

Comprehensive Extended Deterrence with the ROK: Integrating Economics

Sung-han Kim & Hyun Ji Rim

To cite this article: Sung-han Kim & Hyun Ji Rim (2023) Comprehensive Extended Deterrence with the ROK: Integrating Economics, *The Washington Quarterly*, 46:4, 123-141, DOI: [10.1080/0163660X.2023.2286135](https://doi.org/10.1080/0163660X.2023.2286135)

To link to this article: <https://doi.org/10.1080/0163660X.2023.2286135>



Published online: 19 Dec 2023.



Submit your article to this journal [↗](#)



View related articles [↗](#)




View Crossmark data [↗](#)

Comprehensive Extended Deterrence with the ROK: Integrating Economics

The ROK-US alliance has been continuously tested by the vicissitudes of the security environment. During the Cold War, the alliance was forged in blood and fought against expanding communism on the Korean Peninsula and in Vietnam. After the collapse of the Soviet Union in 1991, Seoul and Washington were left to reevaluate the core value of the alliance. North Korea's first nuclear crisis in the early 1990s proved reinvigorating and reminded both countries of the need to deter North Korea's nuclear threats. Along the way, the alliance evolved to incorporate non-traditional elements of security cooperation in areas like the natural environment, terrorism, and sea lines of communication (SLOCs), among others. Against this backdrop, in 2008 ROK President Lee Myung-bak and US President George W. Bush agreed on a new vision for the alliance: a "comprehensive strategic alliance." Since then, this vision has been generally embraced by successive governments, including the current Yoon and Biden administrations.

As North Korea advances its nuclear programs and ballistic missile capabilities, however, many US experts have voiced concerns over the US role in the region by urging Washington to "fold America's nuclear umbrella" or "rethink American nuclear strategy."¹ The United States provides its allies with extended deterrence that consists of the nuclear umbrella, conventional military

Sung-han Kim is the former National Security Adviser and Vice Foreign Minister of the Republic of Korea and is now Professor of International Relations at the Graduate School of International Studies (GSIS) at Korea University. He can be reached at ksunghan@korea.ac.kr. Hyun Ji Rim is Adjunct Professor at the School of Advanced International Studies, Johns Hopkins University. She can be reached at hrim1@jh.edu.  <https://orcid.org/0000-0003-1196-3147>

© 2023 The Elliott School of International Affairs
The Washington Quarterly • 46:4 pp. 123–141
<https://doi.org/10.1080/0163660X.2023.2286135>

capabilities, and missile defense. US extended deterrence is thus a critical element of these allies' security strategies. Considering the gravity of extended deterrence for many, anything that jeopardizes the capability or the will of US extended deterrence can be viewed as a serious security threat for US allies, including physical disruption of the command chain as well as psychological damage to allies' perception of US credibility and the US commitment to Indo-Pacific peace and security.²

As Washington and Seoul face unprecedented geopolitical and geoeconomic challenges, including the North Korean nuclear threat and China's multifaceted challenges, they are exploring how to strengthen extended deterrence and make it workable in a volatile strategic environment. This essay first addresses how those two allies perceived and dealt with the critical task of strengthening the extended deterrence posture and maximizing its effect amidst new challenges to the alliance. We then turn to an examination of whether and how the

**Protecting US
allies against
economic coercion
has emerged as a
new task for alliance
management**

United States is dealing with a third party—China's—economic coercion against its allies. As the weaponization of economic interdependence intensifies, protecting US allies against economic coercion has emerged as a new task for alliance management amid deepening US-China strategic competition in the Indo-Pacific era. By employing the concept of "extended economic deterrence," we look at why and how extended nuclear deterrence and extended economic deterrence can be combined. As an outcome of this analy-

sis, we propose elevating the concept of "comprehensive extended deterrence" to a main pillar of the ROK-US comprehensive strategic alliance and offer some thoughts on how best to shore it up.

Two Critical Challenges and Two Critical Tasks

Its firmly established alliance network in the Indo-Pacific theater has been Washington's edge as Beijing has grown more assertive in pursuing "the great rejuvenation of the Chinese nation" by 2049.³ However, North Korea's intercontinental ballistic missile (ICBM) capability, which put the US mainland within its range through the successful test of Hwasung-15 in 2017, has emerged as a strategic stumbling block to maintaining a strong alliance network. Thus, the United States is reconceptualizing its military doctrine in the theater, the role of its allies and partners, as well as its

traditional deterrence strategy. This is to address concerns of alliance “decoupling,” both in the United States and amongst its allies. As nuclear expert Evan Montgomery states, “theater nuclear force could enable Beijing to drive wedges between the United States and its allies,” and this will cause further erosion of US extended deterrence in the theater.⁴ In order to prevent its allies from breaking away from the US nuclear umbrella, the United States should consider binding itself and its allies more tightly, even after the April 2023 Washington Declaration, especially when those allies doubt the credibility of US extended deterrence.

The continuing credibility problem of US extended deterrence in South Korea could complicate ROK-US policy coordination toward North Korea. The ROK-US alliance has been building advanced missile defense systems, such as the THAAD (Theater High Altitude Area Defense) battery, to deny North Korean nuclear missile threats to South Korea and US Forces Korea (USFK). In addition, the integration of advanced conventional capabilities and nuclear weapons was highly promoted to signal unyielding retaliation and suppress Pyongyang’s appetite for any provocation. Yet, it is unclear if we can say the US nuclear umbrella is credible when South Korea does not know how US extended nuclear deterrence will work when North Korea threatens to use nuclear weapons against the two allies.

From the Pentagon’s Conventional-Nuclear Integration (CNI) of the 2018 Nuclear Posture Review, it is clear that the United States is operationalizing the concept of integrated deterrence toward a strategy that allows a flexible mix of nuclear and conventional forces aiming to achieve an allied goal at the lowest possible level of escalation.⁵ The 2023 US National Defense Strategy stated that “integrated deterrence means using all of the capabilities in all warfighting domains: air, land, sea, space and cyber” and will include using “every instrument of national power: diplomatic, economic, judicial and so on.”⁶ Washington has also begun to see how non-military security threats like economic coercion can threaten US security ties to its key allies in the Indo-Pacific region.⁷

Two recent episodes highlight core challenges faced by the ROK-US alliance. The first episode was Chinese economic coercion against the deployment of a Terminal High Altitude Area Defense (THAAD) battery in South Korea in 2016, and the second North Korea’s ICBM tests in 2017.

The first episode took place toward the end of the Park Geun-hye administration in 2016, when China imposed economic coercive action against South Korea due to Seoul’s and Washington’s decision to deploy a THAAD battery in South Korea. The THAAD deployment targeted North Korean ballistic missiles to protect USFK and ROK forces within the range of the THAAD system. Instead of directing its retaliatory actions at those who

**Washington failed
to respond to
Beijing's
provocative
behavior over the
THAAD
deployment**

triggered regional instability—i.e., North Korea—China penalized South Korea. Despite Beijing's clear economic coercion and pressure campaign against South Korea, Washington failed to respond to its provocative behavior against a US ally. The US government confirmed its position that China's punitive measures are "unreasonable and inappropriate," but that position was not translated into specific actions against China.⁸ The damage done by China was widespread over the export, tourism and cultural sectors, totaling up to 8.5 trillion won, 0.52 percent of Seoul's GDP.⁹

Due to this lack of US engagement, Seoul's concerns regarding its security guarantor grew, along with its demands for a more active response by the United States. In South Korea's domestic political arena, many

argued that Washington should have "protected" Seoul against such retaliation; this is even more the case in the current situation, as the United States considers the evolving alliance strategically valuable in countering non-traditional threats in the age of US-China strategic competition. A coordinated response to economic coercion in future contingencies thus emerged as a much-needed factor for the alliance to gain long-term sustainability.¹⁰

The other episode was North Korea's successful test of ICBMs in 2017. At the time, the newly inaugurated Moon Jae-in administration (2017-2022) sought to establish a cooperative partnership with Pyongyang to bring peace to the Korean Peninsula, though this did not prevent North Korea from continuing its ballistic missile tests. Only two weeks after President Moon took office in May 2017, Pyongyang initiated a series of provocations with missile tests that led to successful launches of the Hwasong 14 ICBM on July 4 and 28. Within four months of these successful tests, North Korea again demonstrated that it could threaten the US mainland by successfully testing the Hwasong 15, which has a longer range and can carry a larger payload.

From the successful test of Hwasong 15 surfaced the "triple security dilemma" that would put Washington, Seoul, and Tokyo in danger simultaneously: if North Korea attacks South Korea or Japan with nuclear weapons, would Washington come to Seoul's or Tokyo's rescue while risking nuclear missile attacks on its own soil? After the successful tests of ICBMs, open-source estimates of North Korea's nuclear arsenal suggest that Pyongyang could possess 20 to 60 nuclear warheads, with a probable production capacity of six warheads per year. North Korea also introduced a new nuclear weapons law that suggests it now has an automated

launch system that makes retaliatory strike possible in the event of incapacitated leader.¹¹

North Korea's growing nuclear and missile arsenal and its subsequent threat to the US mainland have complicated the existing extended deterrence calculus and pose serious strategic challenges. Thus, the credibility of US extended nuclear deterrence to provide security partners with a reliable alternative to nuclear self-armament has been questioned in both Seoul and Tokyo since North Korea's 2017 Hwasung-15 ICBM test.¹²

Ironically, the Moon administration did not prioritize nor acknowledge these new challenges. Its main concern was to keep Seoul's foot in the "peace game" played by North Korean leader Kim Jong Un and US President Donald Trump. North Korea briefly abstained from continuing missile tests before the 2018 Pyeongchang Winter Olympics, hoping to strike a deal with the Trump Administration to ease economic sanctions, but resumed them after the Hanoi summit in February 2019 did not produce its desired outcome. Only after President Yoon Suk-yeol took office in May 2022 did the ROK government actively begin to address these challenges.

Thus, the ROK-US alliance is facing two critical tasks. The first is to strengthen extended nuclear deterrence to counter the heightening North Korean nuclear threat as Pyongyang pursues diversification and sophistication of its nuclear arsenal. The second task is for the United States to provide South Korea with "extended economic deterrence" against China's economic coercion. The ROK-US alliance against the North Korean threat may at times come in apparent conflict with Chinese strategic interests and in turn trigger Beijing's economic retaliation against South Korea rather than the United States, as witnessed in 2016. Deterring China is therefore a critical new challenge for the ROK-US alliance, particularly at a moment when the two allies are—along with Japan—expanding their security cooperation well into the Indo-Pacific theater.¹³

Since deterrence works through the altering of an adversary's perceptions, filtered through its own values and state of mind, the challenge for deterring any external threat is getting into the mind of the adversary and influencing their decision-making calculus.¹⁴ Thus, deterring threats such as North Korea's nuclear weapons and a third party's potential economic coercion requires finding effective deterrence tools on the part of the US and ROK. This means that the US and ROK should reinforce and expand extended deterrence to

The credibility of US extended nuclear deterrence has been questioned since North Korea's 2017 test

deal with nuclear threats as well as economic coercion in a comprehensive manner.

Reinforcing Extended Nuclear Deterrence

North Korea has been accelerating its development of ICBMs and succeeded in making miniaturized warheads in March 2023, although Pyongyang has yet to acquire the re-entry technology for its delivery system.¹⁵ With an eager North Korea not shying away from broadcasting its vision of the further advancement and sophistication of its nuclear armament, the Yoon and Biden administrations agreed to strengthen the existing US extended deterrence mechanism, culminating in the April 2023 summit.

Extended Nuclear Deterrence Being Questioned

The goal of extended nuclear deterrence is to deter Pyongyang's conventional and nuclear threat with three tools: a nuclear umbrella, conventional military capabilities, and a missile defense system. However, the recent advancement in North Korean missile development, especially its ICBM capabilities, added a new contingency to the existing defense planning of the ROK-US alliance: a direct attack from Pyongyang on the US mainland.

In a recent survey by the East Asia Institute, 65.6 percent of respondents answered that while Pyongyang's ICBMs can reach the US mainland, Washington would not respond with nuclear weapons if Seoul comes under nuclear attack.¹⁶ To Koreans who questioned potential US courses of action in the case of North Korean nuclear attacks on the US, Washington offered strong assurances that ICBMs, strategic bombers, and nuclear ballistic missile submarines would immediately be deployed in response.¹⁷ In Seoul, the discussions revolved around the redeployment of US tactical nuclear weapons in South Korea itself, which had been removed in 1991—what experts sometimes call “NATO-style” nuclear sharing. Others favored a different version of nuclear sharing, sometimes known as “Korean-style.” Still others even called for the most extreme option: South Korea's own nuclear armament.¹⁸

NATO-style sharing would require that US tactical nuclear weapons be physically deployed in South Korea for ROK-US joint nuclear planning and operations. This is likely the option Seoul is most interested in.¹⁹ However, it appears infeasible for Washington because US tactical nuclear weapons storage sites from the Cold War era are outdated and building new storage facilities would provide an identifiable location that North Korea could target.

Korean-style nuclear sharing refers to developing cooperational tactical nuclear weapons that can be deployed in Guam, a critical node in the Indo-

Pacific theater. As a type of variation on NATO's Gallois plan, a Korean fighter jet would be dispatched to Guam, load nuclear warheads, and then target North Korea if necessary.²⁰ However, flying from Seoul to Guam to Pyongyang takes over six hours by air, which makes this option merely symbolic. In addition, it would be pointless to station Korean fighter jets in Guam since US nuclear bombers would already be available there if tactical nuclear weapons were to be deployed.

The third option is for South Korea to develop its own nuclear weapons. As North Korean denuclearization has become a persistent challenge, even some in the United States argued that security and stability on the Korean Peninsula would be better achieved with an independent South Korean nuclear armament.²¹ Citing the Cold War precedent of deterring nuclear war through the nuclear balance of terror, this line of thought assesses that a nuclear war on the Korean Peninsula could be deterred with two nuclear armed Koreas. If executed with US consent, Seoul could avoid international sanctions against its nuclear program and "get away with the bomb."²² In fact, there is legal basis for such a case. The Nuclear Non-Proliferation Treaty (NPT) allows for withdrawal under extraordinary circumstances, such as when the supreme interests of a member are jeopardized.²³ For Washington, however, this option poses serious challenges to its nonproliferation policy. Seoul's nuclear armament could also be the first in a nuclear cascade to Japan and Taiwan in the Indo-Pacific, as well as Saudi Arabia and Iran in the Middle East.

It is interesting to note that whether through pushing a proverbial red button, carrying US bombs, or operating its own nuclear weapons, all three options require South Korea's direct involvement in nuclear operations to varying degrees. In other words, a nuclear component has become integral to South Korea's efforts to deter North Korea.

In South Korea, discussion has revolved around three nuclear options to deter North Korea

Launching the Nuclear Consultative Group

Amid these evolving security challenges, the Yoon Administration decided to place greater emphasis on both the symbolism and substance of extended deterrence. This policy decision was reflected in the Nuclear Consultative Group (NCG) established in the April 2023 Washington Declaration. The Yoon and Biden administrations created the NCG "to strengthen extended deterrence, discuss nuclear and strategic planning, and manage the threat to the nonproliferation regime posed by the Democratic People's Republic of Korea

(DPRK).”²⁴ The NCG will further increase the reliability of the US commitment and South Korea’s participation in joint execution and nuclear planning, enhancing nuclear deterrence. The NCG is expected to deal with nuclear and strategic planning issues, meet every quarter, and be led by assistant secretary-level defense officials from both sides. The results of the meeting will be reported to the respective presidents.

Extended nuclear deterrence backed by the NCG aims to render Pyongyang’s nuclear weapons useless via strong deterrence under ROK-US strategic consultation, eventually steering North Korea toward denuclearization. In this context, the establishment of NCG successfully signaled a positive step toward deterring North Korea for the alliance: an advancement of allied efforts in operationalizing extended deterrence strategies. The NCG has also succeeded in significantly raising the credibility of US extended deterrence by reaffirming Washington’s commitment and its willingness to strengthen existing deterrence measures with Seoul.

Most importantly, it is noteworthy that a high-level standing consultative body for discussing nuclear strategy and planning nuclear operations was established for the first time by the ROK-US alliance. Moreover, as a standing consultative body, the NCG allows prompt response to crisis and increases crisis coordination by enabling the announcement of immediate and cohesive deterrence messages.²⁵ This is very much in line with ongoing policy discussions in Washington on rethinking US nuclear posture and declaratory policy, as well as arms control in the Indo-Pacific theater.²⁶

The focus areas of the NCG include intelligence sharing, nuclear command and control coordination, joint planning, and joint operations (joint exercises). Intelligence sharing seeks to share effective information on US nuclear and strategic assets operations against the North Korean threat. Command and control coordination seeks to allow a swift transition from a standing consultative body to the summit level when the allies are under nuclear attack. Joint planning involves coordinating ROK-US joint operations with ROK conventional military capabilities. Finally, joint exercises focus on responding to nuclear crises via tabletop exercises, enhancing the visibility and sustainability of deployed US strategic assets. In brief, both Seoul and Washington are set on systematically enhancing existing extended deterrence measures and developing detailed operational plans to strengthen extended deterrence through the creation of the NCG.

These four pillars of the NCG agenda are thus aimed at maximizing deterrence amidst the growing possibility of North Korea’s use of nuclear weapons. Deterrence suggests two possible paths for counterstrategy: deterrence by denial and by punishment. Increasing the utility of extended nuclear deterrence even further, beyond the Washington Declaration’s enhancements, the United

States and South Korea can: 1) deny North Korea's nuclear capabilities with missile defense systems; 2) punish North Korea with the combined capability of US nuclear forces and ROK advanced conventional weapons; and 3) expand the bilateral consultation mechanism to other Indo-Pacific states.

Once the NCG is settled and institutionalized, Seoul and Washington can consider expanding the consultative body to include other countries like Japan and Australia. If necessary, the NCG as an umbrella organization may have sub-groups of ROK-US, ROK-US-Japan, and ROK-US-Japan-Australia with a view to allowing more flexible application in addressing possible differences in threat perception or in nuclear joint execution. For now, the NCG in its initial stage will need to concentrate on strengthening the extended nuclear deterrent of the ROK-US alliance.

Constructing Extended Economic Deterrence

Economic coercion is a growing threat that targets security cooperation between the United States and its allies, raising questions as to whether the United States has the capability and the will to deter it. Recently there have been greater efforts within the US Department of Defense (DOD) to expand the traditional concept of deterrence and further integrate broader dimensions of non-military deterrence strategy. The definition of deterrence can vary from "the power to dissuade as opposed...to coerce or compel" to "the prevention of action by the existence of a credible threat of unacceptable counteraction and/or belief that the cost of action outweighs the perceived benefits."²⁷ Thus, deterrence does not have to depend on military force alone.²⁸

Amidst US-China strategic competition and rising tensions around cutting-edge technologies, the United States—with its allies and partners—seeks to integrate operations beyond traditional kinetic fires to non-kinetic fires in information operations, cyber and space deterrence, economic sanctions, and diplomatic demarche or other means of localized leverage.²⁹ Such developments are based on acknowledgements that there are limits to the current deterrence strategy in dealing with new challenges (now that the United States has to deter not one but two nuclear adversaries), that the potential role of Chinese economic coercive aggression is growing, and that China aims to decouple the United States and its allies in the Indo-Pacific theater. The United States is thus trying to add an economic dimension to its military-based extended deterrence for its allies. However, US-provided extended deterrence is likely to be incomplete unless it is tightly backed up by US-led bilateral or multilateral economic responses in addition to military ones when US allies are threatened.

China's growing economic coercion has raised questions as to whether the US can and will deter it

Particularly concerning is China's increasing use of economic coercive measures targeting US allies and partners as US-China strategic competition intensifies. Beijing uses these measures when it perceives that its core interests of sovereignty (Tibet, Xinjiang, Hong Kong), security (THAAD), territory (Diaoyu/Senkaku), Taiwan, or dissident issues have been violated. With this in mind, the United States and South Korea should expect a Chinese reaction to strengthening security cooperation and increasing interoperability in their combined defense to counter North Korean threats.³⁰ Beijing also carefully crafts its coercion by selecting issues that are politically sensitive for target states but do not sabotage Beijing's own economy; thus, China has limited coercive actions that focus on consumer goods, tourism and agriculture, but has implemented export bans on rare earth minerals, pressure on foreign business establishments, and boycotting.

Better Late than Never

An increasing number of Chinese coercive measures against other states' economies have prompted many to implement countermeasures to minimize potential damage in the future. If the US is on the same page with its allies on the gravity of this issue, it needs to mobilize, lead and further institutionalize concerted efforts to address the threat.

Japan faced a ban on imports of rare earth minerals from China in 2010 when it detained a Chinese fishing boat captain after a collision with two Japanese Coast Guard patrol boats in the East China Sea.³¹ Tokyo adopted a long-term approach built on strategic management of those import sources. Australia was also faced with Chinese economic coercion in 2020 when Beijing imposed trade tariffs on an extensive list of imports from Australia, totaling 5.5 percent of Australia's total annual exports.³² China sought to punish Australia for opening an investigation into the origin of COVID-19 in Wuhan, China. Australia responded by taking further steps to decouple from China and filled the Chinese void with imports from other Asian countries like Japan, South Korea, Taiwan, Vietnam, Indonesia and India.³³ Strengthening partnerships with likeminded countries was critical to enabling Australia to counter and survive such economic coercion. In this case, the United States did not take any measures that would have made the response by its allies and partners more effective.

The European Union (EU), however, has more recently elicited a US response when the US and EU created a legal response to counter China's coercive measures which was triggered by the worsening of Lithuania-China relations in 2021. China banned import of Lithuanian goods in response to Taiwan's opening of a de facto embassy in Vilnius—and doing so under “Taiwan” not “Taipei”—in November 2021.³⁴ Proposing to launch a “Countering Economic Coercion Task Force,” the US Senate in 2022 introduced an initial Economic Statecraft for the Twenty-First Century Act.³⁵ In 2023, the Senate expanded this effort by introducing the Countering Economic Coercion Act of 2023 to “provide a process for an expedited determination regarding economic coercion.”³⁶ The EU is currently working on fine-tuning its Anti-Coercion Instrument to enhance its ability to respond to Chinese economic coercion efforts.

The Group of Seven (G7) Hiroshima summit in July 2023 subsequently launched the Coordination Platform on Economic Coercion to address “attempts to weaponize economic dependencies by forcing G7 members and our partners including small economies to comply and conform,” and “to increase our collective assessment, preparedness, deterrence and response to economic coercion, and further promote cooperation with partners beyond the G7.”³⁷ NATO has also positioned itself to be more resilient in light of Chinese actions, and officially declared that China's ambitions and economic coercion pose a threat to its security in its July 2023 Vilnius Summit Communiqué.

Pillars of Extended Economic Deterrence

As economic coercion increasingly poses a greater threat to US allies, the NATO and G7 are also intensifying their efforts at counterpressure. To that end, the United States and South Korea need to put a strong extended economic deterrence mechanism in place. Extended economic deterrence must focus on punishing the coercer with an anti-coercion instrument (ACI), building a coercion-denial coalition, and strengthening supply-chain resilience.

First, not many countries have the economic power and the scale to systematically punish economic coercion. In fact, the United States may realistically be the only one with this policy option. In addition to the fact that it is the world's second largest trading country, the US dollar is the global reserve currency; 59 percent of foreign exchange reserves are in US dollars as of 2023 Q2.³⁸ The US dollar is central to the global economy, and for this reason, Washington's financial sanctions can be impactful.

Extended economic deterrence must focus on punishing the coercer with three elements

Seoul and Washington will need to work together to design an ACI that provides a structure through which to execute extended economic deterrence, guided by hierarchical steps ranging from dialogue and engagement to possible countermeasures like imposing tariffs or restrictions on trade in services, access to foreign direct investment, or public procurement.³⁹ When the deterrer decides to use that card, its intentions to punish the coercer must be assertive. If the United States threatens to punish but ends up bluffing, US credibility will be damaged beyond repair, leading to deterrence failure toward China as well as extended deterrence failure with South Korea and beyond. Thus, with political and/or economic instruments, Washington must be able and willing to impose significant costs that can overturn the adversary's initial plan of economic coercion. However, punishment entails more risk in that if the punishments fail to stop the adversary's current and future economic coercion, then it will trigger credibility problems. In this sense, a vehicle for economic punishment in the form of an ACI can be useful but is not sufficient; denial can often be more effective.

Second, the United States should build an international coercion-denial coalition. Strengthened extended economic deterrence in the ROK-US alliance can be utilized as a prototype for a more expansive network in the Indo-Pacific theater, along with deepening ROK-US-Japan trilateral cooperation. In general, a strategy premised on deterrence by denial is easier to expand to host multilateral economic efforts. Based on its own counter-coercion policy, Washington can construct an international platform that draws other states' participation, including G7 members and beyond. This coercion-denial coalition can channel collective support for decoupling from China when necessary and provide the United States with a powerful tool for diplomatic messaging, while promoting the norms of the international rules-based system that the United States aims to uphold.⁴⁰ One example is the May 2023 Supply Chain Agreement at the Indo-Pacific Economic Framework for Prosperity (IPEF), which enables collective action against economic coercion.

Third, the United States should help its allies to build supply-chain resilience. South Korea learned this lesson the hard way as early as 2011 after Seoul stopped domestic production of Urea solution (Diesel Exhaust Fluid, DEF). Within ten years, it was importing over 97.6 percent of its DEF from China; then Chinese exports were banned in 2021 due to a domestic shortage.⁴¹ According to the Korea Confederation of Trade Union's poll in 2021, 32.4 construction workers reported that the urea solution shortage forced a stop on their daily operations.⁴² From manufacturing and production sectors to agriculture, South Korea's economy was seriously disrupted by the Chinese export ban on that high-dependence item—and that was even before China beginning leveraging such dependencies more coercively. This illustrates how critical it is to secure supply chain

resilience in order to be able to gain access to a resource from a different source at a similar price in a prompt manner.

In this context, alliances can improve overall resilience by facilitating a network of flexible supply redistribution that can “greatly complicate the adversary’s decision-making” and even nullify the intended effect of such pressure campaigns.⁴³ It will be crucial for democracies to communicate with the private sector to achieve maximum flexibility for supply chain resilience. But the United States and its allies should make defending against economic coercion an explicit objective of supply chain resilience initiatives like those that emerged in the wake of the COVID-19 pandemic. The trilateral ROK-US-Japan summit in August 2023 took a step in this direction by noting the development of the Partnership for Resilient and Inclusive Supply-chain Enhancement (RISE) to prepare for confronting and overcoming economic coercion.⁴⁴

Launching Bilateral and Trilateral ESD

South Korea and other economic powerhouses are expanding their strategic networks, advancing strategic communications with their partners, exploring deeper intelligence cooperation, and seeking collective action plans to minimize economic security threats from the outside. The United States has already initiated talks on economic security within its own networks, including the EU-US Trade and Technology Council (TTC) and the Quad. Based on each ally’s capabilities, the ROK-US alliance needs to form its own strategy and cooperative action plan. As the G7 Hiroshima Leaders’ Communique in May 2023 stated, enhancing collaboration to ensure economic resilience and economic security is a top priority on the agenda.⁴⁵

The ROK and the United States already agreed to launch the Economic Security Dialogue (ESD) in May 2022 at the first Yoon-Biden summit. The joint statement reads, “President Yoon and President Biden recognize the importance of deepening cooperation on economic and energy security, which are critical to safeguarding our prosperity, shared security, and collective interests.”⁴⁶ Shoring up economic security as a way to protect strategic industries is thus now at the center of ROK-US alliance cooperation. In July 2023, the National Security Councils of both allies met in Washington for their first ever such meeting, and since then have frequently discussed supply chain issues (critical minerals, semiconductors and batteries); key emerging technologies (e.g., AI, quantum computing and space technologies); information technology and communication (ITC, advanced interstate telecommunication technologies, and Open Radio Access Network [RAN] technology).

It seems premature to say whether the ESD is systematically equipped for and can execute economic deterrence measures. It is highly likely that the decision to

punish the economic coercer will be contingent on US-China relations as they are perceived by the White House and NSC—or the US domestic economic situation—at any given time, rather than on the ESD itself. The fact that the NSC is the host of the ROK-US ESD provides an opportunity to explore room for further dialogue between Seoul and Washington when it becomes necessary for South Korea to draw out US actions against the coercer.

In November 2022, at the ROK-US-Japan trilateral summit in Phnom Penh, the three leaders agreed to launch a ROK-US-Japan ESD. This was a critical step forward to further strengthening a coercion-denial coalition, the second function of extended economic deterrence. The Phnom Penh Statement on US-Japan-ROK Trilateral Partnership for the Indo-Pacific stated: “The Leaders emphasize the importance of trilateral cooperation to strengthen the rules-based economic order to enhance economic security and prosperity throughout the Indo-Pacific and the world. Prime Minister Kishida, President Yoon and President Biden are pleased to launch a dialogue among the three governments on economic security.”⁴⁷

The three parties reaffirmed the trilateral partnership against economic coercion, focusing on advanced cooperation for ensuring secure and resilient supply chains, promoting Data Free Flow, critical and emerging technologies, and critical minerals. In February 2023, a trilateral ESD to discuss the collective response

Extended economic deterrence is stronger when it involves more supporters of the network

to weaponizations of economic mutual dependency was held in Honolulu, continuing the discussion on deepening ROK-US-Japan trilateral economic security cooperation. By its nature, extended economic deterrence is stronger when it involves more supporters of the network, since the increased volume decreases the level of intended damage, ensuring more flexibility and options for resilience against economic coercion; and increases the strength of countermeasures complicating the calculations for the cost of coercive actions. Thus, developing tighter coordination in

ROK-US-Japan trilateral settings that promotes converging interests and cooperative mechanisms will inevitably strengthen extended economic deterrence in the long run.

The launching of the ESD is a hopeful sign for ROK-US extended economic deterrence. However, this is a baby step toward a fully functioning comprehensive strategic alliance, and much must be filled in vis a vis the economic dimensions of the alliance to ensure the credibility of US economic extended deterrence in South Korea’s time of need.

Forming a Comprehensive Strategic Alliance

Unless the United States and its allies build a robust extended economic deterrent and establish a theater-specific system to execute their operational plans and policy coordination, the comprehensive strategic alliance will likely remain half-functional in the Indo-Pacific region. Adapting to the changing security environment, South Korea and the United States should continue to strengthen extended nuclear deterrence through the rapid operationalization of the NCG and further develop extended economic deterrence through the rapid institutionalization of the ESD. Combining the two, extended deterrence will be transformed into “comprehensive extended deterrence.”

More recently, the US and South Korea have been moving toward forging a global comprehensive strategic alliance to deal with challenges across various dimensions of security, including harmful economic influences from a third country. Despite calls for further cooperation and dedication to addressing new threats like economic coercion, the focus of cooperation in the joint statement was limited to the issue of supply chain resiliency, failing to nest economic coercion inside a more strategic and systematic approach. Extended economic deterrence and the further institutionalization of such cooperation efforts is much needed, not only to deter a third party’s potential pressure campaigns, but also to enhance long-term strategic coordination between the allies.

Even as it has acknowledged the broadening spectrum of traditional and non-traditional threats, the ROK-US comprehensive strategic alliance will need to prioritize building a solid framework for comprehensive extended deterrence. Transforming the framework into an operational plan will be crucial. This can then attract other US Indo-Pacific allies to join the comprehensive extended deterrence system, which would contribute to strengthening overall alliance sustainability and regional stability.

With deepening US-China strategic competition, comprehensive extended deterrence is a new path for the ROK-US alliance. A truly comprehensive strategic alliance will only be achieved when extended nuclear deterrence and extended economic deterrence are combined and operationalized in institutional ways. Only then will the alliance become sustainable with a high degree of confidence from both sides. This will in turn increase the feasibility of inviting other allies to sign on to comprehensive extended deterrence and contribute to a tighter network between allies and partners, thus further facilitating regional and global peace and stability.

The ROK-US alliance will need to prioritize a framework for comprehensive extended deterrence

Notes

1. Stephen M. Walt, "It's Time to Fold America's Nuclear Umbrella," *Foreign Policy* March 23, 2021, <https://foreignpolicy.com/2021/03/23/its-time-to-fold-americas-nuclear-umbrella/>; Francis Gavin, "Time to rethink American Nuclear Strategy: How to Learn the Right Lessons from the Cold War," *Foreign Affairs*, September 5, 2022, <https://www.foreignaffairs.com/united-states/time-rethink-america-nuclear-strategy>; Stephen Wertheim, "Americans, Go Home!," Quincy Institute for Responsible Statecraft, March 24, 2021, <https://quincyinst.org/2021/03/24/americans-go-home/>.
2. Hyun Ji Rim, "Emerging Technologies: New Threats and Growing Opportunities for South Korean Indo-Pacific Strategy," *Journal of Indo-Pacific Affairs*, April 1, 2022, <https://www.airuniversity.af.edu/JIPA/Display/Article/2979680/emerging-technologies-new-threats-and-growing-opportunities-for-south-korean-in/>.
3. State Council Information Office, People's Republic of China, "Full Text: China's National Defense in the New Era," updated July 24, 2019, https://english.www.gov.cn/archive/whitepaper/201907/24/content_WS5d3941ddc6d08408f502283d.html.
4. US Senate Committee on Armed Services, "Hearing to Receive Testimony on Regional Nuclear Deterrence," March 28, 2023, https://www.armed-services.senate.gov/imo/media/doc/23-21_03-28-2023.pdf.
5. Adam Mount and Pranay Vaddi, "An Integrated Approach to Deterrence Posture," *Federation of American Scientists*, January 2021, <https://uploads.fas.org/2020/12/An-Integrated-Approach-to-Deterrence-Posture.pdf>.
6. US Department of Defense, "Austin Says Current Operations Give Hints of New National Defense Strategy," DOD News, February 18, 2022, <https://www.defense.gov/News/News-Stories/Article/Article/2940956/austin-says-current-operations-give-hints-of-new-national-defense-strategy/#:~:text=It%20%22will%20be%20a%20key,economic%2C%20judicial%20and%20so%20on.>
7. Joint Chiefs of Staff, "Joint Concept for Competing," February 10, 2023, <https://news.usni.org/2023/03/09/pentagons-joint-concept-for-competing>.
8. "U.S. State Department Calls China's Retaliation Over THAAD 'unreasonable,' 'inappropriate,'" *Yonhap News Agency*, March 3, 2017, <https://en.yna.co.kr/view/AEN20170303000500315>.
9. "THAAD Retaliation Damage Expected to Reach 8.5 Trillion won in South Korea and 1.1 trillion won in China," *Yonhap News Agency*, May 3, 2017, <https://www.yna.co.kr/view/AKR20170502160700002>.
10. "Choi Young-il's News Competition," *YTN Radio*, July 11, 2016; "THAAD: the Biggest Beneficiary, the United States and the Biggest Victim, South Korea" https://www.ytn.co.kr/_ln/0101_201607111949394858; "Issue Diagnosis," *Maeil Business Newspaper*, September 25, 2017; "The THAAD Storm, No Umbrella for This One?" " http://mbnmoney.mbn.co.kr/news/view?news_no=MM1002959032.
11. Eric S. Edelman and Franklin C. Miller, "Statement Before the US Senate Committee on Armed Services on United States Nuclear Strategy and Policy," September 20, 2022, <https://csbaonline.org/research/publications/testimony-before-the-senate-committee-on-armed-services-regarding-nuclear-strategy-and-policy>.
12. US Department of Defense, "21st Century Nuclear Deterrence and Missile Defense," <https://dod.defense.gov/News/Special-Reports/21st-Century-Nuclear-Deterrence-and-Missile-Defense/>.

13. David Choi, "US and South Korea must resist Chinese 'economic coercion,' ambassador says," *Stars and Stripes*, May 23, 2023, https://www.stripes.com/theaters/asia_pacific/2023-05-23/china-south-korea-economic-retaliation-10206661.html.
14. Scowcroft Commission, "Report of the President's Commission on Strategic Forces," April 1983, 3, <https://web.mit.edu/chemistry/deutch/policy/1983-ReportPresCommStrategic.pdf>; Henry A. Kissinger, *The Necessity of Choice* (New York: Harper Brothers, 1961), 12.
15. Hyonhee Shin and Daewoung Kim, "North Korea Unveils New Nuclear Warheads as US Air Carrier Arrives in South," *Reuters*, March 20, 2023, <https://www.reuters.com/world/asia-pacific/north-koreas-kim-calls-scaling-up-weapons-grade-nuclear-materials-kcna-2023-03-27/>; Yoonjung Seo and Brad Lendon, "North Korea Ready to Prove ICBM Progress by Firing at Normal Trajectory, Kim's Sister Claims," *CNN*, December 20, 2022, <https://www.cnn.com/2022/12/20/asia/north-korea-icbm-missile-test-plans-kim-sister-intl-hnk-ml/index.html>.
16. "If Seoul is Attacked by a Nuclear Weapon, 'The US will not open a nuclear umbrella' 66.5%," *Joongang*, September 25, 2023, <https://www.joongang.co.kr/article/25195538>.
17. "North Korea's Kim Jong-un Openly Threatens the US mainland: A Challenge to the ROK-US Alliance," *Yonhap News Agency*, May 15, 2017, <https://www.yna.co.kr/view/AKR20170515037600014?input=1195m>.
18. "Urgent Inspection: Theory of Armed Forces," *Yoonhap News Agency*, February 15, 2013, <https://n.news.naver.com/mnews/article/001/0006095295?sid=100>; Chosun Ilbo, "Let's Acquire Nuclear Weapons," *Chosun Ilbo*, January 29, 2019, https://www.chosun.com/site/data/html_dir/2019/01/28/2019012802626.html; "Oh Se-hoon Condemns Kim Jong-un's Remarks on 'Preparations for War' in Response to 'Self-nuclear-Armament,'" *Yonhap News Agency* August 11, 2023, <https://www.yna.co.kr/view/AKR2023081109620004?input=1195m>; "Nuclear Development: 7 out of 10 South Koreans Say They Should Develop Their Own Nuclear Weapons," *BBC News Korea*, July 28, 2022, <https://www.bbc.com/korean/news-62332160?xtor=AL-73-%5Bpartner%5D-%5Bnaver%5D-%5Bheadline%5D-%5Bkorean%5D-%5Bbizdev%5D-%5Bisapi%5D>; Byung-Chul Lee, "Seeking a New Direction in Korea's Nuclear-Armed Discourse," *Defense Studies* 63, no. 2 (2020): 27-58.
19. Hankyoreh, "Ruling Party Lawmaker Pitches NATO-style Nuclear Sharing for Korea," https://english.hani.co.kr/arti/english_edition/e_national/1085705.html.
20. Pierre M. Gallois, "New Teeth for NATO," *Foreign Affairs* 39, no. 1 (1969): 67-81, <https://www.foreignaffairs.com/articles/russian-federation/1960-10-01/new-teeth-nato>.
21. Jennifer Lind and Daryl G. Press, "South Korea's Nuclear Options," *Foreign Affairs*, April 19, 2023, <https://www.foreignaffairs.com/united-states/south-koreas-nuclear-options-north-korea-deterrence>.
22. Ramon Pacheco Pardo, "South Korea Could Get Away With the Bomb," *Foreign Policy*, March 16, 2023, <https://foreignpolicy.com/2023/03/16/south-korea-nuclear-weapons-military-defense-security-proliferation-npt/>.
23. United Nations, "The Treaty on the Non-Proliferation of Nuclear Weapons (NPT)," May 2005, <https://www.un.org/en/conf/npt/2005/npttreaty.html>.
24. The White House, "Washington Declaration," April 26, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/04/26/washington-declaration-2/>.
25. Hanbyeol Sohn, "Tasks Ahead for the Nuclear Consultative Group," *Peninsula*, KEI, May 16, 2023, <https://keia.org/the-peninsula/tasks-ahead-for-the-nuclear-consultative-group/>.

26. US Department of Defense, "Nuclear Posture Review 2022," <https://www.defense.gov/Portals/1/Spotlight/2022/NDS/NUCLEAR%20STRATEGY%20AND%20POLICY%20-%20NPR%20Factsheet.pdf>; Eric Edelman, "Statement Before the United States Senate Committee on Armed Services on United States Nuclear Strategy and Policy," September 20, 2022, https://csbaonline.org/uploads/documents/220920_Edelman_Miller_Testimony.pdf.
27. The DoD Dictionary of Military and Associated Terms, 2017, <https://www.tradoc.army.mil/wp-content/uploads/2020/10/AD1029823-DOD-Dictionary-of-Military-and-Associated-Terms-2017.pdf>.
28. Jeffrey W. Knopf, "The fourth wave in deterrence research," *Contemporary Security Policy* 31, no. 1 (2010): 1-33; Snyder, "Deterrence and Defense."
29. Gen James Cartwright, USMC (ret.), Lt Col Justin M. Conelli, USAF, Clementine G. Starling, and Julia Siegel, "Operationalizing Integrated Deterrence: Applying Joint Force Targeting across the Competition Continuum," Atlantic Council, June 8, 2023, <https://www.atlanticcouncil.org/in-depth-research-reports/report/operationalizing-integrated-deterrence-evolving-the-joint-forces-application-of-targeting-across-the-competition/>.
30. Bruce Bennet et al., *ROK and U.S. Strategies for Responding to the North Korean Nuclear Weapon Threat* (Santa Monica, CA: RAND Corporation, 2021), 59-98.
31. Keith Bradsher, "Amid Tension, China Blocks Vital Exports to Japan," *New York Times*, September 22, 2010, <https://www.nytimes.com/2010/09/23/business/global/23rare.html>.
32. "Australia has faced down China's trade bans and emerged stronger," *Economist*, May 23, 2023, <https://www.economist.com/asia/2023/05/23/australia-has-faced-down-chinas-trade-bans-and-emerged-stronger>.
33. The Australian export market share to these countries increased by over 100 percent from 2019 to 2022. Australian Bureau of Statistics (ABS), "International Trade: Supplementary Information, Financial Year 2021-22," <https://www.abs.gov.au/statistics/economy/international-trade/international-trade-supplementary-information-financial-year/latest-release>.
34. Henry Ridgwell, "US Counters China's 'Economic Coercion' Against Lithuania in Taiwan Dispute," *Voice of America*, February 4, 2022, <https://www.voanews.com/a/us-counters-china-s-economic-coercion-against-lithuania-in-taiwan-dispute-/6425655.html>.
35. Congress.gov, "Text - S.4112 - 117th Congress (2021-2022): Economic Statecraft for the Twenty-First Century Act," April 28, 2022, <https://www.congress.gov/bill/117th-congress/senate-bill/4112/text>.
36. Congress.gov, "S.295 - 118th Congress (2023-2024): Countering Economic Coercion Act of 2023," February 7, 2023, <https://www.congress.gov/bill/118th-congress/senate-bill/295>.
37. The White House, "G7 Leaders' Statement on Economic Resilience and Economic Security," May 20, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/20/g7-leaders-statement-on-economic-resilience-and-economic-security/#:~:text=G7%20Leaders'%20Statement%20on%20Economic%20Resilience%20and%20Economic%20Security,-Home&text=Fostering%20mutually%20beneficial%20partnerships%20and,ensure%20sustainable%20development%20for%20all>.
38. International Monetary Fund, "Currency Composition of Official Foreign Exchange Reserves (COFER) database," <https://data.imf.org/?sk=e6a5f467-c14b-4aa8-9f6d-5a09ec4e62a4>.

39. European Commission, "Political Agreement on new Anti-Coercion Instrument to better defend EU interests on global stage," June 6, 2023, https://ec.europa.eu/commission/presscorner/detail/en/IP_23_3046.
40. Matthew Reynolds & Matthew P. Goodman, *Deny, Deflect, Deter: Countering China's Economic Coercion*, (Washington, DC: CSIS Economic Program), March 21, 2023, 2, <https://www.csis.org/analysis/deny-deflect-deter-countering-chinas-economic-coercion>.
41. "Why is urea scarce only in Korea?," *JoongAng Ilbo*, November 4, 2021, <https://www.joongang.co.kr/article/25021115>.
42. "Urea Crisis Reveals Risks of Korea's Supply Chain," *Korea Times*, November 14, 2021, https://www.koreatimes.co.kr/www/nation/2021/11/120_318737.html.
43. Joint Chiefs of Staff, "Joint Concept for Competing (JCC)," February 13, 2023, <https://news.usni.org/2023/03/09/pentagons-joint-concept-for-competing>.
44. The White House, "The Spirit of Camp David: Joint Statement of Japan, the Republic of Korea, and the United States," August 18, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/08/18/the-spirit-of-camp-david-joint-statement-of-japan-the-republic-of-korea-and-the-united-states/>.
45. The White House, "G7 Hiroshima Leaders' Communiqué," May 20, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/20/g7-hiroshima-leaders-communique/#:~:text=We%20recognize%20that%20achieving%20the,urgent%2C%20interrelated%20and%20mutually%20reinforcing>.
46. The White House, "United States-Republic of Korea Leaders' Joint Statement," May 21, 2022, <https://www.whitehouse.gov/briefing-room/statements-releases/2022/05/21/united-states-republic-of-korea-leaders-joint-statement/>.
47. The White House, "The Spirit of Camp David: Joint Statement of Japan, the Republic of Korea, and the United States."