions without meaningfully enhancing deterrence. This suggests that efforts to reassure South Korea must also give consideration to the possibility of being seen as overly provocative and possibly undercutting deterrence.

By contrast, actions that are meant to deter should focus on emphasizing the ability of South Korea and the United States to defeat aggression while minimizing the impact on North Korean threat perceptions. This means investments in defensive capabilities and signals rather than those that might be perceived as offensive and first-strike in nature. In the words of deterrence theory, this suggests that a strategy of deterrence by denial may be preferable to a strategy of deterrence by punishment that includes loud declarations of preemption and decapitation strategies.

On the Korean Peninsula, both deterrence and reassurance are crucial and increasingly interconnected. If South Korea views US commitments as insufficient, it may encourage Seoul's interest in an independent nuclear capability. South Korea has already moved in the direction of increased conventional capabilities, including ballistic and cruise missiles that have longer ranges and can carry larger payloads. Similarly, South Korea hedging against potential US abandonment has led Seoul to develop conventional counterforce capabilities, which, by virtue of threatening North Korea's nuclear forces, may undermine crisis stability by providing Pyongyang first-strike incentives and fewer reasons for restraint.⁹⁸ Conversely, an overly aggressive US posture on the peninsula could generate South Korean fears of entrapment, potentially weakening the alliance, encouraging South Korean nuclear proliferation and undermining deterrence and crisis stability.⁹⁹

In Korea, the advent and continued growth of North Korea's nuclear weapon and missile capabilities have dramatically altered the security dynamics and raised serious concerns for stability and the outcome should deterrence fail. Successful deterrence remains central to ensuring peace and stability on the peninsula, and important adjustments have been made to bolster deterrence while enhancing reassurance. Yet, strategic deterrence is not as fragile as some suggest, and more attention needs to be devoted to risk reduction and decreasing tensions, along with addressing concerns for miscalculation, accident and inadvertent escalation. In addition, more thinking needs to be done to address lower-level security concerns, particularly in the gray zone that involves conventional forces and deterrence-by-denial considerations.

Despite the continued adherence to the goal of denuclearization, the North Korean nuclear problem is here to stay for the foreseeable future. Many still approach North Korea as a "problem" to solve; instead, it is a security situation that must be managed with a strong alliance and robust deterrence posture that continues to utilize the guidance of deterrence theory.

Endnotes

- ¹ Thomas C. Schelling, *Arms and Influence* (Connecticut: Yale University Press, 1966), 74.
- ² For example, see Bruce Klingner, “Why Does North Korea Want Nukes?” *Heritage Foundation*, August 13, 2018, <https://www.heritage.org/insider/summer-2018-insider/why-does-north-korea-want-nukes>; Kang Seung-woo, “North Korea Tries to Sow Seeds of Doubt on US Extended Deterrence,” *The Korea Times*, November 24, 2022, https://www.koreatimes.co.kr/www/nation/2023/11/103_340488.html; and Shane Smith, “Renewing US Extended Deterrence Commitments Against North Korea,” *38 North*, May 13, 2020, <https://www.38north.org/2020/05/ssmith051320/>.
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