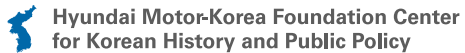


TWO PRESIDENTS, ONE AGENDA

A BLUEPRINT FOR SOUTH KOREA AND THE
UNITED STATES TO ADDRESS THE CHALLENGES
OF THE 2020s AND BEYOND

Edited by Dr. Sue Mi Terry





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Wilson
Center



Hyundai Motor-Korea Foundation Center
for Korean History and Public Policy

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Foreword

Richard L. Armitage

Former Deputy Secretary of State

Many Americans would be surprised to learn that the management of the US–ROK relationship, forged in the mutual sacrifices of the Korean War, is, and has been, difficult. Our history together is replete with palace intrigue, broken treaties, misplaced hopes (President Woodrow Wilson’s Fourteen Points did not apply to Asians), and terrible blunders (Secretary of State Dean Acheson’s 1950 comments about South Korea being outside our security perimeter). Sprinkle in the assassination of First Lady Yuk Young-soo in 1974 and of her husband, President Park Chung-hee, in 1979, the Gwangju uprising in 1980, the imposition of martial law, student riots, and the transition to democracy in 1987, and you have an idea of the challenge and promise of this relationship.

As Sue Mi Terry points out, President Biden and President Yoon have an opportunity to take a clear-eyed view of our mutual national security and economic interests. The two presidents can work on important priorities such as improving trilateral cooperation with Japan, strengthening cybersecurity, dealing with the growing challenges from China and Russia, and safeguarding supply chains. If they do this, we can break out of the difficult cycle we have been in and realize the true promise of our peoples’ hopes and dreams. Northeast Asia can be the guiding light even under the threat from the North and the bumptious rise of China. The authors of this volume offer a head start to policymakers in both Washington and Seoul by proposing timely and thoughtful recommendations on issues ranging from missile defense to trade. May the leaders of both countries have the wisdom to embrace these suggestions.

Introduction

Sue Mi Terry

Director of the Asia Program and the Hyundai Motor-Korea Foundation Center for Korean History and Public Policy, Woodrow Wilson International Center for Scholars

We live in uncertain and dangerous times. Beginning in 2019, the COVID-19 pandemic shut down almost all international trade and travel and has to date killed more than 6 million people, making this the worst pandemic since the deadly influenza outbreak in 1918. Then, in 2022, Russia invaded Ukraine, starting the biggest war in Europe since 1945, causing Western nations to put unprecedented sanctions on the Russian economy, revitalizing unity within NATO, and throwing world energy and food markets into turmoil.

Meanwhile, relations between the world's two largest economies—the United States and China—continue to deteriorate amid the Chinese crackdown on Hong Kong and Xinjiang, the continuing trade war, and concern that Beijing might try to take Taiwan by force. The nuclear menace from North Korea is increasing (it has now become only the third potential adversary after Russia and China, with the ability to strike the US mainland with nuclear intercontinental ballistic missiles), while Iran is drawing closer to a nuclear breakout capacity. And the world continues to warm at an alarming pace because carbon dioxide emissions are still increasing, causing melting ice caps, record heat waves, and an unprecedented number of severe weather events, with far worse to come if the world cannot control greenhouse gases.

The United States and South Korea—whose alliance was forged in blood in the 1950s—stand together as partners confronting these and many other challenges of the 2020s. The United States has been, for all that time, a superpower and the leader of the Western world, with the world's largest economy and most powerful armed forces. South Korea has become an increasingly important partner for the United States and an increasingly important player on the global stage. South Korea now has the world's 6th-largest military and the 10th-largest economy—along with the responsibilities and concerns that come with such immense power.

In 2022, President Biden is being forced to deal with Russia's invasion of Ukraine, but he recognizes the importance of South Korea as not only a regional ally but also a global one. Secretary of State Antony Blinken and Secretary of Defense Lloyd Austin made an unusual joint trip together to Tokyo and Seoul at the start of the administration in 2021, and Biden himself is scheduled to visit South Korea and Japan in May 20-24, 2022. His partner is the newly elected president of South Korea, Yoon Suk-yeol, who argues that South Korea should be a "global pivotal state" and believes that "we should not only focus on relations with North Korea, but rather expand the breadth of diplomacy in the EU and throughout Asia with the South Korea-US relationship as our foundation. We should take on a greater role in fulfilling our responsibility as one of the top 10 economies in the world."

Biden and Yoon now have a historic opportunity to forge a closer US-ROK alliance for the 21st century. Given that Biden comes from the center-left and Yoon from the center-right, the two men see eye to eye on most issues. US–South Korea policy has sometimes been out of sync in recent years over North Korea, China, and trilateral relations with Japan, with more progressive presidents in Seoul and more conservative ones in Washington. Now the two countries finally seem to be in close alignment. But what should the Biden and Yoon administrations do to address the most pressing challenges facing their two countries—and the world?

“Two Presidents, One Agenda: A Blueprint for South Korea and the United States to Address the Challenges of the 2020s and Beyond” is a series of short articles designed to present President Biden and President Yoon with specific policy recommendations addressing the most significant security and economic challenges and opportunities the two allies face in the years ahead. The articles are divided into two major categories: the first category is the shifting geopolitics of Northeast Asia, and the second is economic and trade issues. There are 12 topics in total covered under these two major areas.

For each of the bigger geostrategic and economic issues, two leading experts—one from the United States, the other from the ROK—present recommendations on how each of their countries can deal with these challenges. For narrower issues, a single expert, either American or Korean, offers recommendations. All the writers are leading experts in their field, with significant scholarly credentials. In addition, many have extensive government experience. Their charge was not to pursue purely academic inquiries but, rather, to offer practical and actionable policy items that President Biden and President Yoon can implement. As the articles make clear, the writers are fully up to the task.

The first part of the book looks at the major geostrategic issues facing the United States and South Korea. Abraham Denmark and Jae Ho Chung examine US–China relations and South Korea’s role in the superpower competition, Victor Cha and Won Gon Park examine the growing North Korean threat, Sheila Smith and Sook Jong Lee examine US–South Korea–Japan trilateral relations, and Young-kwan Yoon and Andrew Yeo examine the implications of the Russo-Ukraine war for South Korea and the US-ROK alliance. This part concludes with Scott Snyder and Chaesung Chun examining the state of the US-ROK alliance, which is the linchpin of South Korea’s foreign policy.

The second part of the book focuses on how the US-ROK alliance should deal with trade, technology, and other “new frontier” issues. It begins with Wendy Cutler and Taeho Bark examining trade issues, including regional and international trade architecture, and continues with Matthew Goodman and Hyung-Gon Jeong writing on supply chains, Miyeon Oh on economic security and private–public cooperation, Sang Hyun Lee on nuclear energy, Clara Gillispie on climate change, Adam Segal on cybersecurity, and Soonman Kwon on public health.

Given all the shifts transforming the international environment, the United States and South Korea cannot afford a business-as-usual approach to their relations or the mutual challenges they face. The presidents of South Korea and the United States need specific, innovative, and actionable recommendations from veteran policymakers and scholars on how to deal with myriad issues. This collection charts a way forward for both administrations.

PART I

Geostrategic and Security Issues



Dual Imperatives: How Seoul and Washington Can Update Their Alliance to Address the China Challenge

Abraham M. Denmark

Vice President of Programs and Director of Studies, Woodrow Wilson International Center for Scholars

POLICY RECOMMENDATIONS

- The US and the ROK must acknowledge the profound implications of China's rise for their alliance. South Korea, in particular, should recognize the direct implications for its interest of growing Chinese assertiveness, and change its approach to security and diplomacy accordingly.
- Seoul and Washington should adopt a shared principle that China has no role to play in alliance planning and consultation, and that China's reactions are to be mitigated rather than avoided.
- The alliance should consider military options that had previously been deemed too controversial for Beijing to allow—even while they may not be directed at China itself—in the areas of missile defense, long-range strikes, naval presence, and military exercises.
- Beyond military options, diminishing concerns about Chinese reactions in alliance decision-making should allow the US and ROK to widen the aperture of their alliance to enable cooperation and collaboration across all elements of national power.
- The US and the ROK should explore how best to include Korea in broader Indo-Pacific initiatives and minilaterals, such as the Quad and the Australia–United Kingdom–United States partnership (AUKUS), as well as the US–ROK–Japan trilateral, to identify a significant role that the ROK can play in the broader Indo-Pacific region.
- The US should lead efforts to better inoculate the ROK from potential economic punishment from China, enhance preparations to support the ROK economically and politically, and facilitate discussions on responses to Chinese economic coercion and political influence operations among other allies and partners around the world.

The US–ROK alliance has arrived at a strategic inflection point, and the decisions made by Washington and Seoul in the coming years will have profound implications for years to come. The allies must confront two strategic imperatives posed by an increasingly powerful and assertive China: accounting for the geopolitical challenges posed by China’s rise and evolving the alliance itself to best position the ROK and the US to account for these challenges.

The China Imperative

As China’s political influence and economic weight have grown, successive governments in Seoul have sought to strike a balance in their relationships with Beijing and Washington. Beijing has reinforced this approach by punishing the ROK for decisions it opposed, such as the economic sanctions it put in place in response to the deployment of the US Terminal High-Altitude Area Defense (THAAD) missile defense system to South Korea. Many in Seoul subsequently called for policies that avoided forcing Seoul to make a “choice” between China and the United States.

Yet, for Seoul, the idea of a “choice” between Washington and Beijing was always a false one. The ROK’s relationship with the Indo-Pacific’s two major powers are fundamentally different: China’s policies are always narrowly self-interested, while the United States has combined its own interests with those of its ally through extended deterrence commitment to the ROK. The US has demonstrated this commitment with the deployment of tens of thousands of military personnel, the deployment of strategic assets, and the sacrifice of tens of thousands of lives. In fact, Beijing’s message to Korea about THAAD and other alliance decisions was not that Seoul must choose between China and the United States, but rather that Beijing expects Seoul to sacrifice its own national security in deference to China’s interests and concerns.

The incoming Yoon administration’s approach reflects the recognition that China represents a profound challenge to the interests of the ROK. For too long, policymakers in Seoul have believed that the ROK would not be affected by China’s growing assertiveness against Taiwan or in the South China Sea, or that historical issues with Japan that South Korea shared with China meant that

Chinese assertiveness in the East China Sea did not have an impact on the ROK. These were false hopes: The ROK would be far more vulnerable to Chinese military coercion if China were to gain control over Taiwan, and 69% of the ROK’s crude oil imports come from the Middle East, giving South Korea a profound interest in the future of the South China Sea and the long-term viability of the rules-based international system.¹

By recognizing that Chinese assertiveness has direct implications for the interests of the ROK, Seoul has an opportunity to make some significant changes to its approach to its own security and diplomacy. While a great deal of this can be accomplished unilaterally and multilaterally, Seoul should also look to the US–ROK alliance as a primary mechanism to enhance its approach to China and the Indo-Pacific.

The Alliance Imperative

While the threat from North Korea has by no means diminished, the challenge posed by China demands that the aperture of the US–ROK alliance should widen considerably. Identifying China as a driver of US–ROK alliance planning and coordination will have a profound impact on the alliance itself.

Most immediately, this should allow the alliance to consider military options that had previously been deemed too controversial for Beijing to allow—even while they may not be directed at China itself. Seoul and Washington should therefore adopt a shared principle that Chinese concerns have no role to play in alliance planning and consultation, that alliance decisions will be driven by what is best for the interests of the two allies, and that China’s reactions are to be mitigated rather than avoided. This shared determination would allow Seoul to move beyond the so-called Three Nos—no additional deployment of THAAD batteries, no South Korean integration into a US led regional missile defense system, and no trilateral alliance with the United States and Japan—promulgated by the Moon administration.

From there, the Alliance would be able to examine options to enhance alliance missile defense capabilities and data integration, and improve trilateral cooperation with the US and Japan. The alliance should consider other initiatives to enhance its defense posture, including

the development and deployment of more sophisticated US and ROK strike capabilities, and the rotational presence of US Navy ships at Korean naval bases. Finally, the US and the ROK should examine options for ROK military units to participate in more military exercises across the Indo-Pacific region, including with Australia, India, Japan, the Philippines, and the members of the Association of Southeast Asian Nations (ASEAN).

Yet focusing primarily on military initiatives would sell the alliance short. The complexities of the emerging geopolitical environment, and the breadth of US-China strategic competition, demand that the alliance evolve from one that is primarily military to one that is a platform for cooperation and collaboration across all elements of national power.

To these ends, the US and ROK should explore how best to include Korea in broader Indo-Pacific initiatives. Too often, Korea's envisioned role in the Indo-Pacific region is left unclear in US regional strategies. For example, many Korean observers continue to question how the ROK fits into the US vision of a "free and open Indo-Pacific," or what the Biden administration's emphasis on "like minded" nations may mean for the ROK. Washington should be clearer and more explicit in its vision for the role its Korean ally can and should play in the Indo-Pacific, and develop this vision in close consultation with Seoul.

Moreover, Seoul's past concerns about China's reactions have often left the ROK on the geopolitical sidelines, as new "minilaterals"—such as the Quad and AUKUS—have flourished across the Indo-Pacific. This is both unsustainable strategically and unfair to the significant role that the ROK plays in the Indo-Pacific. Washington and Seoul should set an ambitious agenda for the ROK to cooperate with these minilaterals and enhance the US-ROK-Japan trilateral, which has unfortunately foundered in recent years.

A critical area in need of enhance alliance collaboration is economic and trade policy. Most immediately, the alliance should work to better inoculate the ROK from future economic punishment from China and enhance preparations to support the ROK economically and politically, if China were to again attempt to punish Seoul for supporting the alliance. Additionally, the US

and ROK should work with other countries that have been targeted by China for economic retaliation and political influence (including Japan, Australia, Sweden, and Lithuania) to establish mechanisms to respond, and diminish vulnerability, to Chinese economic coercion. Ongoing efforts to secure critical supply chains—such as those associated with semiconductors—could support these efforts.

When considering these options, Seoul may want to pursue some of these initiatives cautiously and more slowly than Washington would prefer. American policymakers should understand that some hesitancy reflects domestic political concerns rather than deference to Beijing, and they should take care to not go too far in US enthusiasm for greater cooperation with Seoul. It should be clear that the ROK is in the driver's seat with these new initiatives, that the two allies are shoulder-to-shoulder in their efforts to modernize the alliance, and that both sides respect their internal processes. This is a marathon, and pushing too hard, too fast runs the risk of undermining trust and enthusiasm.

Conclusion

The rise of China is driving the most significant shift in geopolitical power since the end of the Cold War, and it will take time for the US and ROK to accordingly evolve their strategies. As part of this adjustment, the US-ROK alliance should be mindful of the old imperative from Silicon Valley: "adapt or die."

By acknowledging the profound implications of China's rise for the ROK and the alliance, Seoul and Washington have the opportunity to expand the breadth of their military cooperation, while also establishing new areas of collaboration across other elements of national power. Most important, the US and ROK should recognize that their interests remain deeply intertwined, and that the alliance is the most effective way to promote stability, prosperity, and the shared values of democracy and the liberal international order across the Indo-Pacific region.

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Korea in US–China Relations: Bridging the Gap as the Priority

Jae Ho Chung

Professor of International Relations, Seoul National University

POLICY RECOMMENDATIONS

“Bridging the gap” should be the priority for both the Yoon and Biden administrations in dealing with the intricate problems associated with the long, steep competition between the US and China:

- The Yoon administration must seek to maintain a healthy balance between public opinion and foreign policy.
- The Biden administration should improve the agility of the alliance against threats and coercions of a nonmilitary nature.
- Both administrations need to agree on ideal ways to strengthen their presence and relevance for the well-being of the region.

The new administration of President Yoon Suk-yeol has just been inaugurated in South Korea, breaking the 10-year cycle in which one party, whether conservative or progressive, produced two presidents in a row. But even though governments have changed, one fundamental geopolitical—geo-economic and geotechnological as well—challenge remains unchanged. The question of how to cope with the competition and confrontation between the US and China will only get more daunting, rendering the strategic conundrum more complicated for the Indo-Pacific region and for Korea in particular.

The track record of the South Korean government in this “great game” has been less than impressive. Korea’s *modus vivendi* in the past 10 years has been disorderly, incomprehensible, and even confusing. It was disorderly because the Park Geun-hye administration

(2013–17) defined improving relations with China as its diplomatic “blue ocean” without due regard for Korea’s challenging and fast-changing strategic landscape.

The dire consequence was manifested in Beijing’s harsh sanctions over the deployment of Terminal High-Altitude Area Defense (THAAD) batteries.

It was incomprehensible because the Moon Jae-in government (2017–22) chose to overaccommodate—if not appease—China, despite the face-losing experiences of the continued sanctions and other mishaps. The Moon administration’s stance was particularly confusing because it was often dubbed “strategic ambiguity” but proved later to be nonaction in many cases.

In the future, three types of gaps need to be filled bilaterally as well as on domestic scenes: (1) the Yoon administration must maintain a healthy balance between

public opinion and foreign policy; (2) the Biden administration should make the alliance more agile against nonmilitary threat and coercion; and, (3) both administrations need to strengthen their presence and relevance for the stability and prosperity of the region.

Public Opinion and Foreign Policy

While the Park administration's passionate approach to China was atypical of a conservative government, it was nevertheless reflective of Korean public opinion at the time, which was largely favorable toward China. The Moon government's China policy, however, makes one scratch his or her head as there were wide rifts between fast-declining public perceptions of China (particularly since 2017), on one hand, and its near-appeasement policy vis-à-vis China, on the other hand. Consequently, the 2022 presidential election became the first where China became an issue of contention.

Recent survey findings shed important light in this regard. Those conducted by Pew Global Research (June 2021), *Yomiuri Shimbun* and *Hankook Daily* (June 2021), the Asan Institute (September 2021), Seoul National University's Institute for Peace and Unification Studies (November 2021), the Chicago Council on Global Affairs (December 2021), and the Federation of Korean Industries (March 2022) suggest, among other things, that (1) in the eyes of Koreans, China is increasingly viewed as a major security threat; and (2) the alliance with the US needs to be strengthened.

In the past five years, however, Korea's policy has not reflected such public views of China. Focusing primarily on North Korea and, therefore, extending the logic to the importance of China's role, the Moon government's policy overaccommodated China. And this thinking was best captured by the so-called three-no stance of October 2017 (i.e., no additional deployment of THAAD, not joining the US-led missile-defense system, and no upgrading of Korea-US-Japan security cooperation to a military alliance).

The *JoongAng Daily*-Seoul National University Asia Center's joint survey (January 2022) offers an excellent snapshot of Korean public opinion regarding US-China competition. Two findings are particularly noteworthy:

(1) 68% of respondents "support the US" in the competition, while the figure for "support China" was 4%; and (2) as to the question of "which country will provide support when Korea's security is threatened," 92% chose the US, while only 3% chose China. The survey adds an important footnote, however: 68% of respondents believed that it is possible for China to rule Asia if the US is not able to enhance its competitiveness vis-à-vis China.

What should determine foreign policy—the elite's expertise or the general public's collective wisdom? While it is an age-old dilemma in democracies, the Yoon administration has to take on this tough challenge of sustaining a healthy balance between the two. At the same time, the US must pull itself together domestically and internationally, thereby living up to the expectations of its allies and partners in an increasingly dangerous world.

Rhetoric and Reality in Threat Management

The Moon government viewed the world around South Korea from an overly benign perspective—that is, good intentions could change the thoughts and deeds of North Korea and China. The eventual outcome of this naive approach, however, proved highly unsatisfactory. In contrast, the Yoon administration is coming in with a more realistic view of the world, ready to reciprocate what the other side does if necessary.

As a conservative government, unlike its predecessor, the Yoon administration will underscore and act upon the key importance of the South Korea-US alliance. Granted that the alliance is central to the bilateral relationship, it should nevertheless be realized that the alliance is not a panacea. Let us be reminded of the painful fact that the alliance was close to being useless in the face of China's economic coercion against South Korea during the 2017–20 period. Despite THAAD deployment's being the "alliance's joint decision," China chose to sanction Korea but not the US. And Washington did little to help Seoul in any practical way.

How the Yoon administration is going to position itself in the extensive restructuring of global supply chains remains to be seen. Insofar as Korea's economic

dependence on China for trade, investment, and key materials remains heavy, the possibility of yet another round of economic statecraft cannot be totally excluded. What can the alliance do about the nonmilitary threat, and how willing is the US to act for its ally in trouble? The 2017 trauma was not trivial for South Korea and, therefore, both Washington and Seoul should work closely to bridge the gap between the rhetoric of “go together” and how it plays out in reality.

Presence versus Relevance

The South Korea–US relationship had already been defined by the Lee Myung-bak government (2008–13) as a global alliance based on a comprehensive partnership. During those years, Sino–American tensions were not as high as they are today. Nevertheless, in those years, the Korea–US alliance that was both global and local (i.e., against North Korea) left its regional role largely unspecified. The Yoon administration is willing to fill the void by assuming some roles of regional importance. It is forewarned, however, that caution and prior preparation (particularly in expectations for China’s coercion against Seoul) on the part of both South Korea and the US are needed.

There is no doubt that America’s presence will expand in the Indo-Pacific region. More important, however, is the question as to whether the relevance of the US will also increase in tandem. For instance, as of 2021, the volume of Korea–China trade was far larger than the sum of Korea’s trade with the US and Japan. Will Washington

be able to revive its economic relevance to the region so as to offset China’s ever-expanding economic clout?

Another facet of America’s relevance to the region involves the amorphous jargon of “like-mindedness.”

While Washington prefers to use this term rather casually, allies and partners would like to get a better sense of this elastic concept. Does it refer to the framework of similar interest that allies and partners should share with the US, particularly in this fast-changing world of the global trust chain? Or, alternatively, does it denote a well-defined and consistent code of norms and values that America abides by and wants its allies and partners to internalize? One good starting point could be the joint effort to ensure that “might does not make right.”

Conclusion

The Yoon administration is likely to welcome America’s “comeback” to the region (if it had ever left Asia, that is). The new South Korean government is prone to shoulder some of the burdens and responsibilities for the daunting task of maintaining peace and prosperity in the dynamic but precarious Indo-Pacific region. Two issues are crucial here: consistency and credibility. Democracies are often fickle and even chaotic. Democratic pendulums—alternating governments in power seek differing policy priorities over time—are an unavoidable side effect. The Yoon and Biden administrations will need to work together at least for the next three years, if not five. How to maintain policy consistency and the credibility of commitments remains a key homework assignment for both.

The Land of Lousy Options: Dealing with North Korea

Victor Cha

Senior Vice President and Korea Chair, Center for Strategic and International Studies
Vice Dean and Professor, Georgetown University

POLICY RECOMMENDATIONS

Aligning on policy and strategy to mitigate the growing threat from North Korea will require continuous communication, cooperation, and compromise within the US-Korea alliance. As a first step in implementing the policy recommendations made in this article, the Biden and Yoon administrations should build on their early summit to align on strategy for North Korea in several areas.

- First, the two sides should continue to affirm to North Korea (and to China) that complete, verifiable, irreversible denuclearization (CVID) remains the goal on the Korean Peninsula. Despite the advanced state of North Korea's nuclear program, giving up on denuclearization as a long-term aim is not a viable option, as it would both undermine the global non-proliferation regime and create incentives for neighboring countries to initiate their own nuclear weapons programs, thereby seriously undermining regional stability.
- Second, the United States and South Korea must strengthen regional defense and deterrence through an alliance-focused strategy. This will require close coordination between Washington, Seoul, and Tokyo—starting with a restart of the Trilateral Coordination and Oversight Group (TCOG)—while maintaining transparency at each step of negotiations and not using alliance equities, such as bilateral military exercises, as bargaining chips. Trilateral cooperation on theater missile defense, military exercises, and intelligence sharing are critical must-do's for the Biden, Yoon, and Kishida governments. These steps will amplify pressure on Pyongyang and provide a backup plan based on deterrence and containment if negotiations fail.
- Third, the Biden and Yoon administrations should present a comprehensive denuclearization road map to North Korea that begins with an initial freeze of the plutonium and uranium nuclear operations in and around Yongbyon, a testing moratorium, and a stop to North Korea's fissile material production. Once this step has been achieved, a second dialogue track should be opened that focuses on the prospect of transformed political relations. Between these two tracks, interim agreements on formalized test bans, threat reduction programs, and a peace initiative can act as pathways to irreversible nuclear disablement and dismantlement

in later stages of negotiations. In considering interim deals, it will be important to maintain pressure from the United Nations (UN) Security Council and UN member states' sanctions. The two allies must agree to: 1) be stingy with these sources of leverage in exchange for only reversible steps by North Korea; and 2) be generous with major sanctions relief in return for irreversible denuclearization steps.

- Fourth, the United States and South Korea must emphasize a mutual commitment to addressing human rights abuses in North Korea, and to allowing North Koreans access to information about the world. The Biden administration should appoint a special envoy for North Korean human rights abuses, a position that has been vacant since the Obama administration. Improvements in the way North Korea treats its own people will be an important indicator of its strategic decision to join the international community, as well as a necessary precondition for any serious economic engagement with the world, given current legal restrictions for US companies regarding human rights violations in the supply chain.¹ Simultaneously, the incoming Yoon administration should co-sponsor resolutions on North Korean human rights violations at the UN Human Rights Council and UN General Assembly—something it has not done since 2018—and not compromise doing so in exchange for dialogue with North Korea
- Fifth, the United States should support North-South engagement efforts, particularly in humanitarian areas, with the understanding that these policies will be closely coordinated with denuclearization negotiations and will remain compliant with the UN sanctions regime. In this way, inter-Korean peacebuilding initiatives can advance alongside shared aims in the area of denuclearization.
- Sixth, both the United States and South Korea should recruit China to put more pressure on North Korea while not fully outsourcing the policy to Beijing. China's strategic interests in its approach to North Korea diverge from those of the United States. It places a higher premium on maintaining stability (and preventing the possibility that US troops would be stationed near its border in case of a North Korean collapse) than on removing North Korea's nuclear weapons. For this reason, in working with China, it is important to strike a balance between coordinating on tactics while not allowing Beijing to drive the overall approach toward denuclearization.
- Seventh and finally, preventing a massive—and inevitable—covid-19 outbreak in North Korea should be addressed with urgency and separately from the nuclear issue. A mass-mRNA vaccination initiative by COVAX supported by the US and the ROK would constitute a major initiative that the Kim regime would have difficulty turning down. It would allow Kim to partially reopen the economy. It could also potentially create better atmospherics between Washington and Pyongyang and dissuade Kim from starting a new cycle of provocations, though that cannot be promised. It could additionally complicate relations between Pyongyang and Beijing, which continues to adhere to a "zero-Covid" policy (North Korea also previously explicitly rejected offers of the Chinese vaccine due to concerns about its ineffectiveness).² But even if it did not, it would still be a worthy endeavor. Protecting innocent North Koreans from a deadly disease is not only the right thing to do—it's also in the interest of countries everywhere that seek to end the pandemic.

The United States and South Korea share the common goal of a Korean Peninsula that is whole, democratic, and free of nuclear weapons. However, a stall in negotiations and a failure to align strategically between the two allies have thwarted any substantial progress towards this objective. The Trump administration and the Moon Jae-in administration were more focused on achieving unilateral milestones with North Korea. Trump, the real estate businessman, wanted Kim to agree to building condominiums and casinos on Wonsan Beach in return for denuclearization.³ Moon wanted the long-sought goal of political progressives in Korea: an inter-Korean peace declaration.⁴ While both spoke of presenting a united front to work toward a mutually beneficial objective, each prioritized its own needs, which ultimately gave Kim Jong-un more leverage.

Despite an unprecedented global pandemic, North Korea has demonstrated continued progress on its weapons of mass destruction (WMD) programs that remains a threat to regional stability in Northeast Asia. A show of any progress, no matter how significant, in such circumstances is evident of the fact that the regime continues to sacrifice the welfare of its citizens for growing military capabilities despite severely diminished resources. As such, President Biden and President-elect Yoon must be on their guard against a new North Korea crisis—one involving a catastrophic mix of covid-19, nuclear weapons, and a collapsing economy.

Nuclear Weapons and Delivery Systems

The threat presented by North Korea's nuclear weapons is more serious than ever. Pyongyang is believed to have 20 to 30 nuclear warheads and enough fissile material production capacity for scores more. It is also close to, if not already in possession of, the ability to reach cities in the United States with long-range missiles carrying multiple nuclear warheads. It not only already possesses short-range ballistic missiles that can reach South Korea and Japan, but is also fine-tuning its precision strike capabilities with each additional test launch.⁵

In total, North Korea has conducted six nuclear tests and over 100 missile tests over the last 30 years.⁶ Kim Jong-un's speech at the Workers' Party Congress in January 2021 made clear that denuclearization is not in the cards

for the Biden administration. On the contrary, Kim laid out an ambitious agenda for weapons modernization, including hypersonic missiles, solid-fuel intercontinental ballistic missiles (ICBMs), unmanned aerial vehicles, nuclear-powered submarines capable of launching ballistic missiles, and tactical nuclear weapons. Kim also said he wants to develop ICBMs with precision targeting up to nearly 10,000 miles, which would more than cover the continental United States.⁷

Now, with the war in Ukraine, North Korea continues to find ways of putting itself on the front burner. It test-launched an ICBM in March 2022, breaking its five-year-long self-imposed testing moratorium, and has threatened the possibility of a looming nuclear test.⁸ A few weeks following the launch, satellite imagery from March 31, 2022 revealed renewed excavation activity at the Punggye-ri nuclear test site.⁹

The Covid-19 Pandemic

Kim Jong-un should fear US military power far less than the prospect of a pandemic raging across a virtually nonexistent public health infrastructure. While North Korea claims there have been no covid-19 cases in the country, it has completely locked down its borders, not unlike the lockdowns it imposed in response to the Ebola outbreak in West Africa in 2014 and SARS in 2003. A CSIS Korea Chair independent study found that in response to the MERS virus in 2015, North Korea stayed locked down for twice the amount of time as South Korea, where the outbreak happened.¹⁰

For over two years, North Korea has imposed a “zero covid” policy, but this has also cut off critical food and medical supplies, resulting in severe shortages. It is one of two countries in the world that has not administered any covid vaccines to its people (despite multiple offers from Covax, the United Nations-backed global vaccine initiative) which has left its population of approximately 25 million people vulnerable to a massive outbreak and probably with minuscule immunity from prior infections. An expert panel convened by CSIS found that North Korea's failure to vaccinate its population makes it uniquely susceptible to a sudden outbreak of covid-19 variants that could kill more than 100,000 people.¹¹ Not only would this be terrible from a humanitarian perspective, but it could also worsen the pandemic by

giving the coronavirus more chances to evolve and potentially even escape immunity provided by vaccines or previous infection.

Even if Pyongyang were to accept humanitarian health assistance, North Korea's approach to negotiation also creates challenges. Its leaders often do not reveal what they want, and they also "forum shop" among various aid organizations to seek the best possible deal. China, which adheres fiercely to its "zero covid" approach, may object to efforts to move North Korea beyond such an approach.¹²

A Collapsing Economy

The North Korean economy has suffered dearly as a result of COVID-19, registering an economic downturn in 2020 comparable to the Great Famine in the 1990s, when 10% of the population perished. Normally, China and South Korea would help out, but the North Koreans have closed off almost all border trade for fear of the virus entering the country. Year-on-year trade with China, far and away the North's leading trade partner, is down more than 70%. Indeed, when a disturbed South Korean government official tried to defect to the North in 2020, the North Korean military not only shot him but also burned his body to avoid any virus transmission.

Before the outbreak of covid, North Korea saw its gross domestic product (GDP) increase by 0.4% in 2019—the first sign of any growth since 2016, when Kim Jong-un first announced his five-year economic plan. Then the pandemic ravaged the world in 2020, to which North Korea was not immune, despite its claims of zero infections. This, coupled with the effects of UN sanctions and severe flooding in the country, caused a 4.5% drop in its GDP—the worst economic downturn since 1997.¹³

Some make the argument that the Russian invasion of Ukraine may see North Korea benefiting economically. Global sanctions against Russia may create trade diversion patterns favoring North Korea as Russia struggles to export oil and gas, which make up a significant sum of its revenue. The impact will be limited, however, as long as North Korea practices a zero-Covid policy locking down its borders.

Despite reports from late 2021 claiming North Korea was gearing up to slowly reopen its borders, citing talks with China and Russia regarding cross-border train

routes, other signs indicate that these efforts are far off.¹⁴ For one, Pyongyang adopted its "Law on Disinfection of Imports" in March 2021 and simultaneously began a major construction project to convert Uiju Airbase into a disinfection facility for cargo transportation along the Sinuiju-Dandong border crossing. However, satellite imagery from November 2021 showed no signs of the facility nearing operational status.¹⁵ Further analysis of the layout and infrastructure of the facility suggests that the quarantining and disinfecting period for imported cargo and personnel may take up to several days.¹⁶ Taking all these factors into consideration, it is difficult to predict with certainty that the North Korean economy can survive being shut down for another year or longer.

The Land of Lousy Options

The challenges for Washington and Seoul are complex and the choices are never easy. When it comes to North Korea, the US and its allies are never choosing the "best" policy, but choosing the "least worst" policy among a range of bad choices. It is truly the land of lousy options.

Given these challenging conditions, Washington and Seoul would be well advised to adhere to four core tenets of policy.

First, the two allies should never sacrifice alliance equities (e.g. joint military exercises) for the sake of incremental progress in denuclearization negotiations.

Second, inter-Korean assistance should be coordinated between Washington and Seoul, and pegged to advances in denuclearization negotiations.

Third, despite current political challenges, Seoul and Washington must engage in airtight trilateral policy coordination with Japan. This is important not just with North Korea but also for maintaining a united position vis-à-vis China and Russia.

Fourth and finally, no surprises. As tempting as it may be to engage in secret negotiations with Pyongyang, there should be no surprises in the alliance.

These tenets ensure that whatever happens with North Korea, the allies will remain in sync and the alliance will not weaken as a result of negotiations with Pyongyang.

Dana Kim, Korea Policy Fellow at the Center for Strategic and International Studies, contributed to this article.

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How to Deal with North Korea's Nuclear Program: A South Korean Perspective

Won Gon Park

Professor, Ewha Womans University

POLICY RECOMMENDATIONS

- South Korea and the US should reaffirm that their goal is North Korea's denuclearization and should create a road map for achieving this objective.
- Discussions of "nuclear arms control" and "armament restrictions" should be sublated into the larger denuclearization goal—that is, lesser arms control objectives should not be pursued on their own.
- Because North Korea will not denuclearize anytime soon, South Korea and the US should strengthen their own nuclear deterrence capabilities—and in particular, they should create an integrated missile defense network involving the US, Japan, and South Korea.

On March 24, 2022, North Korea officially ended its moratorium on nuclear and missile tests by testing a Hwasong 17-type intercontinental ballistic missile (ICBM). Kim Jong-un ordered the launch in a handwritten order, stressing the "inevitability of a long-term confrontation with US imperialism." He also declared that "the powerful nuclear execution of justice, which the North Korean people are seizing vigorously, will undoubtedly destroy US imperialism and its followers' military bravado." Kim Jong-un further declared that he would focus all the nation's power on continuing to strengthen its defense capabilities. This is only the latest indication that North Korea will continue to upgrade, diversify, and mass-produce its nuclear weapons in the future.

North Korea is pursuing a clear goal: to be fully equipped with nuclear capabilities that can attack

Northeast Asian targets such as South Korea, Japan, and Guam, and also the US mainland. Kim wants ensure that the international community, including South Korea and the US, would need to give up on the complete denuclearization of North Korea and ultimately would need to recognize North Korea as a de facto nuclear state.

Denuclearization Remains the Goal

In response, South Korea and the US should reaffirm that North Korea's denuclearization remains their goal. After the Panmunjom Joint Declaration in April 2018 and the Singapore agreement in June 2018, the language stating the "Complete, verifiable, irreversible dismantlement" (CVID) of North Korea's nuclear arsenal

was changed to the “denuclearization of the Korean Peninsula.” Immediately after the inauguration of the Biden administration, the expression “denuclearization of North Korea” appeared again. But, since the South Korea–US summit on May 21, 2021, and the completion of the US review of its North Korean policy, the term has reverted to “denuclearization of the Korean Peninsula.”

North Korea defined the denuclearization of the Korean Peninsula in December 2018 as “a complete elimination of the US nuclear threat to Joseon before eliminating our nuclear deterrence.” This calls for the US to first withdraw its extended deterrence from South Korea and “the withdrawal of US troops holding the right to use nuclear weapons in South Korea.” This is clearly unacceptable.

Therefore, South Korea and the US should once again postulate without any ambiguity to set CVID as the clear goal for eliminating past, present, and future nuclear weapons possessed by North Korea. Since North Korea’s leaders loathe the expression “CVID,” especially the word “irreversible,” because they believe it is a word used for a defeated country, it may make sense to adopt the expression “final, fully verified denuclearization,” or “FFVD,” which was used during the Trump administration. What is important is to clarify that the ultimate goal is to denuclearize *North Korea*, not to denuclearize the Korean Peninsula.

A road map for denuclearizing North Korea should be established. At a minimum, Seoul and Washington should demand that Pyongyang’s current nuclear development should be frozen, and its past nuclear weapons should be declared, verified, and dismantled. “Current nuclear development” refers to both nuclear fissile material and nuclear bomb production facilities, and “past nuclear development” refers to nuclear material and warheads that have already been produced.

The Biden administration’s primary approach to dealing with North Korea’s nuclear threat has been to set denuclearization goals and establish a road map if North Korea agrees to negotiations. The February 13, 2007, and October 3, 2007, agreements suggest that the process could start with (1) freezing nuclear facilities and (2) disabling nuclear facilities. This could lead to (3) reporting and verifying the nuclear program, and (4) dismantling the nuclear program. An improvement

of North Korea–US relations is likely to occur early in the process, and the lifting of at least some sanctions, including snapbacks, is expected.

This would be a dangerous road map to follow. Since North Korea’s economy is evading sanctions, it can function sufficiently with only partial lifting. Moreover, even if a snapback clause were included, it would be meaningless, considering that the UN sanctions Resolution 2397 of December 2019, which already had a trigger clause, was not applied, even though North Korea fired an ICBM. Since China and Russia are siding with North Korea, the possibility of sanctions being restored once they are lifted is currently very low.

Nuclear Disarmament Negotiations Should Be Sublated

Discussions of “nuclear disarmament” and “armament restrictions” should be sublated into the larger denuclearization discussion. In other words, lesser arms control objectives should not be pursued on their own. There is a growing consensus in the US that the complete denuclearization of North Korea is nearly impossible. Instead, many policymakers prefer arms restrictions to stop the development of ICBMs that can attack the US mainland. Some also claim that sanctions should be lifted as a condition for North Korea to resume the testing moratorium. There is also an opinion in South Korea that “nuclear disarmament” talks should be conducted with North Korea. But the premise for disarmament or arms control is equivalent to recognizing North Korea as a de facto nuclear state, with the only point under negotiation being how many nuclear weapons it is allowed to have. In particular, if the US focuses only on ICBMs, South Korea will be completely exposed to North Korea, which has already secured nuclear and missile attack capabilities against South Korea. In this case, if the US does not make efforts to upgrade its extended deterrence, such as having strategic plans for sharing nuclear weapons between South Korea and the US, there could be widespread calls for nuclear armament in South Korea.

It is also worth considering that South Korea and the US revise the Korea–US Mutual Defense Treaty to stipulate

extended deterrence. If the two countries' legislatures ratify the treaty, it will achieve the highest level of institutionalization. President Trump's four years in power were enough for South Korea to doubt the United States' security commitments to South Korea. The problem is that there is an open possibility that policies like Trump's will emerge again. Therefore, efforts should be made to institutionalize and preserve the US alliance with South Korea as much as possible.

Strengthening Deterrence

The top immediate priority for South Korea and the US in their North Korean policy should be to strengthen their joint nuclear deterrence capabilities. The denuclearization of North Korea would be very difficult to achieve in a short period of time. Therefore, South Korea and the US should first expand their ability to respond to North Korean nuclear weapons. South Korea can no longer delay coordinating its missile defense network with those of the US and Japan.

The three promises that the Moon Jae In government made to China—that there will be no additional deployment of the Terminal High Altitude Area Defense (THAAD); no the incorporation of South Korea into a wider US missile defense system; and no military alliance between South Korea, the US, and Japan—are no longer valid. Given China's policy as announced by Jang Jun, the Chinese Ambassador to the United Nations, at a UN Security Council meeting held after North Korea's launch of the Hwasong-17, South Korea has no reason to respect these three promises. Jang was quoted in a public statement: "North Korea kept its promise, but the US did not keep its promise to stop joint military exercises and threatened North Korea's security by deploying strategic nuclear assets around the Korean Peninsula." He emphasized the obligation of the US and justified the launch of the North Korean ICBM on North Korea's side. In the current political situation, where China defends North Korea's nuclear missiles,

South Korea should deploy additional THAAD and link it with US missile defense for its own self-defense.

In particular, the US successfully linked the THAAD and Patriot systems in October 2020. It is expected that the US will soon get to a high level of technical achievement by linking various missile defense systems that are controlled and deployed from the US mainland. Rather than deploying radars and interceptors in a unit, the US military will use interceptors, detection, and surveillance equipment in various combinations as necessary.

North Korea's advanced missile capabilities shown in early 2022, such as pull-up and circuit maneuvers, are almost impossible to intercept properly with South Korea's current missile defense system. The hypersonic missiles and long-range cruise missiles that North Korea is developing are all difficult to detect, identify, and intercept. Thus to protect itself, South Korea needs to be part of a broader missile defense system with the US and Japan.

Conclusions

The newly inaugurated South Korean government should actively encourage the US to actively pursue North Korea's denuclearization as a top-level priority. Currently, the Biden administration prioritizes US–China competition, Russia's illegal invasion of Ukraine, and Iran's nuclear development above the North Korean nuclear problem. Additionally, the Moon Jae In government's policy of unconditional engagement in North Korea, as well as reluctance to raise the issue of denuclearization since 2020, have affected the Biden administration's policy toward North Korea. With Moon in power, it would have been hard for Biden to pursue denuclearization and deterrence forcefully. With Yoon in office, it will be different. South Korea should not give up on the denuclearization of North Korea under any circumstances. Even if the US prioritizes nuclear disarmament and arms restrictions, it must be linked to the ultimate goal of the complete denuclearization of North Korea.

The US–Japan–ROK Trilateral: Rebuilding Confidence, Deepening Cooperation

Sheila A. Smith

John E. Merow Senior Fellow for Asia-Pacific Studies, Council on Foreign Relations

POLICY RECOMMENDATIONS

With a new government in Seoul, the US now has an opportunity to encourage further improvement in the Japan–ROK relationship. Four areas of confidence building may facilitate stronger trilateral bonds:

- First, the United States' ability to deter aggression against either ally depends on deploying and maintaining forces capable of ensuring success, if North Korea were to attempt to use force. The US–Japan and the ROK should restart regular trilateral exercises for air and ballistic missile defenses and design combined exercises that demonstrate their collective capabilities.
- Second, achieving greater economic resilience should be a priority. As the region becomes increasingly sensitive to events and actions that might disrupt supply chains, South Korean participation in the Quad working group is recommended. Similarly, the US, Japan, and South Korea have a shared interest in ensuring that export controls of advanced technology are robust and could play a significant role in designing future multilateral efforts to ensure protections of critical technologies.
- Third, popular sentiments in both countries on the legacy of World War II remain highly sensitive and will require a steady and consistent approach by both Japanese and Korean leaders. The US should explore the potential for the third-party mediation of difficult issues.
- Finally, the US, Japan, and South Korea should invest in a concerted, trilateral effort to develop people-to-people exchanges to develop stable ties among the three nations.

The US–Japan–ROK trilateral relationship is one of America's most important in the region. Each of our security alliances provides deterrence and assures the defense of Japan and South Korea. Together, they provide the foundation for deterring North Korean aggression on the peninsula and for maintaining peace

and stability across Northeast Asia. Yet the relationship between Seoul and Tokyo is often antagonistic, despite their shared security concerns. A territorial dispute and lingering war memory sensitivities can easily evoke strong popular sentiments, and politicians on both sides have at times seen opportunity in inflaming these

sentiments to their advantage. Of late, these tensions have spilled over to affect not only political ties but also the economic partnerships that have long been seen as ballast to the periodic eruption of antagonism. This threatens the United States' ability to work closely with both allies to ensure uninterrupted deterrence, and it suggests that these two alliances may function below their capacity if a crisis were to emerge.

Moreover, as Asia's geopolitics have adjusted to China's rising economic and military power, policymakers in Tokyo and Seoul have at times differed in their approach to managing relations with Beijing. The US has deepened its agenda for cooperation with Japan, Australia, and India via the Quad and has developed working groups to address transnational concerns such as supply chain resilience and effective controls over technology transfer. Whether this signals a fundamental difference in how Seoul and Tokyo see China's role in the region remains to be seen. Yet it will be important for Washington, Tokyo, and Seoul to deepen their understanding of China's intentions as well as the options they each bring to managing the growing challenges associated with Chinese influence on the region as well as on the global order.

To address North Korean issues, in early 2021 the Biden administration began a sustained trilateral consultative process with South Korea and Japan. With a new government in Seoul, the US now has an opportunity to encourage further improvement in the Japan–ROK relationship. Repairing confidence between Tokyo and Seoul will require political leadership not only from South Korea's new president but also from Japan's prime minister. While the US should play a supporting role in encouraging bilateral reconciliation steps for outstanding issues of historical reconciliation, in some areas a direct US role may be beneficial. Four areas of confidence building, in particular, may facilitate stronger trilateral bonds.

Improve Deterrence

The United States' ability to deter aggression against either ally depends on deploying and maintaining forces capable of ensuring success if North Korea attempted to use force. With the increase in North Korea's missile capabilities, Japan is as vulnerable to aggression as

South Korea. A repeat of 2017 missile launches by the North would demand a demonstrable response by both alliances. But an integrated trilateral response would be even more effective. Resuming air defense and ballistic missile defense (BMD) exercises between Japanese, ROK, and US forces would be an important first step. The three countries can further boost deterrence with trilateral exercises that could demonstrate a further integration of capabilities. Humanitarian and disaster relief exercises could be helpful in building confidence. A training program designed specifically to train the next generation of trilateral military and intelligence professionals would also be beneficial.

Greater Economic Resilience

As the region becomes increasingly sensitive to events and actions instigated by China that might disrupt supply chains, both Japan and South Korea must prepare for greater economic resilience. South Korea has already felt the pressure of economic coercion by China after the deployment of Terminal High-Altitude Area Defense (THAAD). Similar steps to improve deterrence on the peninsula, such as President Yoon's desire to deploy a second THAAD system, will require a concerted response by the US and Japan to help deflect any costs that Beijing may wish to impose. Efforts in the Quad and elsewhere to design resilience for supply chains deeply affects Korean manufacturers, and Yoon's proposal for including South Korea in the upcoming May Quad meeting in Tokyo would be an important first step. Similarly, a trilateral dialogue on tightening export controls on advanced technologies should be initiated. Japan's new economic security legislation offers an important opportunity to consider how to align existing frameworks for export controls as well as US–Japan–ROK ambitions for a multilateral framework that could include Australia and India as well as the European nations.

Dealing with the Legacy of War

Popular sentiments in both South Korea and Japan on war legacy issues require a steady and consistent approach by both Japanese and Korean leaders. While the 1965 Treaty on Basic Relations—with its associated Agreement on the Settlement of Problems Concerning

Property and Claims and on Economic Co-operation—provides the initial framing of compensation claims, both nations have acknowledged that it did not fully address all issues. The 2015 comfort women agreement reflected admirable leadership by both Prime Minister Abe and President Park. The Moon government's undermining of this accord led to a serious loss of trust between the two governments. Park Jin, President Yoon's foreign minister, noted that this 2015 agreement represented a promise by the government of South Korea, signaling a serious intent to address the Japanese government's frustration with the on again, off again nature of government-to-government agreements on historical reconciliation. The Korean Supreme Court's ruling on forced labor claims could involve the forcible redistribution of Japanese corporate assets to the plaintiffs, thereby violating the terms of the 1965 Treaty on Basic Relations.

Ultimately, reconciliation is a process, and no one government can declare an end to the process unilaterally; nor can issues as complex as wartime claims be fully addressed without the support of the Japanese and South Korean people. If a government resolution is required, then the 1965 Basic Agreement included provision for third-party mediation in future claims. In the interest of resolving what may be politically too difficult to negotiate bilaterally, a mediation process could be explored as a way of reaching an equitable resolution. A different approach would be to allow nongovernmental actors, including Japanese and South Korean corporations and other organizations, to create a framework for reconciliation.

People-to-People Exchanges

The US, Japan, and South Korea should invest in people-to-people exchange to ensure more stable ties between the three nations. There is a precedent here that might be a useful reference for the trilateral relationship. In 1961, at the suggestion of Ambassador Edwin Reischauer, the United States and Japan initiated a new dialogue among civil society leaders to facilitate deeper ties among the nations' citizens. President John F. Kennedy and Prime Minister Hayatou Ikeda created the Cultural and Educational Interchange Commission (CULCON) to deepen the

knowledge of and friendship between the people of Japan and the United States. Today, I have the privilege of chairing the US panel, which includes representatives from Congress, the Department of State, and the Department of Education, as well as prestigious scholars and business and social leaders knowledgeable about the US-Japan relationship. Last year, CULCON celebrated its 60th anniversary. From a meeting that largely brought university and business leaders together to a network of exchanges in the arts, education, civil society, and local community leaders, this advisory body to the US and Japanese governments has helped to foster a broad network of individuals and organizations across both nations in support of deeper ties and shared problem-solving. This seems a valuable model for considering trilateral engagement efforts that might help repair the people-to-people ties between Japan and the ROK, and perhaps could also be designed to include representatives from the United States.

Conclusion

Now, more than ever, strong ties between the US, Japan, and South Korea are needed to address the myriad challenges confronting the Indo-Pacific region and the global order. While our individual interests may not always align, we share a deep commitment to democracy, to a globalized economy, and to maintaining a free and open regional order.

As our alliances adapt to the shifting balance of power in Asia, so, too, must they adapt to new generations of Americans, Koreans, and Japanese as they take on leadership within our nations. Questions about the value of our relationships, about the commitments we have made and should continue to make to our trilateral partnership, and about the opportunities we have to improve it.

The US can and should encourage closer military ties between these two critical alliances so as to ensure and upgrade our regional deterrent. Economic ties must be protected from political fissures, and our collective resilience must be deepened in an increasingly volatile world. Our future rests with ensuring that the citizens of our three nations understand each other and build partnerships with each other in addressing these challenges.

Rebuilding the US–South Korea–Japan Trilateral Relations in the Indo-Pacific Region

Sook Jong Lee

Professor, Sungkyunkwan University

POLICY RECOMMENDATIONS

The United States, South Korea, and Japan have common interests in bolstering the liberal, rules-based order in the Indo-Pacific region. This article offers recommendations for three areas of cooperation:

- The US, South Korea, and Japan should contribute to the greater economic connectivity in the Indo-Pacific region. South Korea and the US should join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). The Biden administration needs to finalize its Indo-Pacific Economic Framework so that South Korea and Japan can identify the most useful roles they can play. South Korea, for example, can contribute to digital connectivity and infrastructure. All three countries can find better solutions for reaching carbon neutrality by providing clean energy in the region.
- The US, South Korea, and Japan should enhance security cooperation to deal with North Korea's escalating nuclear and missile threats by increasing intelligence sharing and undertaking close military and security consultation. South Korea's participation in the Quadrilateral Security Dialogue (Quad) working group, and later, full membership, are desirable for the region's peace and stability. The three countries need to develop a crisis management mechanism for contingencies in Taiwan and the South China Sea and East China Sea.
- As stable democracies, South Korea and Japan can support democratic resilience in the region. Both have become more vocal about supporting democracy, as has been evident in their actions toward Myanmar and Russia. The US can facilitate democratic unity among the three to provide coordinated programs such as good-governance-oriented foreign aid. The three can work together to create a plurilateral institution focusing on the region's democracy agenda. They should work closely to stop efforts by autocracies such as China and Russia to undermine human rights norms in the United Nations and other international organizations.

A free and open Indo-Pacific is crucial for the prosperity, security, and democracy of the US, South Korea, and Japan. This region has been increasingly moving toward China's influence, primarily due to its economic power. Countries in this region are tied to China through trade, supply chains, and investment. There is also a lack of a security architecture that can effectively govern the region's seas and skies. The Russian invasion of Ukraine is not only awakening European countries but also making countries in the Indo-Pacific region think about the possibility of a nearby war. To safeguard the democracies in Northeast Asia, it is imperative to create a structure for peace and prosperity. The US, Japan, and South Korea are the largest, third-largest, and tenth-largest economies in the world, and South Korea and Japan are the two strongest military allies of the US in Asia. As leading democracies that respect individual liberty, human rights, and the rule of law, they have supported others to live under democratic governance.

Despite these shared interests and practices, each country's vision remains bound by domestic politics, which hinders cooperation among the three. Antagonistic South Korea–Japan relations have been a core problem, making the search for trilateral arrangements futile. Recognizing this problem, the Biden administration, in its Indo-Pacific strategy released in February 2022, defined enhanced US–Japan–ROK cooperation as one of 10 action plans.¹ In a joint statement that followed, “the Secretary and Foreign Ministers emphasized their three countries share a common view of a free and open Indo-Pacific, which is inclusive, and shared respect for the rules-based international order and pledged to further expand their cooperative relationships.”² With the new Yoon Suk-yeol government in office from May 2022 and the new Japanese government led by the moderate Prime Minister Fumio Kishida since October 2021, there are high hopes to improve South Korea–Japan relations. Yoon's foreign policy is based on his view of South Korea as a “global pivotal state” working in closer cooperation with the US and Japan.³

Greater Economic Connectivity through the Indo-Pacific Economic Framework

All three nations have a common interest to bolster the rules-based economic order that allows countries to choose partners and policies free of coercion. To move forward, both South Korea and Japan must go back to placing each other on the “white list” of countries accorded preferential treatment for export licensing.⁴ They need to recognize that linking history issues to economic or security-related matters is not beneficial for either side. Japan contributed to the launching of the CPTPP after the Trump administration withdrew from the Trans-Pacific Partnership. The South Korean government is currently working to join the CPTPP, and the Biden administration should seek membership as well in the near future.

The US Economic Framework is a key for countries of the region to participate in the Indo-Pacific strategy but lacks concrete programs that showcase the benefits of participation. The Moon Jae-in government's New Southern policy was motivated primarily to reduce economic dependence on China. To promote active engagement in the Indo-Pacific Economic Framework, the Biden administration should send strong signals of the economic benefits that countries can derive from it. For instance, providing common standards and rules that can govern digital space and new frontier technology is worthy of serious attention.

South Korea can contribute to the framework by reducing the region's infrastructure gap and increasing digital connectivity, both areas where South Korea is a leading global economy. The US needs to invite South Korea to the Build Back Better World initiative that has been focused on the partnership with Group of Seven (G7) members. Using its robust information technology (IT) companies and foreign aid, South Korea can help connect the region digitally. The US, South Korea, and Japan should work together to provide reliable and trustworthy rules and norms for governing digital space. Last but not least, South Korea should participate in the Enhancing Development and Growth through Energy (EDGE) to learn lessons that will help achieve its challenging goal of achieving carbon net zero by 2050. All three countries should also seek to construct rules and standards that can govern digital and other new frontier technologies.

All three countries recognize the centrality of the Association of South East Asian Nations (ASEAN) and the importance of India in their regional vision. If trilateral directions and standards are provided, each country's bilateral cooperation with ASEAN countries and India could generate synergies. Educational or cultural exchanges can surely strengthen diplomatic as well as economic ties.

Security Cooperation for the Free and Open Indo-Pacific Region

With no security architecture in the region, plurilateral security cooperation like the Quad or a trilateral security pact between Australia, the United Kingdom, and the United States (AUKUS) would be a desirable addition to the existing various bilateral security alliances with the US. At the same time, these arrangements need to be perceived as inclusive rather than as containing China. South Korea is currently participating in the working group dealing with the Coronavirus pandemic, but it needs to expand to areas such as maritime cooperation, which is based on the United Nations Convention on the Law of Sea. It may take time for South Korea to become a full member of the Quad, so the US and Japan should work together to increase the momentum for South Korea to join. Cybersecurity can be a common area of interest to be dealt with trilaterally and also in Quad-plus gatherings.

The biggest security challenge for all three countries is wisely responding to North Korea's nuclear and intercontinental ballistic missile capabilities. For the sake of more efficient and effective intelligence sharing, the three countries should consider changing the existing two bilateral General Security of Military Information Agreements into a trilateral agreement. Additionally, the US needs to continue to assure its nuclear-extended deterrence stance to curb the rising public sentiment in South Korea—and to a lesser extent in Japan—to build its own nuclear weapons as a hedge against the North Korean threat. More regular trilateral defense meetings and joint military exercises would provide a more stable security environment. It is also imperative to construct a trilateral mechanism to deal with a potential crisis over Taiwan or the South China Sea and East China Sea brought about by Chinese aggression.

The Ukraine war is causing the US to become more actively involved in Europe with its NATO allies. As such, US allies and partners in the Indo-Pacific region are watching to see if this will weaken the US strategic focus on the region. The Biden administration needs to show that this is an unfounded concern.

Bolstering Democratic Resilience

The backsliding of democracy in the world has been widely recognized as undermining the liberal international order. The Varieties of Democracy (V-dem) study reports that the level of democracy enjoyed by the average global citizen in 2021 has decreased to 1989 levels, eradicating the last 30 years of democratic advances.⁵ Autocratic governments like Russia became dangerous by waging war and bending international rules in their favor.

The Indo-Pacific region is no exception. Some examples of democratic backsliding include Thailand's hybrid democracy with frequent military coups, Myanmar being under a military dictatorship since the February 2021 coup, the rise of Hindu nationalism in India, frequent reports of oppression of the free press and violations of human rights in the Philippines, and notorious human rights violations in North Korea and Xinjiang. Free civic space in Hong Kong and other places has been shrinking as authoritarianism expands.

South Korea and Japan are the two of the most prominent leaders in democratic Asia. They have participated in larger networks, such as the Community of Democracies and the Summit for Democracy, as well as the smaller 1.5 track D-10 dialogue. What is lacking is a region-focused cooperative body that can encourage democratic resilience. Under Yoon and Kishida, South Korea and Japan are expected to revive the cooperative spirit of the Kim Dae-jung-Obuchi Joint Declaration of 1998. They should move beyond this step, however welcome. With the US, they need to aim to create a like-minded body to coordinate resources such as foreign aid to support democracy in the region. The liberal, rules-based order is not sustainable without more action from democracies to safeguard it. South Korea needs to address the human rights issues of North Korea more actively. All three countries should work closely to bolster human rights norms in the United Nations and other international organizations.

Both South Korea and Japan became more active in democracy overseas as seen through their sanctions against the Myanmar military and Russia for their assaults on liberal norms, whether by overthrowing their own democracy (Myanmar) or attacking a neighboring democracy (Russia). The US should provide a facilitator role to enhance democratic unity trilaterally rather than sitting by while Japan and South Korea are trapped in their nationalism-driven animosity for each other.

Conclusion

The US, South Korea, and Japan represent a powerful nexus of economic, political, and military power. The three countries share ideals but need to do more to put these ideals into action, given the threats from illiberal states such as China and North Korea. This article offers a brief outline of how to enhance economic and security cooperation to bolster democracies in Asia.

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Implications of the Ukraine War for South Korean Foreign Policy and Northeast Asian Security

Andrew Yeo

Senior Fellow and the SK-Korea Foundation Chair in Korea Studies, Center for East Asia Policy Studies, Brookings Institution

POLICY RECOMMENDATIONS

- Leverage the Ukraine crises to help rebrand South Korean foreign policy and its strategic narrative in a direction that links principles and values to South Korean national interests.
- Pursue greater strategic dialogue with NATO and the EU in response to European nations' deeper interest in Indo-Pacific affairs.
- Consider increasing humanitarian assistance to Ukraine and export controls against Moscow in concert with other US allies.
- Boost military readiness and strengthen defense and deterrence capabilities on the Korean Peninsula. This includes the resumption of regular joint military exercises and building morale of the ROK Army, given diminished prospects for denuclearization and increased North Korean provocations.
- Recognize that some measures to bolster South Korean defense and deterrence capabilities may lead to greater instability on the Korean Peninsula or escalate into an arms race in Northeast Asia. Although all options should remain on the table, calls for targeted preemptive strikes or developing independent South Korean nuclear weapons capabilities are two such examples.

On February 24, 2022, Russian military forces invaded Ukraine. Although the war remains confined to Ukraine, the conflict carries significant implications for South Korean security and foreign policy and North Korean denuclearization. This article presents two sets of challenges and opportunities for the incoming Yoon Suk-yeol government. First, the Ukraine crisis complicates Seoul's relations with both Moscow and Beijing, but it provides Seoul with

greater opportunities to diversify and strengthen its global partnerships with US allies in Asia and Europe. Second, the Ukraine crisis offers the Kim administration diplomatic cover and greater motivation to further develop its nuclear weapons and missile program. Although prospects for inter-Korea engagement and improved US–North Korea relations look bleak, Seoul and Washington can take steps to strengthen their defense against North Korean threats.

Responses to the Russian Invasion

The Biden administration's response to Russia's invasion of Ukraine was swift. Starting in January 2022, the US reported that an invasion would be imminent. To deter Russian aggression, the US began imposing sanctions against Russia while closely consulting with NATO and European allies. In part due to the scope and brutality of Russia's assault, the US managed to quickly build a broad package of economic sanctions and export controls against Russia. The US also froze Russian assets abroad and blocked Russian banks from the international SWIFT payment system. Additionally, the White House proposed revoking Russia's most-favored-nation status and denying the country borrowing privileges at multilateral financial institutions such as the International Monetary Fund (IMF). As of early April 2022, the Biden administration has offered \$2 billion in security assistance to Ukraine. However, the US has stopped short of imposing a no-fly zone against Russian aircraft or additional support that would place the US in direct conflict with Russia.

South Korea's initial response to Russia's invasion was more measured relative to the US and some of its closest allies. The Moon Jae-in government supported international sanctions against Russia, but in contrast to Japan and Australia, it did not initially impose independent sanctions. Members of the ruling Democratic Party of Korea even blamed Ukrainian President Volodymyr Zelensky for provoking Russia. After further deliberation, however, Seoul decided to ban the direct exporting of strategic materials to Russia and Belarus, such as semiconductors, and halted transactions with major Russian banks. Although Russia only ranks 12th among South Korea's largest trading partners, these actions are not insignificant. At the United Nations, South Korea voted to condemn Russia's invasion of Ukraine. It later voted to suspend Russia's membership to the UN human rights council (UNHRC). South Korea also recently upped its pledge for humanitarian assistance to \$40 million.

Although some South Korean conservative policymakers and media outlets have criticized the Moon government for not providing greater support to Ukraine's defense, Seoul's actions have been more in line with that of other traditional US allies. By comparison, India, Indonesia,

Vietnam, and Thailand abstained from voting in the UN General Assembly to suspend Russia's membership in the UNHRC. The Philippines, another US treaty ally, has kept mostly silent. South Korea's support for Ukrainian sovereignty has been welcomed and explicitly recognized by both Secretary of State Antony Blinken and President Biden.

Reactions to Russia-China Cooperation

Russia's invasion of Ukraine presents challenges and opportunities for South Korean foreign policy in relation to US-China competition and global order. The February 4, 2022, joint statement by Moscow and Beijing has altered the geopolitical landscape in Eurasia, making it harder for Seoul to sustain a posture of "balancing" between Beijing and Washington.

As a major trading partner of China, South Korea will need to maintain positive relations with Beijing. Beyond the Chinese Communist Party's maritime claims in the South China Sea and its spreading of false narratives through global public diplomacy channels, its ongoing support for Vladimir Putin makes Beijing more difficult to trust as a regional actor, and much less as a strategic and economic partner. Several EU members, including Germany and France, have already recalibrated their relationship with Beijing the past few years and taken a deeper interest in Indo-Pacific affairs.

As long as Beijing continues to throw Moscow a lifeline, attitudes toward China will continue to sour. Russia's invasion has prompted countries such as Germany, Finland, and Sweden to revise (or at least seriously consider revising) decades-old security policies. These include raising defense spending for Germany and applying for NATO membership for Finland and Sweden. As such, the Russia-China axis will likely foster deeper connections between trans-Atlantic and trans-Pacific US allies and strengthen security networks between NATO and treaty allies such as Japan, South Korea, and Australia. For example, in April 2022, five Asia-Pacific nations were represented at a NATO foreign ministerial meeting in Brussels to discuss the Ukraine crisis. Foreign Minister Chung Eui-yong was in attendance, making him the first South Korean foreign minister to attend a high-profile NATO meeting.

Dimming Prospects for North Korean Denuclearization

From January to mid-April 2022, North Korea test-fired a total of 15 missiles, including a test of an intercontinental ballistic missile (ICBM). Although some analysts have argued that this spate of provocations is due to US preoccupation with the Ukraine crisis, the recent cycle of missile tests predates Russia's invasion. The regime is conducting tests to perfect its own missile (and thus deterrent) capabilities. And while North Korea has currently expressed little interest in negotiations, such tests increase Pyongyang's long term bargaining leverage vis-à-vis Washington and Seoul in any future negotiations.

The Ukraine crisis has a strong bearing on North Korea's nuclear calculus and the prospects for denuclearization. First, Ukraine's abandonment of nuclear weapons in 1994, followed by Russia's invasion two decades later, reinforces the belief that nuclear weapons are the only guarantee for state security and regime survival. Furthermore, US restraint against nuclear Russia signals to Pyongyang that nuclear weapons act as an effective deterrent against the US.

Second, given the current political climate and heavy sanctions levied against Russia, Moscow and Beijing are unlikely to support additional sanctions against North Korea. Moscow may even try to circumvent North Korean sanctions and seek to provide Pyongyang with fuel at a discounted rate to cut its losses from reduced demand for Russian oil and gas. Therefore, Beijing and Moscow are unlikely to leverage their diplomatic relations with Pyongyang to pursue denuclearization.

Conclusion

This article concludes by stating three broad implications. First, leveraging the Ukraine crisis to help rebrand South Korean foreign policy to take on a larger global role carries greater benefits than risks. South Korean export controls and sanctions against Russia may result in short-term economic and diplomatic costs for the Yoon government (e.g., Russia placed South Korea on its list of "hostile" countries). However, supporting Ukraine and strengthening ties to other US allies in Asia and Europe will generate larger strategic and global reputational benefits in the long term. The quick formation of a coalition willing to defend Ukrainian sovereignty should be taken as an encouraging sign of US and European commitment to defend the sovereignty and territorial integrity of like-minded partners in Northeast Asia.

Second, the war in Ukraine feels more distant to South Koreans relative to how it feels to the European and American publics. This might create more challenges for the Yoon government in imposing greater financial coercion against Russia or offering additional humanitarian assistance. Offering direct military assistance comes with even greater domestic political and international risks. Nevertheless, the Yoon government should find ways to support Ukraine politically and economically. For instance, South Koreans may be more receptive to reconstruction and development efforts in a postwar Ukraine.

Third, amid the Ukraine crisis, North Korea has all the more reason to maintain nuclear weapons. North Korean provocations are likely to continue this year, while prospects for negotiations with Pyongyang will remain low. The Yoon government must review South Korea's defense posture and capabilities. It should leverage the US-South Korea alliance to boost defense and deterrence capabilities but also to ensure that escalatory policies do not create a destabilizing effect or a dangerous arms race in Northeast Asia.

The Ukraine Crisis: Implications for Asia and South Korea

Young-kwan Yoon

Professor Emeritus, Department of Political Science and International Relations, Seoul National University

POLICY RECOMMENDATIONS

- Both Seoul and Washington need to begin discussions as soon as possible on developing a new strategy and road map to denuclearize North Korea, despite the noncooperation of China and Russia, because of the growing nuclear and conventional threats from the North. The two administrations should form a blue-ribbon committee composed of specialists for this purpose.
- The US government should consider sending a special envoy to North Korea to begin a dialogue on denuclearization and other issues. This will send a positive signal to Pyongyang and help avoid another crisis.
- Both the US and South Korea need to develop a mechanism for much closer cooperation in the field of economic security (e.g., global supply chains, advanced technologies, space, cybersecurity).
- Both the US and South Korea need to find the way of responding effectively to possible economic punishments from China against South Korea for its legitimate political and economic actions.

Russia's invasion of Ukraine on February 24, 2022, dealt a severe blow to the liberal international order of the post-World War II period. Russia blatantly violated the most fundamental principles of international law, such as territorial integrity and self-determination. South Koreans, like most citizens of Western democracies, were very shocked by the Russian invasion. The fact that a big power could invade a small state and crush its people's rights to decide on their own political system was appalling for the Korean people. After all, Korea had experienced

similar tragedies at the time of Japanese colonization in the early 20th century and the invasion of South Korea in 1950 by the North with the support of China and the Soviet Union.

Thus, South Koreans, watching what was going on in Ukraine, were suddenly reminded of the importance of having an ally, the United States, which shares values such as democracy, freedom, self-determination, and the rule of law—and, at the same time, provides a stable political and security environment for South Korea, which is surrounded by North Korea and bigger powers.

Many South Koreans actually tended to underappreciate those values in Korea's foreign policymaking in recent years. Reflecting public opinion in favor of supporting Ukraine, the Moon administration rightly decided to join the international coalition led by the United States that is sanctioning Russia. The Ukraine crisis will probably galvanize people's support for the Yoon administration's policy of reinvigorating the ROK-US alliance.

Reactions of Asian Countries to the Russian Invasion of Ukraine

The reactions of Asian countries to the Ukrainian crisis have so far been mixed. Major allies of the United States and nation-states supporting the liberal international order are actively participating in sanctioning Russia. For example, Japan, South Korea, Singapore, and Australia are sanctioning Russia, despite economic and political costs. Singapore, a city-state, which has tended to be sensitive on the issue of sovereignty, is one of the most active participants in sanctioning Russia.

However, some other Asian countries are not being cooperative. India, a democratic country and a member of the QUAD, abstained from a US-sponsored UN Security Council resolution on February 26, 2022, which strongly criticized Russia's aggression against Ukraine. India heavily depends on imports of weapons from Russia and does not seem to want to push Russia by criticizing it to the side of Pakistan and China, India's arch-rivals. India, with a long tradition of nonaligned diplomacy, has also benefited from Russia's support on the Kashmir issue in the UN. Vietnam, Indonesia, and Myanmar are other nation-states that, for various reasons, are not cooperating with the United States and the West in sanctioning Russia.

The fact that Ukraine is far from these Asian countries geographically might have made them concerned more about near-term geopolitical calculations rather than worrying about the serious long-term negative effects of the Russian invasion on the nature of the international order. Considering India's potential to have a positive political influence in world politics, it is regrettable in particular to witness that country's inaction at this critical moment.

The most important Asian country that would be able to affect the direction of the future international

order would be China. However, China is in a difficult situation. If it responds to the request of President Vladimir Putin and supports Russia militarily and economically, it will hurt its relations with EU countries and push Europe closer to the side of the United States. This will contradict China's own global strategy, which aims to weaken US influence by driving a wedge in US-EU relations. However, if it does not help Russia, it will weaken its most important authoritarian partner. Both Putin and Xi Jinping declared on February 4, 2022, that there would be "no limit" in their mutual cooperation.

It will not be easy for China to leave its pro-Russian neutrality and fully support Russia, considering that it is now in its worst domestic economic situation in the three most recent decades. The economic stakes in its relationship with the West are too high for China to sacrifice in order to fully support Russia. However, if it were to decide to take audacious actions and fully support Russia economically and militarily, there would be a clearer fault line appearing between the democratic Western camp and the authoritarian Eurasian camp. International competition between these two camps on the military, ideological, diplomatic, and economic fronts will intensify, and the world may be a step closer to a new Cold War international order.

Implication for Politics on the Korean Peninsula

As the result of the Russian invasion of Ukraine, the US global strategy will need to be recalibrated. It is uncertain in which direction the United States will be moving. Will the United States try to confront and tackle two strategic targets—China and Russia—simultaneously? Or will the United States leave Russia to its European NATO partners and mainly focus on confronting China in the Indo-Pacific region?

Either way, as the result of the Ukrainian War, I am afraid that it would be even more difficult for the United States to concentrate on the North Korean issue than before. The Biden administration probably will have even less political capital left for investing on the North Korean issue. China, Russia, and Iran now seem to be occupying much higher priorities in the US foreign policymaking than North Korea.

Conversely, North Korea will probably stick to its nuclear program even more firmly than before as the result of watching what Russia has done to Ukraine in 2022 and also in 2014. North Korean leader Kim Jong-un probably believes that if Ukraine had not given up its nuclear warheads three decades ago, Russians could not have invaded Ukraine so flagrantly.

Furthermore, the North Korean leader is becoming more and more impatient because of his country's economic difficulties. So, Pyongyang has begun to break its self-imposed moratorium on test-launching intercontinental ballistic missiles (ICBMs). North Korea launched 15 missiles in the first three months of 2022. On March 16, it launched a Hwasung-15 ICBM, which blew up immediately after liftoff. North Korea launched another Hwasung-15 on March 24, while claiming it was a Hwasung-17, a more advanced ICBM.

There appeared a clear mismatch between the United States' lack of political capital to invest in denuclearizing North Korea and North Korea's urgency and impatience. The war in Ukraine has made this kind of mismatch even more unmistakable.

If the current situation continues, we will face another round of heightened tension on the Korean Peninsula like one we witnessed in 2017. Sung Kim, US Special Representative on North Korea, publicly mentioned recently the possibility of another North Korean nuclear test. And the United States dispatched a nuclear-powered aircraft carrier, the Abraham Lincoln, to the East Sea on April 11. This was the first time a US aircraft carrier entered the East Sea since North Korea first launched a Hwasung-15 four years and five months ago.

The worsening relationship between the United States and China and Russia is beginning to spill over into the issue area of North Korea. Both China and Russia vetoed the UN Security Council resolution for imposing additional sanctions on North Korea after its ICBM launch. This was a significant change in their positioning on the North Korean nuclear issue. Both countries cooperated in sanctioning North Korea until the end of 2017, when North Korea engaged in provocations like launching long-range missiles and testing nuclear weapons.

This change has a significant negative implication for the US/ROK policy of denuclearizing North Korea. Since the early 1990s, when North Korea's nuclear program became a major diplomatic concern of the international community, the cooperation of China and Russia has been a necessary condition for the US policy of denuclearizing North Korea. However, from now on, the United States and South Korea will not be able to expect any cooperation from Moscow and Beijing in pressuring North Korea by economic sanctions. Facing severe sanctions and international isolation, Russia may try to strengthen its ties with North Korea. For example, Russia may try to accept North Korean workers in violation of a UN Security Council resolution.

Conclusion

If the relationship between the three authoritarian countries—North Korea, China, and Russia—becomes stronger in this way, then the Korean Peninsula's politics will become similar to the old Cold War order. Probably, there would be much less room for inter-Korean dialogues and cooperation. We are approaching to a critical juncture regarding the Korean Peninsula's security situation.

This requires that the United States and South Korea change the assumptions of their traditional approach to the North Korean nuclear program and try to develop a novel approach. Deterring North Korea's provocations by strengthening the extended deterrence mechanism and pressuring Pyongyang to denuclearize with economic sanctions are certainly important but not enough. We need preventive diplomacy. Though it may look futile, more efforts than in the last year for intensive political communication with the North Korean leader are needed in order to find a mutually acceptable solution of the nuclear problem. The risk of a nuclear disaster is rising not just in Ukraine but also on the Korean Peninsula.

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A Comprehensive US–South Korea Alliance in an Era of Geostrategic Uncertainty

Scott A. Snyder

Senior Fellow for Korea Studies and Director of the Program on US–Korea Policy, Council on Foreign Relations

POLICY RECOMMENDATIONS

- The US–South Korean alliance should expand to become a two-way partnership rather than a hierarchy in which the United States is primarily a security provider and South Korea is primarily a security consumer. The two countries need to work more closely together to address a range of security challenges as well as nontraditional security challenges in areas such as public health and climate change.
- South Korea needs to develop closer ties with other democracies in Europe and Asia—and in particular with NATO and European Union states. South Korea can move in this direction in a fashion that will elevate US–South Korea alliance ties by providing humanitarian support to the international coalition assembled to help Ukraine.
- South Korea and the US need to do more to deal with the growing threat from China. Needed actions include beefing up supply chain resiliency, enhanced coordination on standards for the development and application of new technologies, bilateral investment screening, democracy and governance consultations, closer alignment of policies to promote capacity building and infrastructure development in the Indo-Pacific region, and preservation of freedom of navigation and overflight in the South China Sea and of peace and stability in the Taiwan Strait.

The US–South Korea alliance has achieved unprecedented levels of public support in both the United States and South Korea under successive administrations over the past decade, suggesting that both the US and South Korean publics understand and support the profound convergence of interests shared by both countries. The United States and South Korea are fellow democracies that face common security threats and shared challenges to economic prosperity resulting from international political volatility and security uncertainties. The Chicago Council on Global Affairs has recorded steady increases in US public recognition of, and support for, South Korea as an economic and security partner of the United States over the past two decades, especially as South Korea has become a powerhouse of cultural exports with global reach.¹ Over 60% of Americans consider South Korea as either an ally or partner of the United States. Likewise, after a period of ambivalence in the mid-2000s, Asan Institute polls show that South Korean public approval of the United States has consistently scored at about 6 on a 10-point scale during the past decade. The United States is the only major power that has had consistently favorable ratings in South Korea over the past decade.²

Public appreciation for the US–South Korea alliance in both countries primarily stems from a shared recognition of the dangers posed by a nuclear North Korea and a China that strives to displace the United States. Public support for the alliance in both countries has grown in response to perceptions of a growing threat from both these countries.

Notably, support for the security alliance with the United States persisted across changes in both American and South Korean administrations, despite President Trump’s attempts to coerce South Korea into making substantially larger monetary contributions to the alliance by characterizing the country as a free rider. Both South Korean conservative and progressive administrations have prioritized smooth relations with the United States based on South Korea’s national interests and strong public support for the relationship.

The Joint Statement: A Way Forward

One tangible result of South Korean bipartisan support for the relationship with the United States was the joint statement issued on May 21, 2021, by President Joe Biden and President Moon Jae-in.³ The joint statement built on prior joint statements in 2009 and 2013 between President Obama and conservative South Korean presidents Lee Myung-bak and Park Geun-hye.⁴ A comparison of the 2009 Obama-Lee joint statement and the 2021 Biden-Moon joint statement shows the steady deepening of US–South Korea alliance coordination mechanisms during the past decade. The Biden-Moon joint statement points to a more complex regional security environment and the need for cooperation in the face of rising global challenges, such as the COVID-19 pandemic and climate change. The joint statement provides greater detail than its predecessors regarding the comprehensive nature of functional cooperation needed to strengthen the alliance, although it omits the phrase “comprehensive strategic alliance” that appeared in the 2009 and 2013 US–South Korea joint statements and describes alliance-strengthening measures while avoiding the direct naming of China and North Korea as threats.

The comprehensive nature of the Biden-Moon joint statement should allow the Yoon Suk-yeol administration to hit the ground running in its efforts to build a “comprehensive strategic alliance” with the United States as the centerpiece of Yoon’s foreign policy. The main task for the Yoon administration will likely be the strengthening of coordination across all dimensions of the US–South Korea alliance.

A Two-Way Partnership

US–South Korean alliance cooperation is poised to make progress to a greater extent than ever before as a two-way partnership rather than as a hierarchy in which the United States is primarily a security provider and South Korea is primarily a security consumer. In the context of Yoon’s aspiration to be a “global pivotal state,” South Korean contributions to international stability are more likely to be welcomed, and the US expectations for South Korea to stand together in providing global leadership are more likely to be met than ever before.

The specific agenda for strengthening the two countries' global security partnership under Biden and Yoon will inevitably involve the immediate tasks of standing against Russian aggression in Ukraine and strengthening deterrence and jump-starting diplomacy in the face of North Korea's ongoing expansion of missile and nuclear capabilities. In the longer term, both sides will deepen coordination on regional and functional issues to address the strategic challenges posed by China's aspirations for regional dominance and shared nontraditional security challenges in areas such as public health and climate change.

In response to the Russian invasion of Ukraine, the Yoon administration has the opportunity to signal its aspiration to contribute to global leadership by more explicitly aligning South Korea in opposition to Russia's unilateral use of force through strengthening ties with NATO and the European Union and making generous contributions to Ukrainian refugee settlement efforts. Although these actions are, strictly speaking, South Korean actions, contributing to the Biden administration's priorities will have positive effects on the US–South Korea alliance by associating the alliance with other like-minded security organizations that contribute to global security and by establishing a pattern of mutual support between the US–South Korea alliance and NATO members.

North Korea remains the centerpiece of US–South Korean security cooperation, and continues to be framed by the Biden approach to North Korea, which involves a combination of “diplomacy as well as stern deterrence.”⁵ The Yoon transition team's proposed restoration of the US–ROK Extended Deterrence Policy and Strategy Group as a focus of US–South Korea alliance coordination will provide a welcome opportunity for the Biden and Yoon administrations to engage in what will likely be an extended and in-depth coordination process to shore up deterrence against North Korea's improved military capabilities.

Dealing with China

Given the Biden and Yoon administration's convergence of concerns about China, Yoon's administration should catalyze more intensive and deeper coordination on the areas contained in the Biden–Moon joint statement. The to-do list when it comes to China is long and includes supply chain resiliency, enhanced coordination on standards for the development and application of new technologies, bilateral investment screening, democracy and governance consultations, closer alignment of policies to promote capacity building and infrastructure development in the Indo-Pacific region, and preservation of freedom of navigation and overflight in the South China Sea and of peace and stability in the Taiwan Strait. The task of going beyond words and pledges to lash up the US and South Korean governments to make practical contributions in each of these areas represents a substantial working agenda for the alliance.

Finally, the Biden–Moon joint statement provides a robust agenda for joint cooperation on functional issues such as the development and application of emerging technologies, global health and climate change, civil nuclear energy production, and space cooperation, among others. These joint efforts will further bind the United States and South Korea even more closely together as partners by enhancing joint policy coordination between the two allies.

Conclusion

It has been common to observe that the US–South Korea alliance was forged in blood, based on US actions to defend South Korea from North Korea's invasion in 1950 at the dawn of the Cold War. But as the personal bonds of wartime heroics that intertwined the United States and South Korea are replaced by contemporary cultural bonds, the rationale for the alliance also needs to be overhauled and redefined as mutually beneficial, both now and in the future. The forging of the US–South Korea partnership, based on shared values for comprehensive cooperation and the joint development of new technologies, provides a potentially powerful, forward-looking rationale by which to build on this shared history and sustain the alliance into the future.

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Defending the Free and Open Indo-Pacific: The ROK-US Alliance Under Biden and Yoon

Chaesung Chun

Professor of Political Science and International Relations, Seoul National University

POLICY RECOMMENDATIONS

- South Korea should pursue a more values-based foreign policy in conjunction with the United States to “actively promote” what President Yoon calls “a free, open, and inclusive order in the Indo-Pacific.”
- South Korea must find a realistic way to engage with China that recognizes the growing threat it poses to the liberal order in Asia while also recognizing that China and South Korea do not have a direct conflict.
- The United States and South Korea need to lay out a strategy to shield South Korea from Chinese economic retaliation as it becomes a more active US partner in Asia.
- The United States and South Korea need to find common ground on defensive economic security measures, such as creating resilient supply chains.

Liberal, Democratic Values in the Indo-Pacific Region

According to South Korea’s new president, Yoon Suk-yeol, the overarching concept for the incoming administration’s foreign policy is to turn South Korea into a “global pivotal state.” As a country with the world’s 10th-largest economy, it is natural that the new focus of South Korea’s foreign policy should reach beyond the Korean Peninsula. This reflects Yoon’s vision that “we should not only focus on relations with North Korea but, rather, expand the breadth of diplomacy in the EU and throughout Asia.”¹

The Yoon government is likely to “advance freedom, peace, and prosperity through liberal democratic values and substantial cooperation,” which gives the impression that South Korea will pursue value-based diplomacy.² As a former prosecutor-general, Yoon places much emphasis on the values written in the South Korean Constitution. It is expected that South Korea will seek a new path defined by universal values rather than narrow national interests.

This vision sheds new light on the future mission of the ROK-US alliance, which is supposed to be the “central axis” of South Korea’s foreign policy. The US-led liberal, rules-based international order faces tremendous

challenges, and the function of the alliance should evolve in accordance with the new task to strengthen that order. The Biden administration has been trying to rebuild the rules-based order, which was harmed to a great extent during the Trump era, and the foremost assistance comes from alliances and strategic partners. Thus, the purview of the ROK–US alliance is not confined to military and security domains. Yoon recognizes that “South Korea has benefited from the global and regional order led by the United States.”³ A range of components of the order—such as economic security, technological collaboration, and emerging security issues such as climate change, public health, cyber-security, energy, and nonproliferation—will be new areas of alliance cooperation. President Yoon’s vision for a “comprehensive strategic alliance” is in line with the concept of “global pivotal state” and also with Biden administration’s efforts for the reinvigoration of the US leadership and its plan for a “Build Back Better World.”

Beyond doubt, Seoul and Washington need to devise a North Korea policy to achieve the goals of the complete denuclearization of North Korea and effective paths for negotiation for the peace and co-prosperity of the Korean Peninsula. But the changing international environment surrounding the North Korean nuclear problem complicates the calculus of the negotiations. Kim Jung-un tries to take full advantage of the growing US–China rivalry, the US–Russia confrontation due to Russia’s invasion of Ukraine, and the emerging “axis of authoritarianism,” which provides an opportunity to North Korea to achieve its goals. Now President Yoon must synchronize his North Korea policy with a broader foreign policy. Simultaneously, the ROK–US alliance will face new challenges from North Korea’s enhanced nuclear and missile ability. The doctrine of “integrated deterrence” newly developed by the United States may apply to the future stance of the alliance to cope with North Korea’s nuclear threats.

The Biggest Challenge: China

However, the biggest challenge to Yoon comes from elsewhere: dealing with the US–China strategic rivalry. Yoon acknowledges that “the intensifying competition between the United States and China poses a strategic

dilemma for South Korea.”⁴ It will affect almost all foreign policy issues, such as North Korea policy, the perimeter of the alliances, and future economic security. It will determine how South Korea defends the liberal international order, and how South Korea realizes its values and norms in a broader context during President Yoon’s entire term. One hint for Yoon’s strategy to solve this dilemma is his statement that “Seoul’s reluctance to take a firm stand on a number of issues that have roiled the relationship between Washington and Beijing” should end.⁵

Expanding the geographical reach of the alliance will require Yoon to better defend and promote South Korea’s values and interests in the Asia-Pacific region. Using the concept of the Indo-Pacific, the United States during the Trump era described Chinese threats as existential, and the Biden administration is also pursuing firm policies to counteract Chinese behavior in this region. President Yoon’s adoption of the Indo-Pacific concept as a central geographical focus will create the impression that South Korea will take Chinese assertive behavior in this region seriously. Yoon’s emphasis on values—especially the value of freedom, which is closely related to human rights—will likely encourage the United States to expect a stronger South Korean stance toward China.

The most fundamental issue is whether both Yoon and Biden will be on the same page regarding the nature of the threat coming from China and the ultimate goal of the two countries’ China policy. Whereas the US portrays China as a sole strategic competitor posing grave threats to the current international order, South Korea has maintained a less alarmist view of China’s rise. There are indeed elements exacerbating decreasing optimism toward China: increasingly colliding economic interests between South Korea and China, although China is South Korea’s largest trading partner; unprecedented levels of unfavorability toward China among South Koreans; and China’s passive and permissive stance toward North Korea’s nuclear provocations. However, it is also true that China does not pose direct military and security threats to South Korea, because the two sides lack bitter territorial disputes. Chinese diplomatic support for dealing with North Korea is still necessary.

Debates over the ultimate goal of US China policy continue among American policymakers and pundits. The White House recently issued the Indo-Pacific Strategy, indicating that “our objective is not to change the People’s Republic of China (PRC) but to shape the strategic environment . . . maximally favorable to the United States, our allies and partners, and the interests and values we share.”⁶ But still, the question remains if this means containment, balancing, engagement, or something else.

Kurt Campbell, deputy assistant to the president and coordinator for Indo-Pacific affairs on the National Security Council, once remarked that “US policymakers and analysts have mostly, and rightly, discarded some of the more optimistic assumptions that underpinned the four-decade-long strategy of diplomatic and economic engagement with China.”⁷ This leaves the question of whether engagement with China will be totally discarded in the future.

In principle, President Yoon’s position toward China is evident in saying that “our political values are different from China.” But, so far, Yoon’s idea of the future Indo-Pacific region embraces the principle of “inclusiveness.” Yoon has written that “South Korea should actively promote a free, open, and inclusive order in the Indo-Pacific.”⁸ This phrase resonates with the overall South Korean view that excluding China from the regional order is not the best option. This may bring about a backlash in the future, and the clash and confrontation between the United States and China will have a grave impact on the Peninsula. It will be critical whether Yoon is capable of proposing a realistic way to engage with China so that China finds a way to conform to the current liberal order. The Yoon government’s assessment of possible Chinese threats will affect impending alliance management issues, such as missile defense systems, the wartime operational control (OPCON) transfer, military exercises, and the ROK–US–Japan trilateral security cooperation.

The US Indo-Pacific Strategy requires security cooperation among allies and calls for allies and partners to take on regional leadership roles themselves. The so-called hub-and-spokes alliance system in East Asia is complemented by mini-lateral or multilateral

coalitional mechanisms such as the Quad and Aukus. How President Yoon will connect the bilateral alliance with these new cooperative mechanisms such as the Quad is essential. So far, Yoon plans to “first to work together on vaccines, climate change and emerging technologies to create a synergy with Quad countries,” but “whether the four Quad partners are willing to accept South Korea into the group” is also the question.⁹

The Biden administration tries to counter China by maintaining technological primacy, especially in frontline technologies such as digital economy, artificial intelligence, quantum computing, nanotechnology, and biotechnology. The mission of the alliance goes beyond traditional security issues. Both the United States and South Korea need to find common ground in defensive economic security measures, such as creating resilient supply chains, and more proactive measures, such as creating a technological initiative. The expansion of the scope of common issues for Seoul and Washington will put the alliance on a new stage.

Finally, the question of how to counteract Chinese economic retaliation will draw attention. The White House remarked that “we will also seek to manage competition with the PRC *responsibly*.”¹⁰ The collective deterrence vis-à-vis Chinese economic retaliation needs elaboration. Regarding this matter, Yoon remarked that “South Korea should not be intimidated by China’s coercive actions such as economic retaliation as manifested in the past event surrounding the deployment of THAAD (Terminal High Altitude Area Defense].” Securing close coordination between the two countries and the US assurance to support South Korea will provide the Yoon administration with leverage to pursue value-oriented diplomacy.

Conclusion

The Yoon administration plans to make the ROK–US alliance “comprehensive” and “strategic,” taking the alliance as the central axis of its foreign policy. To cope with the hardening North Korean position and more frequent provocations, the Yoon and Biden administrations need to strengthen integrated deterrence and close coordination to ensure the

Korean Peninsula's stability while producing a realistic road map for the denuclearization of North Korea. To make the ROK-US alliance genuinely "strategic," frank communications and evaluations regarding China's threats and changes in Indo-Pacific strategic environments are urgently needed. Reevaluating the utility of the alliance in the 21st century beyond military and security affairs will open a new path forward in economic security, technological collaboration, and emerging security issues such as climate change, public health, cybersecurity, energy, and nonproliferation.

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PART II

Trade, Technology, and “New Frontier” Issues

US–Korea Trade: Shifting from a Bilateral to a Regional/Multilateral Focus

Wendy Cutler

Vice President, Asia Society Policy Institute

POLICY RECOMMENDATIONS

- South Korea should become a founding member of the Indo-Pacific Economic Framework and proactively work with the United States on matters related to substance, membership, and incentives.
- The United States and South Korea should work together to make their respective Asia Pacific Economic Cooperation (APEC) host years (2023 for the US, 2025 for Korea) successful and effective, identifying agenda items that can be shaped during the US host year and delivered in 2025.
- The United States and South Korea should join hands in the World Trade Organization (WTO) to launch and/or advance critical negotiations and initiatives dealing with issues such as e-commerce, pandemic response, and nonmarket economy practices, as well as develop common approaches toward reforming the organization.
- South Korea should join efforts by the United States, the European Union, and Japan to coordinate on defensive measures and rules development aimed at countering trade-distorting subsidization, technology theft, economic coercion, excess capacity, and related unfair trade practices.
- The United States and South Korea should coordinate on shaping and implementing high-standard economic and trade agreements and frameworks, mindful of the important role Korea can play in the Regional Comprehensive Economic Partnership (RCEP) and potentially in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) once Seoul formally applies for membership.
- The United States and South Korea should work together in other global and regional economic organizations, as well as ad-hoc groupings—including the Quad, Group of Twenty (G-20), and the Organization for Economic Cooperation and Development (OECD)—on issues of common interest.

With the 10th anniversary of the entry into force of the US–Korea Free Trade Agreement (KORUS) celebrated in March, and a new president taking the helm in Seoul, now is an opportune time to rethink the scope and direction of the US–Korea trade and economic relationship for the coming years. KORUS has been incredibly successful in helping to increase trade and investment flows between the two countries, cement business-to-business ties, and transform our bilateral trade relationship from one of friction to one of cooperation. That said, it remains important that both sides continue to work together to resolve emerging bilateral trade irritants before they become politicized.

Over the next few years, the two countries should move beyond a bilateral lens to advance US–Korea economic cooperation on the regional and global stage in an effort to address emerging challenges to continued growth and prosperity, as well as to shape and modernize the rules-based trading system. By working together, along with other regional allies and partners, Washington and Seoul have an important opportunity to address regional and global challenges, including resilient supply chains, fair trade, inclusive growth, nonmarket economy practices, climate change, technology standards, workforce development, export controls, investment screening, and economic coercion.

In recent years, the United States and Korea have stepped up their discussions and coordination in international trade and economic groupings and institutions. This work, though useful, has not reached its potential. Under the Yoon administration, Washington and Seoul have an important opportunity to bolster this cooperation. It should be guided by an affirmative agenda based on the two countries' shared values and norms, rather than aimed at any one country. It should focus on advancing solutions to emerging and challenging issues to the regional and global rules-based system, while developing coordinated defensive measures against threats to this system.

The Indo-Pacific Economic Framework

To date, Korea has been positive about the soon-to-be-announced Indo-Pacific Economic Framework (IPEF), the US blueprint for economic engagement in the region. All signs suggest that Korea is on track to become a founding member of this initiative, a move that is being well received in Washington. In the future, however, more than just signing up will be critical to make this initiative a success. IPEF will face a number of challenges, including expanding membership to economies in South Asia and Southeast Asia. Korea can be an enormous help in such an effort, given its extensive trade and investment ties with prospective candidates. By doing its own high-level outreach to these countries, along with providing financial and other incentives, Korea can be an important partner of the United States. Moreover, Korean input on how to make the initiative more meaningful and in tune with the needs of the region would be of huge value throughout the process.

Asia Pacific Economic Cooperation

The United States will host the Asia Pacific Economic Cooperation (APEC) forum in 2023, after its last hosting in 2011. Seoul has announced that it will host APEC in 2025, 20 years since it last invited the 21 APEC economies to Korea. APEC's work has become more challenging in recent years due to a number of factors, including US/China friction. Still, it remains an important regional economic venue to work on emerging issues in a nonthreatening way. The US host year will provide an important opportunity to launch and shape work on agenda items that can be followed up during Peru's 2024 hosting and brought to successful conclusion during Korea's host year. Agenda items for consideration could include narrowing income inequality, promoting digital ecosystems, tackling climate change, preparing for the next pandemic, developing workforce skills, and institutionalizing a more inclusive stakeholder mechanism. Washington and Seoul should coordinate closely on APEC matters now to ensure that their

host years are maximized to deliver effective results for the region. Korea also has an important opportunity to showcase its growing foreign direct investment in the United States, and the high-paying jobs that these investments generate, during the US host year.

The World Trade Organization

In recent years, the World Trade Organization (WTO) has been under unprecedented stress, with its negotiating, dispute-resolution, and monitoring functions all in some degree of disarray. To add to the pressure, the Russian invasion of Ukraine has introduced new challenges and tensions to the organization. Both the United States and Korea have benefited from the WTO and are committed to its reform. But Washington is no longer playing the leadership role that it once did, recognizing that achieving results in a reasonable amount of time in Geneva has become increasingly difficult. That said, there are negotiating areas in which the US and Korea share common interests, including e-commerce and responses to the COVID-19 pandemic, that lend themselves to cooperation. Moreover, there may be new opportunities for Washington and Seoul to work more closely together to promote updated rules and enforce existing transparency obligations on nonmarket economy practices, including on industrial subsidies and state-owned enterprises. Furthermore, there may be joint work that can be pursued on WTO institutional reform matters, including decisionmaking, plurilaterals, and developing country status.

The Trilateral Process: Countering Nonmarket Economy Practices

The United States, the European Union, and Japan commenced work during the Trump administration on the so-called trilateral process to develop rules to counter trade-distorting subsidization, technology theft, anticompetitive behavior of state-owned enterprises, and forced technology transfer requirements. This work was endorsed in November 2021 by the three trade ministers, while also being expanded to include work on defensive measures to counter such practices. The three parties are

working together to inventory existing tools, identify gaps, and as necessary develop new tools. In light of the threat such practices present for the future viability of the global trading system, Korea should consider joining the trilateral process, both with respect to rule development and defensive measures.

RCEP/CPTPP

Korea played an instrumental role in bringing the Regional Comprehensive Economic Partnership (RCEP) negotiations to a successful conclusion. With its skilled negotiators, the Korean team was able to lead others to bridge gaps in key areas where agreement seemed elusive. With 12 members having ratified and brought the RCEP into force, efforts have now shifted to implementation of the agreement's obligations. Korea can play an important role in urging other RCEP members to adopt the needed laws, regulations, and associated administrative measures to adhere to RCEP commitments. Without some pressure, certain RCEP members are likely to be slow-moving. Furthermore, RCEP parties will soon start work on the agreement's built-in agenda, as well as emerging issues. Over time, they will deepen existing rules and develop new disciplines and standards as they periodically convene at senior and working levels. Here, too, Korea has an important voice in ensuring that the rules being developed reach as high a standard as possible and reflect the values of transparency, openness, and fairness.

Korea is expected to shortly formally seek membership in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Korea is a natural candidate for accession to this 11-country pact, given its multiple high-standard free trade agreements in force. While Korea will need to make certain adjustments to bring its trade programs in line with the CPTPP's rules and ambitious market access commitments, this should not be a heavy lift for Seoul. Conversely, China, which applied to join the CPTPP last September, faces serious challenges to secure membership. This is because its current laws and regulations fall short of many CPTPP obligations, particularly in the areas of digital, labor, state-owned enterprises, and intellectual property

protection. It also has a questionable track record with regard to fully implementing its trade agreement obligations. Korea, along with the United Kingdom, can serve as examples of accession candidates that are prepared to embrace the high-standard rules of CPTPP, offer meaningful market access to others, and implement what it has been agreed to.

Conclusion

US–Korea cooperation and leadership in regional and multilateral groupings are not limited to the organizations and groupings mentioned above. The Quad, G-20,

and OECD are other fora where there are multiple opportunities for both countries to work together.

The next few years can prove to be a transformational time for US–Korea economic and trade relations. Just as KORUS reshaped our bilateral trade relationship, stepped-up cooperation on addressing regional and global challenges can take US–Korea trade and economic relations to a new level. We have an important opportunity to work together closely in regional/global institutions and groupings to promote our joint values—the rule of law, transparency, openness, inclusiveness, and fairness.

Beyond the WTO: How to Strengthen International and Regional Trade Architecture

Taeho Bark

President, Global Commerce Institute of Lee & Ko
Former Minister of Trade, Republic of Korea

POLICY RECOMMENDATIONS

International Trade

- Strongly support efforts to revitalize the multilateral trading system of the World Trade Organization (WTO). In particular, South Korea should join efforts to normalize the WTO Appellate Body. Korea should also emphasize the importance of restoring US leadership to strengthen the multilateral trading system and participate in the Ottawa Group, which was formed by a number of middle-power nations to reform the WTO.
- Support plurilateral trade agreements (PTAs) among like-minded countries which can take the rule-making role within the WTO framework. As the WTO failed to successfully establish or modernize multilateral trade rules, PTAs came on the scene as a viable alternative to develop new norms on various important issues like digital trade, subsidies and state-owned enterprises, and environmental sustainability. Korea should maintain the position that these PTAs are open to nonparticipating WTO member countries so that they can join the agreements later and ultimately pursue a path of integrating into the multilateral trading system.
- Propose the establishment of the Trade and Technology Council (TTC) involving the United States, the EU, Japan, and Korea. Through this mechanism, participating countries should be able to share information on supply chains and advanced technologies and address joint countermeasures to deal with supply chain disruptions and secure stable supplies of strategic products and materials.

Regional Trade

- Faithfully implement the Regional Comprehensive Economic Partnership (RCEP), which went into effect on January 1, 2022.
- Accelerate negotiations to join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Through the negotiations process, Korea will be able to find an opportunity to improve Korea–Japan economic and trade relations. Korea should urge the United States to consider joining the CPTPP to advance it into a high-standard, integrated Trans-Pacific trade agreement.

- Consider participating in the Indo-Pacific Economic Framework (IPEF) envisioned by the United States. Korea should reveal its willingness to participate in regional efforts to develop norms and principles and make binding commitments in such crucial areas as trade facilitation, standards for the digital economy and technology, supply chain resilience, de-carbonization and renewable energy, and labor standards. Based on the understanding that the IPEF will not include any market-access component, Korea should carefully monitor what approach the IPEF will eventually pursue. Regarding potential IPEF participants, Korea should encourage active participation from like-minded countries in the Indo-Pacific region. Korea should also closely examine reciprocal benefits the IPEF would offer to potential participating countries, including Korea.
- Propose a digital trade agreement involving the United States, Japan, the members of the Association of Southeast Asian Nations (ASEAN), and South Korea.

The World Trade Environment

As we have witnessed in the past years, the multilateral trading system has been in a serious crisis. Although the crisis has been caused by various factors, the core issue is directly related to the decision-making mechanism of the WTO, which requires a consensus by all member countries. This is why the Doha Round failed. Now, many trade experts claim that important decisions cannot be made at the WTO due to the rigid decision-making process.

The world trade environment faces great uncertainties resulting from both the ongoing digital and green transformations as well as the global value chain disruptions caused by the COVID-19 pandemic and geopolitical crises including the intensified conflict between the United States and China and the recent outbreak of the Russia-Ukraine war. A bigger problem, however, is that the multilateral trading system cannot undertake any actions to effectively stabilize these uncertainties.

During the Tokyo Round in the 1970s, due to the sharp differences among participating countries, plurilateral agreements (called “codes”) among a subset of the General Agreement on Tariffs and Trade (GATT) contracting parties had been formed for such areas as anti-dumping, government procurement, subsidies, and so on. However, after the Tokyo Round, there were many criticisms that the codes were undermining the credibility of the multilateral trading system. Since then, PTAs have been prohibited at the WTO.

However, now is the time to choose whether we keep the multilateral system of the WTO, which is no longer

able to make any decisions on important issues, or we allow like-minded members of the WTO to form PTAs on key subjects within the framework of the WTO. Of course, these PTAs should be open to other members that would like to join them later and aim eventually to include all members of the WTO. Trade experts are suggesting that it would be beneficial to promote PTAs in certain areas such as digital trade, the environment, and industrial subsidies in which multilateral discussions are currently at a stalemate.

As a country that has benefited a great deal from the free trade environment provided by the multilateral trading system, South Korea should actively participate in efforts to reform and strengthen the multilateral trading system.

Regional Trade Integration

Another alternative for the malfunctioning multilateral trading system is pursuing high-standards regional trade agreements (RTAs). The two mega RTAs in the Asia-Pacific region, the RCEP and the CPTPP, have come into effect recently. Korea will continue to faithfully fulfill its commitments as one of the important member countries of the RCEP.

Korea was interested in participating in the Trans-Pacific Partnership (TPP) as a founding member, but it missed the opportunity at that time. The Korean government has made its decision to join the CPTPP and officially begun undertaking the domestic process. The incoming administration of Korea should continuously work on the remaining process, including negotiations with incumbent members of the CPTPP.

At this critical juncture, when uncertainties in the world trade environment are increasingly worsening, participation in the CPTPP will provide great opportunities for Korea. Specifically, it is expected that the CPTPP will help Korean companies to secure a stable supply of key parts, components, and materials by making their manufacturing bases as well as imports sources far more diversified in the member countries of the CPTPP.

The United States can contribute to advancing the CPTPP into a high-standard, integrated Trans-Pacific trade agreement by rejoining the pact, which will greatly help stabilize the uncertain trade environment in the Asia-Pacific region.

The US Initiative in the Indo-Pacific Region

The United States finds it hard to counter China's state-directed, non-market trade policies and practices by applying the existing rules of the multilateral trading system of the WTO. Instead, the United States thinks that it needs new strategies to effectively deal with China and has announced plans to establish the IPEF that will set rules and standards on various emerging issues with like-minded partners in the Indo-Pacific region.

Although the details of the IPEF have not been released yet, it would aim to focus on a host of issues, including trade facilitation, standards on digital economy and technology, supply chain resilience, de-carbonization and renewable energy, and labor standards. Trade experts are suggesting that the IPEF would consist of several subgroups (called "pillars") and take a flexible approach where invited countries do not have to participate in all pillars. It should be noted that according to the Office of the US Trade Representative (USTR), the IPEF would not involve any market-access commitments.

Because Korea agrees on the need for setting high-standard rules on emerging trade issues, it should positively consider joining the IPEF as one of the initial participants. The IPEF initiative will present a new form of regional agreement and play an important

role in mitigating uncertainties in the world trade environment in the future.

Furthermore, it is important for the envisioned framework to be open and ultimately helpful to rebuild the multilateral trading system. In addition, the United States should explain to South Korea the benefits of the IPEF, which may be different from those of the CPTPP, and Korea should look for further clarification on how the IPEF can be beneficial to underrepresented and underserved workers, industries, and small and medium-sized enterprises (SMEs) in Korea.

Conclusion

South Korea was one of the poorest countries in the world in the 1960s. Since then, it has achieved miraculously successful economic development through trade. In 2021, Korea became the 10th-largest country in gross domestic product (GDP), the 8th-largest in trade, and the 6th-largest in exports. However, Korea lacks natural resources and has a relatively small domestic market, making it difficult to sustain economic growth without exports and overseas investments. In this regard, a free and stable world trade environment is crucial for Korea's continuous economic development in the future.

Korea values liberal democracy, a market economy, and multilateralism, and it respects the multilateral trading system based on non-discrimination and reciprocity principles. In this regard, it would be important for Korea to cooperate with like-minded countries that share these values and principles to revitalize the multilateral trading system for sustainable global trade. At the same time, Korea should also actively participate in PTAs and RTAs that complement the multilateral trading system.

Korea is currently implementing 18 FTAs with 58 countries. Instead of further expanding its export markets, now is the time for Korea to actively strive for international trade strategies, such as diversifying its economic relations, establishing new international trade norms, and minimizing geopolitical risks. Participating in the IPEF could thus be a valuable strategic move for Korea.

Promoting US–Korea Technology Cooperation: Opportunities and Challenges Ahead Under New Leadership

Matthew P. Goodman

Senior Vice President for Economics, Center for Strategic and International Studies

POLICY RECOMMENDATIONS

The United States and the Republic of Korea are aligned in their core values and interests—but not always in their policies. With the start of a new administration in Seoul, there is an opportunity for the United States and ROK to more closely align their policies on supply chains for critical technologies. This article recommends four main lines of effort by the two governments to enhance policy coordination in this area:

1. Align incentives for R&D and investment in critical technologies.
2. Align cybersecurity, export control, investment screening, and other defensive policies to protect supply chains for critical technologies.
3. Jointly promote an affirmative agenda to advance preferred global technology standards and digital rules.
4. Take advantage of new and existing bilateral and plurilateral forums to coordinate the policies above.

The Logic of Cooperation

The United States and ROK have a compelling interest in working together to promote and protect critical technologies and make their supply chains more resilient. Among other reasons for this:

- *They have complementary capabilities.* In semiconductors, for example, Korean companies produce around 70% of the world’s memory chips, while the United States is the global leader
- *They face shared vulnerabilities,* whether from cyberattacks, transfer of sensitive technologies to adversaries, unreliable access to critical materials, and an array of potential disruptions—natural and human-made—to supply chains.

in advanced chip design. There are also many potential synergies from joint development of batteries, electric vehicles (EVs), and other clean energy technologies.

- As allies and advanced market democracies, *they have shared values and preferences* with regard to global standards, rules, and norms.
- *There are numerous risks associated with NOT coordinating*, from gaps in mutual security to redundant investments and overcapacity.

In recent high-level interactions, Washington and Seoul have recognized the potential benefits of closer cooperation in the technology arena. The joint statement released by President Biden and President Moon after their summit in May 2021 included an extensive section calling for a strengthened partnership to promote and protect critical technologies such as semiconductors, EV batteries, biotechnology, and telecommunications.¹ In his congratulatory call to president-elect Yoon Suk-yeol on March 9, 2022, President Biden said he looked forward to cooperating with his new counterpart on supply chains and other key global challenges.²

From Words to Practice

The challenge now will be to put shared recognition of the potential benefits of greater cooperation into practice through tangible action by the two governments, individually and in concert. Three lines of effort stand out as priorities.

First, Washington and Seoul should coordinate their efforts to increase funding and policy support for R&D and investment in critical technologies. In semiconductors, the foundational technology of today's digital economy, each country has taken steps to sustain its leadership in chip development and production. Through its "K-Semiconductor Belt" strategy, for example, the Moon administration, in May 2021, announced substantial tax credits for semiconductor R&D and investment.³ For its part, the Biden administration made semiconductors a focus of its 100-day supply chain review in early 2021, promising an array of policies to bolster the industry.⁴ Meanwhile, the so-called CHIPS Act authorizing \$52 billion to support chip investment and R&D continues to wend its way through the US Congress.⁵

The challenge is to coordinate efforts like these to ensure reliable and secure supplies of semiconductors over the

short and long term, not only for the United States and ROK but also for key allies and partners. As the Information Technology and Information Foundation (ITIF) said in a 2020 report, chip production is a complex and expensive undertaking that no single country can manage alone.⁶ Coordination among key players such as the United States and ROK will be necessary not only to enhance supply chain resilience but also to avoid redundancy of investment and overcapacity.

Second, Washington and Seoul should further align their defensive policies to ensure that sensitive technologies do not get into the wrong hands. This means, among other things, strengthening cybersecurity measures and tightening export-control and investment-screening programs. Regarding the latter set of policies, the United States has implemented substantial reforms in the past few years through the new FIRRMA⁷ and ECRA⁸ legislation, and Washington is now considering a controversial new outbound investment screening process.⁹ As suggested in the Biden-Moon joint statement of May 2021, there are expectations in Washington that Seoul will tighten its own laws and procedures in these areas.

Third, the United States and ROK should work together to push an affirmative agenda of global standard-setting and rule-making in the technology arena. There is fierce competition under way among advanced and large emerging countries to set the standards and rules that will govern global economic activity over the coming decades, and it is critical for both the competitiveness and national security of the United States and ROK that they work together to advance their preferred approaches. This means, for example, working together in the International Telecommunications Union to push back against notions of "internet sovereignty" advanced by China and Russia.¹⁰ It also means working through regional trade arrangements such as APEC, the Digital Economy Partnership Agreement (DEPA), and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) to advanced US–ROK–preferred digital rules and norms. The United States and ROK cannot just play defense on these issues; they must offer an affirmative agenda for global technology governance.

Managing Areas of Tension

Better coordination of technology policies between Washington and Seoul involves not only promoting shared approaches but also managing differences. The United States and ROK are allies and economic partners, but they also have economic and foreign policy interests that do not always perfectly align. For one thing, each country has a legitimate interest in promoting growth and jobs in its own domestic economy. Policies to promote “onshoring” of technology production—such as the Biden administration’s proposal to offer larger incentives for EVs¹¹ produced with higher US content and confirming to US labor standards—could work against allied cooperation.

Moreover, US and Korean companies compete with each other in global markets, and there are limits to how far they will be willing to collaborate. Recent reports of tensions between US automakers and Korean battery suppliers over transfers of trade secrets is just one example of the practical challenges of technology cooperation, even between these two close allies.

Finally, Washington and Seoul will need to acknowledge and work around the different realities of their respective relationships with China. Over 30% of the ROK’s exports go to China, and Korean companies continue to invest heavily in the Chinese market, including in key technology sectors such as semiconductors. Although president-elect Yoon has signaled a willingness to take a more hawkish line on China, there may be limits to how far the new government in Seoul is willing to go in supporting Washington’s efforts to reduce technological interdependence with China.

Mechanisms for Coordination

Addressing these tensions forthrightly, as well as maximizing the opportunities for constructive collaboration, will require appropriate mechanisms of coordination between Washington and Seoul. Both bilateral and plurilateral forums will be needed.

There has been much discussion about whether Korea will—or should—join the United States, Japan, Australia, and India in the Quadrilateral Security Forum, or Quad.¹³ To be sure, there is a certain logic to the notion of including the ROK in the Quad’s new work on

critical technologies. However, maritime security remains the dominant unifying theme of the Quad, and it is unclear how much real scope there is for cooperation in the technology arena within such a diverse group.

What may make more sense is for the United States and ROK to align in a “variable geometry” of plurilateral groupings that bring together countries that are more naturally complementary on key technologies.¹⁴ For example, a new semiconductor grouping might include the United States, Korea, Japan, Taiwan, the Netherlands, and other key players in chip supply chains. Slightly different configurations of countries would make sense on other critical technologies such as batteries, 5G, and biotechnology.

Korea’s participation in the Biden administration’s forthcoming Indo-Pacific Economic Framework (IPEF) would provide another mechanism for Washington and Seoul to coordinate on digital governance and technology supply chain issues, two central topics on the IPEF agenda.¹⁵ Ideally, the work in IPEF would eventually result in both the United States and ROK becoming members of formal regional trade agreements such as DEPA and CPTPP—although Seoul should move ahead with joining both groups even if Washington continues to dither.

Finally, the Biden and incoming Yoon administrations should consider establishing a new bilateral forum to coordinate all the policies and activities discussed above. This could be modeled after the new “Economic 2+2” arrangement between US and Japanese ministers of commerce and foreign affairs.¹⁶

Conclusion/Policy Implications

The start of the Yoon administration gives the United States and ROK a chance to reset their relationship across many domains. Given the stakes for both countries’ economic competitiveness and national security, no area is more in need of better US–ROK cooperation than critical technologies. The Biden and Yoon administrations should move quickly to establish new mechanisms of coordination of their technology policies, encompassing both defensive (protection) and offensive (promotion) measures, as well as steps to manage their inevitable differences of approach.

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Technology and Supply Chain Resilience: Opportunities for U.S.–Korea Cooperation

Hyung-Gon Jeong

Former Vice President and current Senior Research Fellow, Korea Institute for International Economics Policy

POLICY RECOMMENDATIONS

To further strengthen their alliance, South Korea and the US, should increase cooperation in the following technology and supply chain areas.

- South Korea–US cooperation in high-tech industries for building resilient supply chains.
- South Korea–US cooperation for technology protection, export control and strengthening the foreign investment screen.
- Multilateral cooperation for building resilient global supply chains.

South Korea–US Cooperation for Resilient Supply Chains

Major countries around the world are fiercely competing to secure global supply chains for semiconductors and other high-tech industries.

High-tech sectors such as semiconductors are changing the concept of national security; and in the future, the economic, diplomatic, and security power of countries with access to these technologies will only grow stronger.

Until recently, companies had developed and innovated specialized technologies under the global division of labor. However, the collapse of supply chains due to the COVID-19 lockdown, excessive state intervention in supply chains, and global protectionism are now making the international division of labor under free trade difficult to carry out. In addition, the war between Russia and Ukraine is making global supply chains more and more unstable.

The supply chain risk faced by South Korea and the United States is that imports of certain items are overly dependent on a particular country. In Korea, 2,235 items (based on HS10 data) are more than 70% dependent on imports from China. For example, Korea imports 31.2% (\$17.8 billion) of its semiconductors from China. In the case of memory semiconductors, the dependency is even greater. South Korea imports 76.7% (\$13.9 billion) of all memory semiconductors from China. This rises to 78.3% (\$14.1 billion) when including imports from Hong Kong.

South Korea is also highly dependent on China as a market for its semiconductor exports. China accounts for 43.2% (\$41.2 billion) of South Korea's total semiconductor exports, while Hong Kong accounts for 18.3% (\$17.4 billion), meaning that 61.5% of semiconductors are exported to China and Hong Kong. The high volume of imports and exports of Korean semiconductors to and from China is due to the large amount of intra-company trade between Samsung

Electronics and SK Hynix's Korean and Chinese subsidiaries. Most semiconductors produced by Korean companies in China are supplied to multinational companies such as Apple in China. And some are supplied to Chinese companies while the rest are exported to Korea or overseas.

The US semiconductor industry is in a similar situation. It is highly dependent on international trade, and more than 80% of the semiconductor industry's profits come from overseas customers. China accounted for 29.6% of US semiconductor exports in 2021. Asia already accounts for 69.8% of the global semiconductor market, more than three times the 21.7% of the US. This is because production of semiconductor applications such as smartphones, personal computers (PCs), and automobiles is concentrated in China and Vietnam. For this reason, the US business community is actively advocating free trade, such as the elimination of tariffs and nontariff barriers.

Along with the United States and Germany, China represents one of the top three hubs of global value chains (GVCs). China is already linked to all GVCs, so excluding China from GVCs is not possible. It is difficult to change supply chains in a short period of time because companies in various countries specializing in specific technologies or production processes are well entrenched. Supply chain risk and national security problems are not caused by the global division of labor. The reason why the current supply chain issue has emerged as an economic security issue is because it is highly dependent on a certain country or company.

Semiconductors, batteries, and rare metals, which are essential for fostering high-tech industries, are too dependent on China. In particular, China often controls such supply chains. For this reason, it is important for both South Korea and the United States to reduce their dependence on China in certain high-tech fields. However, as the US business community argues, there can be no technology development without access to the global market. Multinational corporations have so far achieved technological innovations through a global division of labor, using Asian and Chinese markets. Therefore, South Korea and the US should continue to protect and dominate their own high-tech sectors while utilizing the Chinese market. From this point of view, high-tech development and technology protection should be the core of bilateral cooperation between South Korea and the US. How, then, can the two countries cooperate?

First, it is necessary to further strengthen cooperation in the semiconductor material, parts, and equipment industries. Korea imports a significant portion of its semiconductor equipment from the United States. As of 2020, 21.9% of semiconductor equipment and 38.5% of equipment parts were imported from the United States. Conversely, over the past 20 years, the US semiconductor equipment industry has been losing its competitiveness in the global market. The Trade Specialized Index (TSI) shows that the competitiveness of the US has decreased significantly, falling from 0.0214 in 2000 to -0.1017 in 2020. This seems to be due to deteriorating price competition in the global market. However, Chinese products have become more competitive in various fields over the past 20 years. Chinese products also have an overwhelming No. 1 market share, and Chinese products have increased their share of the global market.

Korea is also less competitive in semiconductor display equipment. In the case of this equipment, although the degree of self-reliance has improved slightly compared with 20 years ago (from 33.6% in 2001 to 39.5% in 2020), it still remains lower than expected considering the importance of the industry. The industry is comparatively inferior in quality and technology, and many items are difficult to produce in Korea, so it is important to pay attention to securing supply chain resilience. Therefore, through cooperation between Korea and the US, the competitiveness of US semiconductor equipment and parts industry should be improved. By doing so, supply chain resilience in the Korean semiconductor equipment industry can be improved as well. In particular, China's competitiveness is remarkable in the equipment industry, so there is a concern that the market can be eroded by Chinese products if the US and South Korea do not respond in a timely manner.

The United States is making efforts to establish a more stable supply chain for four core industries. It intends to strengthen the domestic manufacturing ecosystem by utilizing the Manufacturing USA Institute. It is necessary to jointly foster the semiconductors material, parts, and equipment industries between Korea and the US by utilizing these US policies. In addition, it is necessary to seek mutual cooperation in fields such as 5G and batteries. Providing substantial amounts of government incentives for manufacturing is a key factor for strengthening cooperation between the US and Korea in advanced industrial sectors.

Korea and the US complement each other in the area of semiconductors. Compared with the US, Korea absolutely lacks design technology and design experts in the system semiconductor (non-memory) field and is also very weak in the development of intellectual property for semiconductor design. Therefore, more active cooperation with the United States is expected in these areas.

The United States is heavily dependent on Taiwanese semiconductor foundries. In terms of stabilizing supply chains, the US needs to diversify its cooperative partners. Korean semiconductor companies, including Samsung Electronics, can be good partners of the US. The Pentagon enacted the Trusted Foundry program in 2003 to ensure the integrity of the semiconductor supply chain for the US government. Under the program, the firm TSMC is producing semiconductors for the Pentagon. Since the US entrusts production of military semiconductors to a Taiwanese company, it should also pursue cooperation with Korean companies such as Samsung Electronics. To this end, Korean companies like Samsung Electronics should be included in the Pentagon's Trusted Foundry program. Only when this is possible will a genuine Korea-US technology alliance be realized.

Technology Protection, Export Control, and Foreign Investment

South Korea and the US should strengthen joint efforts to control exports of strategic assets. Korea and the US should prevent unwanted technology transfers by thoroughly regulating technology distribution channels. However, this export control should be limited for specific security purposes rather than becoming a wider-ranging protectionist initiative.

Clear and targeted export controls should be designed to avoid affecting a wide range of commercial products. This should not cause unintended damage to the industries of the two countries. Export controls are one of the easiest measures to protect technology, but export-controlled items need to be updated regularly, and only items directly related to national security should be specifically controlled.

It is necessary to strengthen not only export controls but also screen functions for foreign investment. When companies in hostile countries invest in high-tech industries for the purpose of acquiring advanced technologies, the relevant information should be shared

between South Korea and the US to prevent the leakage of certain technologies.

Multilateral Cooperation for Building Resilient Supply Chains

South Korea and the US need to jointly use existing multinational forums to address issues such as strengthening supply chains, cybersecurity, joint R&D, export control, intellectual property protection, and trade subsidies.

For global supply chain cooperation, Korea should consider participating in the Indo-Pacific Economic Framework (IPEF), which is led by the US. The IPEF will move away from trade agreements centered on market opening and become an economic cooperation forum based on supply chains, digital transformation, and technological cooperation. Korea and the US should strengthen their mutual status as economic, supply chain, and technology allies in the IPEF.

It is necessary to jointly respond to market-distorting subsidies by strengthening the role of allies in the WTO and making joint efforts to improve the digital trade environment. It is also necessary to strengthen market access by removing tariffs on products produced by new technologies through the expansion of the Information Technology Agreement (ITA). Modernizing and simplifying customs clearance and procedures through the activation of WTO trade facilitation agreements is absolutely necessary for stabilizing supply chains.

Conclusions

South Korea-US supply chain cooperation should not be conducted to exclude any one country. Instead, cooperation should proceed between the two countries to strengthen their global competitiveness. Decoupling from China is an unwise tactic. Doing so would be contrary to the values of the two countries in pursuing global free competition and cooperation. But it is necessary to secure the technological superiority of both countries in the global market through technological alliances so that they can enhance their competitiveness. Again, the supply chain crisis is not due to the global division of labor. Technology advantages, technological progress and technology protection are the most important factors for building a more resilient supply chain.

Enhancing Economic Security in the Indo-Pacific: The Next Chapter of the US–ROK Economic Partnership

Miyeon Oh

Director and Senior Fellow, Asia Security Initiative, Atlantic Council
Director, Korea Studies, School of Advanced and International Studies,
Johns Hopkins University

POLICY RECOMMENDATIONS

The Biden and Yoon administrations should work together to enhance the economic security of the Indo-Pacific region both bilaterally and multilaterally. Given the increasing significance of technology in the realm of national security, this article offers these policy recommendations:

- The Republic of Korea (ROK) should take the lead, along with the United States, in establishing the agenda, rules, and norms for the Indo-Pacific Economic Framework (IPEF), by joining as a founding member.
- While digital governance and supply chains of critical technologies are likely to be two central topics for the IPEF, the United States and the ROK can also spearhead the creation of a mechanism for protection against Chinese economic coercion within the IPEF.
- The United States and the ROK should foster more effective cooperation through the enhancement of public–private partnerships in areas such as critical technology supply chains, digital commerce, and clean energy.
- The United States and South Korea should forge the path for a US–ROK–Japan–Vietnam Quadrilateral Economic Dialogue, an informal multilateral framework to advance economic security in the Indo-Pacific region, as a means to better engage with core member countries of the Association of Southeast Asian Nations (ASEAN).

Economic Security in the Changing Geopolitical Climate

To enhance security, freedom, and prosperity in the Indo-Pacific region, it is crucial for American leaders to present clear objectives regarding economic security. The Biden administration is determined to strengthen its long-term position and commitment to the region by engaging and working with its allies and partners to respond to the rise of China. However, US–China strategic competition has primarily centered on hard security challenges and clashes pertaining to values and norms. Greater resources and attention should be devoted to economic security challenges.

Asia's economic architecture has transformed enormously since the 2008 global financial crisis, and the region is undergoing further drastic changes in the COVID-19 pandemic era. With the onset of rapid digitalization and technological innovation, the role of advanced and emerging technologies in the national security sector has become more significant than ever before. As such, establishing resilient and secure global supply chains of technologies that are critical to national security has become a top priority agenda not just for the United States but also for its allies and partners.

The Indo-Pacific region is at a critical turning point in its economic architecture. US approaches to China undoubtedly carry immense implications for the national security of its key allies and partners, including South Korea. It is therefore vital for the United States to craft its China policy in a manner that is both realistic and acceptable for its Indo-Pacific allies and partners, given their complex interdependence with China's economy. The Biden administration is currently consulting with its allies and partners before putting forward an Indo-Pacific Economic Framework (IPEF) that outlines these key economic pillars: trade facilitation, digital trade, supply chain resiliency, infrastructure; clean energy and carbon neutrality, and worker standards.

While partners in the region welcome the return of US leadership into the economic sphere, they require greater clarity regarding the objectives, approaches, and incentives for the IPEF. The Biden administration must clearly articulate where the United States wants to reduce dependence and seek selective and targeted

decoupling with China, as well as in those areas where the United States, together with allies and partners, aims to enhance its technological and economic edge. While it is imperative to use economic instruments to safeguard US national interests and economic competitiveness, it is also necessary to demonstrate how these economic measures and rules can safeguard the national interests of other like-minded countries.

Common Opportunities and Challenges

The United States and the ROK share common key advantages as leading economies with advanced and emerging technologies, and as leading democracies. The two countries also share common challenges—not only traditional security challenges but also economic challenges, including the realignment of global supply chains, the need to mitigate climate risks through clean energy, and the unfair trade practices of and technology transfers to authoritarian countries. With a new administration in Seoul, momentum is building to upgrade and expand the scope of the US–ROK alliance and economic partnership through close coordination to enhance the economic security of the Indo-Pacific region.

First, the United States and the ROK should collaborate to set standards, rules, and norms for the IPEF. This will require the ROK to join the IPEF as a founding member and actively engage and closely coordinate with other like-minded countries in the region on key agenda items, such as digital commerce and critical technology supply chains. The US–EU Technology Trade Council (TTC) serves as an example of a platform through which the United States and the ROK can begin engaging with like-minded regional and global stakeholders in order to better coordinate on technological, economic, and trade issues. The United States should also consider joining the Digital Economy Partnership Agreement (DEPA)—a new trade agreement to facilitate digital trade and create a framework for engagement among the digital economies of Chile, New Zealand, and Singapore. The ROK requested to join in September 2021, and China followed suit in October 2021.

Given the growing importance of technology in the national security domain, the United States and the ROK can play a proactive role in establishing a global network

of techno-democracies. This emerging network can provide a platform of coordination to set global standards and facilitate the development of multilateral frameworks for advanced and emerging technologies with trusted partners. Such efforts will reaffirm the eventual formation of a regional architecture led by ASEAN that enforces existing global norms on technology as they pertain to regional and national security.

Another major area of focus for the United States and the ROK should be the creation of a mechanism within the IPEF that will ensure protection against China's coercive economic actions. To date, Beijing has imposed or threatened trade-restrictive measures to punish dozens of countries that have pursued policies deemed harmful to Chinese interests. This includes China's economic retaliations against the ROK's decision in July 2016 to deploy and participate in the US-led Terminal High Altitude Area Defense (THAAD) system, as well as China's ban on exports of rare earth minerals to Japan in 2010 after a collision between a Chinese fishing vessel and a Japanese coast guard vessel near the disputed Senkaku Islands. More recently, since 2020 China has stopped importing Australian coal, sugar, barley, lobster, wine, copper, and timber, after Australia barred Huawei and ZTE from its 5G networks and called for a global inquiry into the origins of the coronavirus pandemic. Evidently, there is strong demand for collective action against Chinese economic coercion, and the US should take the initiative, with strong support from the ROK, to create a protection mechanism.

Public-Private Partnerships

Tackling supply chain vulnerability is a top policy priority for both the United States and the ROK. This is evidenced by President Biden's and President Moon's agreement in May 2021 to collaborate on fostering resilient and secure supply chains for critical technologies. The two governments agreed to explore the creation of a US-ROK Supply Chain Task Force, which will implement and review bilateral cooperation in high-tech manufacturing and supply chains.

Under the Yoon administration, the United States and the ROK should directly engage with the private sector and industry experts through the establishment of sector-specific Working Groups. While the role

of government is pivotal to bolstering supply chain resiliency, it is not easy for policymakers to have a substantial impact on the complex global supply chains that exist today. Private companies are thus essential to building a network of trusted partners and strengthening public-private partnerships to assemble stakeholders in a value-driven digital and technological ecosystem. Existing lines of efforts undertaken by the task force or working group that are sector-specific can provide a framework for public-private partnerships that will act as vehicles for industry and government experts to exchange views and offer policy recommendations.

Multilateral Mechanisms

Southeast Asia is a region of strategic importance for the United States and its allies. It is not only an engine of regional economic growth facing increasing Chinese political and economic influence, but its rapid industrialization, urbanization, and digitalization also continue to transform the entire globe. The United States and the ROK should expand their level of commitment to Southeast Asia, and in so doing promote greater connectivity, sustainable economic growth, energy security, and digital innovation. Since the United States and the ROK have strong track records of development assistance and investment in the region, the two countries can play a more proactive role by expanding existing multilateral frameworks to better engage with ASEAN countries.

For instance, the United States and South Korea, expanding the existing US-ROK-Japan trilateral framework, can play a key role in establishing the USROK-Japan-Vietnam Quadrilateral Economic Dialogue, an informal multilateral framework to advance economic security in the Indo-Pacific region. Indonesia and the Philippines may also provide support for ASEAN-led sector-specific regional architectures. Improvement of energy management systems, development of liquefied natural gas (LNG) infrastructure, and investment in the renewable sector are areas of converging interest among those countries. The Quadrilateral Economic Dialogue can provide an official platform for public-private partnerships to enhance energy cooperation in Southeast Asia, which could as a result empower the private sector to coordinate with local governments and nongovernmental organizations.

It can also serve as a key vehicle for the governments of the US, ROK, and Japan to support their private firms navigating relations with state-owned enterprises (SOEs) in Southeast Asia (or with state-owned enterprises of ASEAN countries). The four countries can create a digital innovation mechanism for public-private partnerships in Southeast Asia, which can enable Korean and Japanese companies to assist with existing US private-sector efforts such as the construction of trusted 5G networks.

Conclusion

The Biden and Yoon administrations share common opportunities and challenges in Asia. Given the enhanced importance of technology, and therefore the increased role of the private sector in the national security realm, the two allies should innovatively and proactively work together, both bilaterally and multilaterally, to enhance economic security in the Indo-Pacific region.

ROK-US Nuclear Cooperation: Challenges and Opportunities

Sang Hyun Lee

President, Sejong Institute; President, Korea Nuclear Policy Society

POLICY RECOMMENDATIONS

- The ROK and US should officially declare a comprehensive nuclear power partnership. To this end, the Yoon Suk-yeol administration must urgently remove the policy confusion caused by the Moon Jae-in government's nuclear phase-out policy. The Biden administration must clearly declare its policy of strengthening the United States' nuclear partnership with South Korea for its carbon-neutral goal.
- The communication channel for nuclear cooperation between the two countries should be normalized. To this end, it is necessary to revitalize the High-Level Bilateral Commission (HLBC), which has already been established but has not functioned properly. Major issues to be addressed by HLBC include intellectual property differences between the American-made AP1000 and the Korean-made AP1400 nuclear power plants; cooperation in research and development of advanced reactors, including small modular reactors (SMRs); and follow-up measures for joint fuel cycle research, such as pyro-processing.
- Follow-up measures to implement cooperation on nuclear exports agreed to at the Korea-US summit in May 2021 should be taken immediately. In order to implement this agreement, a working group should be launched and deal with each export cooperation field. The working group should focus on winning new nuclear power plant contracts, providing project financing for new power plant exports, and forming a consortium for nuclear fuel supply and spent nuclear fuel management.
- The US and ROK should discuss ways to enhance their strategies in the US-led nonproliferation program.
- It is necessary to strengthen the communities of nuclear policy experts in both countries by expanding the scope and dialogue of bilateral nuclear cooperation, expanding regular meetings, and expanding the related discussions of the 1.5 track expert group. To this end, the South Korean and US governments need active policy support from the Ministry of Foreign Affairs and the State Department, and various public relations and seminars to expand public awareness of the use of nuclear energy.

Carbon Neutrality and Nuclear Energy

Carbon neutrality to combat climate change is taking a high policy priority in almost every country in the world. Carbon neutrality is a concept in which greenhouse gas emissions from human activities are reduced as much as possible, and the remaining greenhouse gases are absorbed (by forests, etc.) and removed (by carbon capture, utilization, and storage), resulting in zero actual emissions. Carbon neutrality is often called “net-zero” by making the amount of carbon absorbed equal to the amount of carbon emitted.

The Biden administration, as well as the Moon Jae-in government, are pushing carbon neutrality as an important policy. In recent years, it has been difficult for the international community to talk about any areas of politics, economy, or society without addressing carbon neutrality to combat climate change. At the 26th Conference of Parties for Climate Change (COP26), carbon neutrality along with COVID-19 emerged as one of the biggest topics at the global level, with strong carbon neutrality goals being presented by member countries. According to a report by the Joint Research Centre of the EU Commission, there is no scientific evidence that nuclear power is more harmful to health or the environment than conventional power generation methods. Rather, nuclear power has less impact on climate change than hydroelectric power or renewable energy.

Major developed countries—such as the United States, the United Kingdom, France, and Canada—have recently begun to reemphasize the necessity of using nuclear energy in achieving their carbon-neutrality goals. Nuclear power is a clean energy source that does not emit greenhouse gases and that can operate 24 hours a day. It can play a key role in achieving carbon neutrality. These countries are making efforts to expand nuclear power generation by announcing plans to develop innovative nuclear technologies, such as small module reactors (SMRs) and advanced reactors. In addition, nuclear power plants are a base-load power source and can be operated to overcome the intermittency of renewable energy, so that they can coexist with renewable energy sources. In particular, since Russia’s surprise invasion of Ukraine, energy security and independence have become even more important. The plight of Europe,

especially Germany, which has been heavily dependent on Russia’s oil and natural gas while pursuing a nuclear phase-out policy, has served as an example to further highlight energy security.

The Moon Jae-in government officially adopted the “2050 Carbon Neutrality Plan” as Korea’s long-term vision in December 2020. The 2050 carbon neutrality plan aims to achieve carbon neutrality, economic growth, and quality of life at the same time by simultaneously pursuing the following: low-carbon economic structures; low-carbon industrial ecosystem creation; transition to carbon neutral society; and strengthening the foundation of carbon neutral socioeconomic system.

According to the Moon government’s long-term Low-Carbon Economic Development Strategy (LEDS), which is part of the carbon neutrality initiative, the power supply system centered on fossil fuel generation will be converted to renewable energy, green hydrogen and carbon dioxide capture technology to promote carbon neutrality in the power sector. This will change the power supply system to one centered on renewable energy, such as solar and wind power, and fossil fuel power generation will change its role from being a primary energy source to being merely a supplement to renewable energy. By 2050, the target year, emissions will be zeroed out and the proportion of renewable energy will be expanded to 70.8%, due to the total suspension of thermal power generation.

By contrast, president-elect Yoon and his People Power Party presented three campaign pledges on environmental and climate change: realizing carbon neutrality, responding to the climate environmental crisis, and promoting nuclear power generation. Regarding nuclear power generation, Yoon said that he would scrap the Moon Jae-in government’s nuclear phase-out policy and realize carbon neutrality by harmonizing renewable and nuclear energy. While strengthening the Korea–US nuclear alliance, he also announced the goal of creating 100,000 jobs by expanding nuclear power plant exports. He also said he would actively develop next-generation nuclear reactors and promote hydrogen technologies. Yoon believes that if the Moon Jae-in government pushes ahead with the 2050 carbon neutrality scenario, in which renewable energy accounts for 70%, it will inevitably raise electricity bills by 4% to 6% every year by 2050, which will be a big burden on the national economy.

Why Should the ROK and the US Cooperate?

At the Korea–US summit in Washington on May 21, 2021, the two countries agreed to cooperate in overseas nuclear markets, including joint participation in nuclear power plant projects, while ensuring that the highest standards of international nuclear safety, security, and nonproliferation are maintained. According to the fact sheet released along with the joint statement, the two countries will cooperate in forming a global nuclear power supply chain and adopt the obligation to join the International Atomic Energy Agency (IAEA) Additional Protocol when supplying nuclear power plants as a joint nonproliferation policy.

Why did the two countries agree to cooperate in exporting nuclear power plants at the Korea–US summit? Korea has no choice but to continue to use nuclear power in seeking a low-carbon economy and energy security. Since it has continued to generate nuclear power, it also has abundant experience in building nuclear power plants. Since the US stopped construction of nuclear power plants after the Three Mile Island accident, there is no supply chain that can build nuclear power plants independently. In the meantime, it is worth noting that the current international nuclear power plant export market is almost the sole stage of Russia and China. China and Russia strongly support nuclear power plant exports through national policies. In the near future, a number of new contracts are expected from Poland (8 reactors), Czech Republic (2 to 4 reactors), Hungary, and Saudi Arabia. Given that Russia and China will almost monopolize these supplies, Biden needs to hurry. This is why the Biden administration decided to propose cooperation in exporting nuclear power plants with Korea.

It is a natural choice for Korea, which relies heavily on nuclear power generation and has the world's best experience in building nuclear power plants, to join hands with the US, which has not built nuclear power plants for decades. It can be said that the justification for South Korea and the US to cooperate is even greater now that countries around the world are looking at the importance of nuclear power again due to the disruption of global supply chains caused by COVID-19, worsening

US–China strategic competition, and the energy crisis since Russia's invasion of Ukraine.

There are various areas where the two countries can cooperate in the nuclear energy field in the future. First, the safety of nuclear power plants, such as the physical protection of facilities and human security for nuclear workers, is an important area of bilateral cooperation. Recently, cybersecurity and the safety of nuclear power plants in the event of an armed conflict between countries after the Ukraine crisis have been becoming important issues. A second area of cooperation is in the field of dismantling and decontamination of decommissioned nuclear power plants whose life span has ended. A third area of cooperation is in spent nuclear fuel management. Spent nuclear fuel is a global challenge that no country in the world has solved, and it is the biggest barrier and countermeasure that hinders the continuation and expansion of nuclear power generation. In the case of Korea, spent nuclear fuel storage at plant sites will reach saturation points, starting with the Gori and Hanbit nuclear power plants in 2031. The fourth area of cooperation is the development of next-generation advanced nuclear reactors, including SMRs. Fifth and finally is cooperation in the field of nuclear exports, as agreed to at the ROK–US summit in May 2021.

Conclusion

While carbon neutrality has emerged as a hot topic globally, the importance of energy security has grown since Russia's invasion of Ukraine. Russia, which has recently accounted for 60% to 70% of the international nuclear power market, is likely to be expelled from the market, and China has yet to fully enter the nuclear export market. This will open a window of opportunity for Korea and the United States to export nuclear power plants. Furthermore, with the possibility of a default by Russia, which faces strong international sanctions due to the invasion of Ukraine, export financing, which has been Russia's strength in nuclear power plant exports, has become uncertain. The South Korean and US governments and the two countries' businesses should take advantage of this opportunity. Since Korea and the United States have the best

nuclear technology and construction capabilities in a complementary way among democratic countries, the two countries should actively expand cooperation not only for nuclear exports but also for the development and construction and next-generation nuclear power plants, including SMRs.

Korea is expected to see a major change in its nuclear policy with the inauguration of the Yoon Suk-yeol administration on May 10, 2022. Recently, when Yoon's

policy consultation delegation visited Washington, discussions were held between the two countries on the expansion of bilateral nuclear cooperation. The two countries are discussing holding the HLBC as soon as possible in order to materialize South Korea–US cooperation and seek other ways to cooperate on nuclear power exports. South Korea and the US should respond quickly to this changed situation based on their comprehensive nuclear cooperation partnership.

Charting a Course for the Future of US–ROK Energy Cooperation: Elevating Attention to Climate Action while Maintaining a Focus on Energy Security

Clara Gillispie

Senior Advisor, National Bureau of Asian Research

POLICY RECOMMENDATIONS

The Biden and Yoon administrations could strengthen their respective country’s energy security *and* their joint leadership on climate change by pursuing a bold agenda for US–ROK energy cooperation in the Asia-Pacific. Three key ambitions should be high on this agenda:

- *Moving aggressively* to decarbonize the region’s power sector as soon as possible;
- *Tackling near-term bottlenecks* to an otherwise imminent revolution in transportation, including with hydrogen and electric vehicles; and
- *Unlocking additional pathways to net-zero* via championing “smarter” development, with an emphasis on the enabling role of both physical and digital infrastructure.

Both the United States and South Korea have committed to achieving “net-zero” greenhouse gas emissions by 2050, with South Korea further codifying its domestic obligations in national legislation. As the energy sector accounts for the vast majority of these emissions, there is no way to achieve this goal without radically reshaping existing energy systems—yet doing so will require both countries to confront notable challenges.

The State of US–ROK Energy Cooperation

The United States and South Korea have a strong foundation for energy and climate cooperation that is based on shared values, complementary industrial strengths, and a successful track record in joint R&D. Cooperation to date has thus often been ambitious in scope, covering areas as diverse as nuclear energy, basic infrastructure development, and energy pricing reform.

Both countries have also sought out ways to coordinate their relevant engagements with other economies in Asia, to better respond to various opportunities and challenges posed by the wider region's emergence as the center of global energy demand growth.

Successive administrations in both countries have regularly expressed ambitions for elevating the strategic attention given to their joint energy partnerships. South Korea's nearly 100% reliance on imports for oil, natural gas, and coal has prominently informed these interests, but so too have shared concerns about Asia's worsening environmental outlook. Notable among concerns here is deteriorating air quality across the region, driven by a sharp, multidecade rise in carbon dioxide (CO₂) emissions and particulate matter from energy use. As one measure of what this has meant, air pollution alone is now responsible for 4.5 million deaths annually in Asia—and in Seoul, in particular, it is shaving 1.7 years off average life expectancy.¹

Thus, in the near-term, a key question before the US–ROK alliance is how to elevate attention to climate action while sustaining a focus on energy security. Indeed, these twin goals featured prominently in the May 2021 US–ROK Leaders' Statement released by President Joseph R. Biden Jr. and President Moon Jae-in. Likewise, Biden reiterated his own interest in bilateral cooperation on climate change during his congratulatory call to President-elect Yoon Suk-yeol.²

Understood in this context, the recent decision to elevate the US–ROK Energy Policy Dialogue to the ministerial level in 2022 presents an early opportunity for both countries to continue to explore these issues at a senior level.³ Nonetheless, a new administration in South Korea is likely to raise questions about the priorities and tactics that should inform joint engagement—and, in turn, what focal points (if any) might benefit from adjustment.

Key Challenges and Opportunities

The United States and South Korea are two of the world's largest consumers of energy and most innovative economies. As such, their joint efforts to radically alter their own energy consumption patterns (much less Asia's) have global implications—and could come to shape what others see as possible. Specific needs for innovative thinking vary:

Power Generation

According to the International Energy Agency, decarbonizing the power sector as soon as possible—and no later than 2040—is critical to guaranteeing a path to net-zero by mid-century.⁴ This will be a particularly acute challenge in Asia, given the region's heavy reliance on coal-fired power (including in South Korea, where it accounts for 40% of power generation). Yet the benefits of aggressive action are immense, as this effort alone would address what is currently the source of 50% of Asia's CO₂ emissions.⁵

A key role for both Washington and Seoul here is not only supporting Asia's developing economies in preparing for this transition but also demonstrating leadership as first movers. For its part, the Biden administration has set a goal for the United States to achieve 100% carbon pollution-free power generation by 2030. In contrast, while South Korea's current electricity plan envisions steep emission declines over the next two decades, it does not guarantee that domestic power generation will be emission free by 2040. Yoon has expressed his intention to revise this plan, including its suggested declining role for nuclear energy—the country's most significant source of carbon pollution-free power. Nonetheless, in both countries, full decarbonization will require more aggressive commitments, including greater near-term progress in scaling up wind and other forms of renewable power generation.

Transportation

While the power sector represents the largest source of Asia's CO₂ emissions, transportation is the fastest-growing source. This is because of growing regional desires for mobility coupled with the transportation sector's prominent dependency on oil. Asia's auto fleet alone is expected to triple in size by 2050.⁶ This suggests an incredible need—and potential market—for tools that can help curb relevant emissions.

Both hydrogen and electric vehicles are tools for exactly this. Yet both technologies face questions related to their general affordability as well as needs for specific technical advances. Here, the United States and South Korea are potentially well positioned to drive additional near-term breakthroughs. Both are home to some of the world's

top automotive companies and are already collaborating on market development efforts. South Korean firms have also emerged as leading manufacturers of high-capacity batteries for advanced vehicles, where the 2021 resolution of a key dispute between SK Innovation and LG Energy Solution has removed a major impediment to ramping up manufacturing in the United States.⁷

Even so, questions remain about specific next steps for enhancing cooperation, including what the right role for government is in attempting to shape market outcomes. Market analysts have raised concerns that prices for electric batteries could soon skyrocket due to rising global demand for their underlying materials (such as critical minerals).⁸ Biden and Yoon will need to offer a carefully considered response to this anxiety—one in which a continued focus on supporting a diverse range of technologies can help but may not eliminate the need for improving the overall clean energy supply chain.

Infrastructure

Available infrastructure shapes how easily countries can shift to cleaner energy consumption patterns. It can also lock-in developmental pathways for decades to come. In the case of the United States and South Korea, older systems—including aging power grid and transmission infrastructure—are in dire need of modernization. Other countries in the Asia-Pacific region will need to pursue modernization while also addressing ongoing gaps in existing infrastructure. More broadly, additional needs for new systems across the region will include things such as new fueling and charging stations for advanced vehicles.

Infrastructure development is a competitive strength of both the United States and South Korea, and the US International Development Finance Corporation and the ROK Export-Import Bank have championed joint financing of relevant projects in the Asia-Pacific. To take existing efforts further, Biden and Yoon might consider a more prominent emphasis on how projects can contribute to “smart” development, where big data and various digital tools can support physical systems in realizing even greater efficiencies. This could widen the available paths to net-zero—and continue to build on areas where firms in both countries have demonstrated strengths.

Looking Ahead

In each of the areas mentioned above, initiatives that focus on advancing new technological breakthroughs are both needed and have a natural alignment with US and South Korean industrial strengths. Even so, such initiatives are not the only—or even necessarily the most impactful—way that both countries can work together. There also remains a dire need for additional initiatives that address the market, policy, and geo-economic conditions that can prevent available clean energy solutions from being successfully deployed in the Asia-Pacific region.

Deploying new systems and tools will require immense amounts of capital investment. The Asian Development Bank estimates that developing Asia alone will require \$23 trillion in energy infrastructure investment between 2016 and 2030 to meet its earlier climate targets (much less new goals for carbon neutrality).⁹ In the face of growing strains on local and national budgets across the region, there is a risk that some countries may retreat in their developmental ambitions, prioritizing cheap and easy over secure and sustainable. The United States and South Korea are not immune to this risk.

Conclusion

Realizing net-zero greenhouse gas emissions globally by mid-century will depend on the actions taken now—especially in the Asia-Pacific region. By working in tandem, the United States and South Korea could be well positioned to lead the charge in ways that benefit both themselves and their neighbors. Yet both countries could also be doing more to seize the moment.

When the Ministerial ROK-US Energy Policy Dialogue was initially announced, the joint statement suggested that this “elevated” cooperation should have three pillars: a focus on technologies and research; commercialization and deployment; and overall energy policies and planning. This structure continues to be a useful framing device for thinking about how both countries can (and should) work together on the issues raised in the preceding sections.

On technologies, there is no shortage of potential opportunities to work together. As one way of thinking about maximizing returns, the International Energy Agency has suggested that some of the biggest

innovation opportunities in the years ahead are in advanced batteries and hydrogen—areas that, as suggested above, are within the scope of existing US–ROK collaborations. To supercharge these efforts, Biden and Yoon might consider increasing resources directed to official initiatives, as well as expanding incentives for private sector collaboration (e.g., preferential tax credits for joint partnerships). Both countries might also consider expanding their minilateral partnerships with other economies that have similar interests and strengths in these fields—including Australia, Japan, and Singapore (all of which are active on hydrogen).

Technological breakthroughs are vital to advancing new pathways for decarbonization and are likely to have benefits that extend beyond a minilateral context. Yet they will be meaningless if clean energy tools cannot be successfully commercialized and then deployed. To that end, both countries could be doing more together to address clean energy supply chain challenges, including with critical minerals. Next steps here could involve making complementary investments to expand relevant production capacity, as well as encourage a more diverse portfolio of suppliers. Both countries could also be doing more to support next-generation infrastructure that helps to make greater utilization of clean energy sources more viable and more affordable.

Successful deployment will, in turn, hinge on national efforts to champion sound energy policies—ones that can send appropriate market signals and help a wide range of stakeholders to engage in planning for the future. As low-hanging fruit, Biden and Yoon should continue to bolster mechanisms for joint US–ROK engagement with other economies in the Asia-Pacific region. Both the Asia-Pacific Economic Cooperation forum and the East Asia Summit offer venues for these discussions. Discussions here could also be augmented through additional dialogues with partners in developing Asia, including counterparts in South and Southeast Asia.

In sum, there are a number of ways that the United States and South Korea could take their energy partnership to the next level. But moving from expressing concern about climate change to taking effective steps to slow it will require high-level leadership in both countries.

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Raising US–South Korean Cybersecurity Cooperation to the Next Level

Adam Segal

Director of the Digital and Cyberspace Policy Program, Council on Foreign Relations

POLICY RECOMMENDATIONS

The Biden and Yoon administrations have a strong base of bilateral cybersecurity consultations, working groups, and dialogues on which to build. The United States and South Korea can, however, better address growing threats in cyberspace by:

- Clearly stating that cyberattacks could, under certain circumstances, be covered by the Mutual Defense Treaty.
- Developing technical and legal procedures for joint attribution of cyberattacks.
- Exploring ways in which the two sides can jointly disrupt criminal infrastructure and trace, freeze, and seize cryptocurrency payments made to ransomware groups.

Both Washington and Seoul face increasing risks in cyberspace. There has been a proliferation of ransomware attacks, along with financially motivated attacks on banks, cryptocurrency trading sites, and other platforms by nation-state actors or their proxies. Hackers continue to exfiltrate sensitive data from the networks of government agencies, the military, and the defense industry base, and Chinese hackers have maintained their campaign of cyber-enabled theft of intellectual property and business secrets from the private sector. While cyber operations have not played as large a role in the war between Ukraine and Russia as many as expected, in the opening days of the conflict Russian hackers placed wiper malware on government networks, briefly took down communication networks with distributed-denial-of-service attacks, and disrupted ViaSat, a provider

of broadband satellite internet services. More than a month into the conflict, Ukraine announced that it had disrupted a sophisticated attack on its power grid.

North Korea, China, and Russia Continue to Exploit Cyberspace

Cyber operations by North Korea, China, and Russia are a threat to United States and South Korean national security and economic interests. Over the last several years, North Korea has successfully used cybercrime to avoid international sanctions and to fund its missile and nuclear weapons development programs. According to the United Nations (UN) investigations, the Kim regime has deployed ransomware, hijacked digitally mined currency, and laundered illicit funds through

cryptocurrency exchanges, taking in as much as \$2.3 billion. The Bank of Korea estimates that money from cybercrimes represented about 8% of North Korea's economy in 2020.

Chinese cyber espionage threatens United States and South Korean technological competitiveness. Despite announcing in 2015 that it would not support cyber-enabled theft of intellectual property, China has resumed its industrial espionage campaign against the private sector. In 2021, Chinese hackers exploited a so-called zero-day vulnerability in Microsoft Exchange email servers, allowing them to gain access to thousands of sensitive networks. Moreover, knowing that Microsoft was pushing out a protective patch for the vulnerability, the Chinese scanned almost the entire internet to find exposed servers. Public attribution of Chinese attacks on Korean firms is rare, but in 2020 Mitsubishi Electric announced that it had been the victim of a group it called Tick that had also targeted tech companies in South Korea.

North Korea could also use destructive attacks as a tool of political coercion or as a precursor to a military conflict on the Korean Peninsula. Over time, North Korean hackers have apparently deemphasized disruptive attacks like the DarkSeoul attacks in 2013 on media, financial firms, and the Blue House, shifting to espionage and data theft, and then to financial crimes. Still, during a crisis, Pyongyang is likely to target civilian and military infrastructure. North Korea has identified cyber operations as an important asymmetric tool to close the gap in conventional weapons. Kim Jong-un reportedly declared that cyber warfare is an "all-purpose sword that guarantees the North Korean People's Armed Forces ruthless striking capability, along with nuclear weapons and missiles."

The United States and South Korean Reactions

Washington and Seoul have addressed the growing cyber threat domestically, bilaterally, and multilaterally. The Biden administration has improved information sharing between the public and private sectors, defined authorities and built cyber capacity in the federal government, and raised security standards in critical infrastructure networks. Moreover, the United States has

adopted a doctrine of persistent engagement and forward defense, based on the practice of disrupting attackers before they reach US networks. Cyber Command has deployed personnel to launch "hunt forward" missions in 14 countries in Asia, Eastern Europe, and the Middle East to monitor adversary activities and to identify malware and share it with US partners.

In 2019, the Moon administration introduced the National Cybersecurity Strategy, which identified securing critical infrastructure, enhancing cyberdefense capabilities, promoting the growth of a domestic cybersecurity industry, and strengthening international cooperation as priorities. The National Security Basic Plan, which outlined the implementation of the strategy, included over 100 policy and technical tasks. While the strategy states that South Korea will "ensure a proactive deterrent against cyberattacks," Seoul has not acknowledged the use of its own cyber capacities to disrupt North Korean operations. South Korea has also so far avoided publicly attributing attacks to China-based attackers.

Over the last decade, the United States and South Korea have strengthened cybersecurity cooperation and coordination. In 2013, the Pentagon and the Ministry of National Defense announced the formation of the Cyber Cooperation Working Group, "to strengthen cooperation in information sharing, cyber policy, strategy, doctrine, personnel, and exercise to improve our collective readiness against cyber threats." The State Department and the Ministry of Foreign Affairs hold Bilateral Cyber Consultations, which reinforce cooperation between the two countries on "detering cyber adversaries, cybersecurity of critical infrastructure, capacity building, information sharing, and international security issues in cyberspace."

Because of the rising threat from ransomware, in September 2021, the United States and ROK established a working group at the National Security Council level "focused on enhancing cooperation among law enforcement and homeland security agencies, to learn from past cybercrime events and combat ransomware attacks against our two countries."

The United State and the Republic of Korea have also been involved in international efforts to identify legitimate norms of state behavior. Both states accept the

application of international law, notably international humanitarian law in times of conflict, to cyberspace. Washington and Seoul have promoted a set of 11 norms adopted by the UN, which includes norms prohibiting states from intentionally damaging or impairing others' critical infrastructure during peacetime or targeting another state's computer emergency response teams. Given the threat from North Korean criminal hackers and other proxies, Seoul has stressed adherence to the norm that states should not knowingly allow their territory be used for internationally wrongful acts with the use of information and communication technologies.

Conclusion

There is a well-developed base of consultations and working groups between the two partners, but the Biden and Yoon administrations have the opportunity to further strengthen US–ROK cyber cooperation in three areas.

First, as a deterrent to destructive attacks from North Korea, the two sides should issue a statement that cyberattacks could, under certain circumstances, be covered by the Mutual Defense Treaty. Previous statements from the Security Consultative Meeting have been relatively vague, highlighting the need to bolster the defense of critical infrastructure. In 2014, NATO declared that cyberattacks were a threat to the alliance's security, and that a cyberattack could invoke collective defense under Article 5. South Korea and the United States could reproduce the language issued by Washington and Tokyo in 2019, which stated that “international law applies in cyberspace and that a cyberattack could, in certain circumstances, constitute an armed attack for the purposes of Article V of the US–Japan Security Treaty.”

Second, Seoul and Washington should collaborate on developing technical and legal procedures for joint attribution of cyberattacks. Over the last several years, the United States has joined with a growing list of partners to attribute and sanction attacks by North Korean, Russian, and Chinese actors. In July 2021, for example, the United States, the EU, NATO, the United Kingdom, Australia, and other partners attributed with a high degree of confidence the hacking of Microsoft Exchange Servers to hackers connected to China's Ministry of State Security. South Korea's participation in these internationally coordinated attributions will not only help clarify the types of actions that violate agreed upon norms but also foster agreements about when and how states should publicly accuse others of cyberattacks.

Third, the United States and South Korea should quickly operationalize the ransomware working group, exploring ways in which the two sides can jointly disrupt criminal infrastructure and trace, freeze, and seize cryptocurrency payments made to ransomware groups. After the hacking of Colonial Pipeline, the US government seized servers and other infrastructure used by DarkSide, the ransomware gang behind the attacks, and successfully tracked and recovered \$2.27 million of the \$4.4 million paid in virtual currencies. As both countries move to regulating virtual currencies and decentralized finance, US and South Korean law enforcement agencies, intelligence agencies, and military operators will want to ensure that new technical and policy capabilities to disrupt ransomware gangs does not interfere with innovation in web3 technologies.

In sum, while there is already a great deal that South Korea and the United States are doing in the realm of cybersecurity, there is more that they can do in this critical domain.

Public Health in US-South Korean Relations: US-South Korean Cooperation for Health Security

Soonman Kwon

Professor, Seoul National University

POLICY RECOMMENDATIONS

The COVID-19 pandemic has had huge impacts on socioeconomic systems as well as the health of populations around the world. This article examines how Washington and Seoul can effectively work together to address COVID-19 and future global health threats by treating them as the security threats. The Yoon and Biden administrations need to not only fight the current pandemic but also work together to establish sustainable health security mechanisms.

- The US and South Korea can collaborate on regional surveillance and monitoring to enhance preparedness and policy response to pandemics and other public health emergencies in Northeast Asia.
- The US and South Korea can collaborate on R&D, production, and distribution of vaccines and medicines by establishing a regional hub for vaccines and medicines in South Korea.
- The US and South Korea can collaborate to strengthen the global value chain (GVC) for public health.

Collaboration for Regional Surveillance and Monitoring of Pandemic

Surveillance, monitoring and regional coordination are all essential for effective response to public health emergencies. South Korea and the US need to take the lead in these areas in Northeast Asia.

South Korean and US public-health agencies can collaborate to help Asian countries better prepare and respond to pandemics. Collaboration can take various modalities; for example, the US Centers for Disease

Control and Prevention can establish a regional branch office in Seoul.

South Korea has been relatively successful in the response to COVID-19, as shown by lower fatality from the pandemic compared with other OECD countries (309.03 per million persons in Korea, 550.61 in Finland, 986.18 in Canada, 1,539 in Germany, 2,420.93 in the UK, and 2,939.63 in the US as of March 29, 2022). The Korea Disease Control Agency (KDCA) has played a key role in the Korea's response to COVID-19, which can provide valuable lessons to many low- and middle-income countries (LMICs) in the region.

KDCA has been strengthened since the Middle East Respiratory Syndrome (MERS) experience in 2015 and expanded substantially during the COVID-19 pandemic. Korea has been collaborating with many countries in the region, including a good network of researchers and policy makers, and the collaboration between South Korea and the US can take advantage of this existing network.

Regional Hub for Vaccines and Medicines

The US and South Korea can collaborate to expand the R&D and production of vaccines to improve access to vaccines in LMICs and better prepare for a future pandemic. Vaccines have been a game changer to the global effort to end the COVID-19 crisis. The US has played a key role in the R&D and production of innovative vaccines for COVID-19. However, many people in LMICs still have limited access to COVID-19 vaccines and medicines due to high price and insufficient supply. The vaccination rate (i.e., two shots) for COVID-19 is 74.06% for high-income countries, 76.61% for upper middle-income countries, 50.41% for lower middle-income countries, and only 11.48% for low-income countries.

South Korea and the US have had discussions on a Global Vaccine Partnership since May 21, 2021. A more concrete collaboration can include South Korea as a regional hub for vaccines and medicines. Vaccines and medicines produced through this collaboration can contribute to minimizing shortages and improving the availability of vaccines and medicines in LMICs. Global equity in access to vaccines and medicines is a key concern because no one is safe until everyone in the world is safe.

R&D is critical in guaranteeing that many LMICs gain access to effective vaccines and medicines at affordable prices. For example, mRNA vaccines are effective but the requirement of cold chain in distribution can be a barrier to LMICs. South Korea is rapidly increasing R&D in the health sector, especially that related to pandemics. The government and public in Korea have a strong commitment to strengthening the capacity of the biopharmaceutical industry, especially after experiencing COVID-19.

South Korea's biopharmaceutical manufacturing is one of the leaders in the global market. For example, Samsung Biologics has been producing Moderna's COVID-19 vaccine since October 2021. As a leader of health-sector R&D, the US can support South Korea to expand its capacity even further and position itself as a regional hub. As a regional hub, South Korea can take advantage of its capacity in clinical trials and testing and confirming the cost-effectiveness of vaccines, medicines, and devices related to a pandemic. South Korea is regarded as having one of the best infrastructure for clinical trials in the world.

South Korea was designated by the World Health Organization (WHO) as a Global Bio-Manufacturing Training Hub on March 23, 2022. With funding from the South Korean government and bilateral and multilateral development partners, it will train government officers and biohealth industry personnel. It will contribute to overcoming the lack of skilled workforce and weak regulatory systems in LMICs. South Korea is one of only a few countries in the world that have changed from being a recipient to a provider of foreign aid, and the experience can give valuable lessons to many LMICs around the world.

Cooperation in Global Value Chain (GVC) for Public Health

South Korea can be a key partner for the US to build a more resilient supply chain to minimize potential disruptions in a public health emergency. During the COVID-19 pandemic, most countries in the world experienced shortages in Personal Protective Equipment (PPE) and Durable Medical Equipment (DME), especially in the early stage of the response. On February 24, 2021, President Biden issued Executive Order 14017 to build resilient, secure and diverse supply chains.

Many countries have faced challenges in meeting the surge in demand for PPE, DME, medical materials, and active pharmaceutical ingredients (APIs). Collaboration between the US and South Korea can be effective in addressing the vulnerability of supply chains and in better preparing their countries, along with others, for a future public health crisis. For example, both South Korea and the US face similar challenges in APIs because the majority of them are imported (e.g., from China).

Cooperation in R&D and swap arrangement can cover everything from PPE and DME to vaccines and medicines. Countries usually follow slightly different paths of pandemic spreading, and South Korea and the US can collaborate to overcome temporary shortages. For example, South Korea was a global leader in the development and production of in-vitro test kits for COVID-19, which have helped many countries meet the surge in demand during the pandemic.

Conclusion

The experience of COVID-19 shows that pandemics and other public health emergencies are a key security

issue for the world. Collaboration among countries is vital in effective preparedness and response. The US and South Korea have a long history of fruitful collaboration in national security areas, and this collaboration needs to be extended to the health security area. Surveillance and monitoring in the region is essential to early detection, which makes it possible to prepare and respond to a health emergency. Creating a regional hub for R&D, production, and distribution in South Korea improves access to vaccines and medicines around the world. Safeguarding and strengthening value chains are also a key security issue to be handled through collaboration between the US and South Korea.

Authors' Bios



AMBASSADOR RICHARD L. ARMITAGE is a founding partner of Armitage International, L.C. and serves as the firm's president. He is a former deputy secretary of the Department of State and has served as the assistant secretary for international security

affairs and deputy assistant secretary for East Asia and Pacific affairs at the Department of Defense. In addition, Ambassador Armitage has held a wide variety of high-ranking U.S. diplomatic positions; including, Presidential Special Negotiator for the Philippines Military Bases Agreement, Special Mediator for Water in the Middle East, Special Emissary to King Hussein of Jordan during the 1991 Gulf War, and Ambassador directing U.S. assistance to the new independent states of the former Soviet Union. Ambassador Armitage is the recipient of numerous U.S. military decorations, as well as military decorations from the governments of Thailand, Republic of Korea, Bahrain, and Pakistan.



SUE MI TERRY is director of the Asia Program and the Hyundai Motor-Korea Foundation Center for Korean History and Public Policy. Formerly a senior fellow with the Korea Chair at the Center for Strategic and International Studies

(CSIS), she served as a senior analyst on Korean issues at the CIA (2001-2008). She also served as the director for Korea, Japan, and Oceanic Affairs (2008-2009) at the National Security Council under both President George W. Bush and President Barack Obama as well as the deputy national intelligence officer (2009-2010) for East Asia at the National Intelligence Council. She holds a Ph.D. (2001) and an M.A. (1998) in international relations from the Fletcher School of Law and Diplomacy at Tufts University and a B.A. in political science from New York University (1993).



ABRAHAM M. DENMARK is vice president of programs and director of studies at the Woodrow Wilson International Center for Scholars. From 2015 to 2017, he served as US deputy assistant secretary of defense for East Asia. Drawing on his experience

as a senior government official and analyst, Mr. Denmark advises the Wilson Center's research on the geopolitical dynamics of the Indo-Pacific and contributes to its industry-leading analysis on U.S.-China relations. Denmark is the author of *U.S. Strategy in the Asian Century: Empowering Allies and Partners* (Columbia University Press).



JAE HO CHUNG is a professor of international relations at Seoul National University. He is the author of *Central Control and Local Discretion in China* (Oxford University Press, 2000); *Between Ally and Partner* (Columbia University Press,

2007); and *Centrifugal Empire* (Columbia University Press, 2016). He was a recipient of the Choice Award in 2017 for his *Centrifugal Empire*. He can be reached at cjhir@snu.ac.kr.



VICTOR CHA is senior vice president and Korea Chair at the Center for Strategic and International Studies. He is also professor of government and Vice Dean of the School of Foreign Service (SFS) at Georgetown University. He is the

author of several books, including *The Impossible State: North Korea, Past and Future* (Harper Collins Ecco, 2012) and *Powerplay: Origins of the American Alliance System in Asia* (Princeton University Press, 2016). He can be reached at vcha@csis.org.



WON GON PARK is a professor in the Department of North Korean Studies of Ewha Womans University. He received his Ph.D. from the Department of International Relations at Seoul National University. He researched the ROK-US alliance and

North Korea for 18 years at the Korea Institute for Defense Analyses. Currently, he is a member of the Policy Advisory Committee of the Korean Ministry of Foreign Affairs. He can be reached at wongon@ewha.ac.kr.



SHEILA A. SMITH is the John E. Merow senior fellow for Asia-Pacific studies at the Council on Foreign Relations (CFR). An expert on Japanese politics and foreign policy, she is the author of *Japan Rearmed: The Politics of Military*

Power, Intimate Rivals: Japanese Domestic Politics and a Rising China (released in Japanese as 日中親愛なる宿敵: 変容する日本政治と対中政策), and *Japan's New Politics and the U.S.-Japan Alliance*. She is also the author of the CFR interactive guide *Constitutional Change in Japan*. Smith is a regular contributor to the CFR blog *Asia Unbound* and a frequent contributor to major media outlets in the United States and Asia.



SOOK JONG LEE is professor of Graduate School of Governance at Sungkyunkwan University, and representative of the Asian Democracy Research Network. She served the East Asia Institute as president and now senior fellow of the Institute. Dr.

Lee was research fellow at the Sejong Institute and visiting fellow at the Brookings Institution. She has participated in many global networks for democracy. Her recent publications include *Populism in Asian Democracies: Features, Structures, and Impacts* (editor, 2021), *National Identity of South Koreans: Trends of the Past 15 Years* (editor, 2020), *Transforming Global Governance with Middle Power Diplomacy: South Korea's Role in the 21st Century* (editor, 2016), and *Public Diplomacy and Soft Power in East Asia* (editor, 2011). Dr. Lee received her Ph.D. in sociology from Harvard University.



ANDREW YEO is a senior fellow and the SK-Korea Foundation Chair in Korea Studies at the Brookings Institution's Center for East Asia Policy Studies. He is also a professor of politics at the Catholic University of America in Washington. His latest

book, *State, Society and Markets in North Korea* is out now with Cambridge University Press. He is also the author or co-editor of four other books including *Asia's Regional Architecture: Alliances and Institutions in the Pacific Century* (Stanford University Press 2019), *North Korean Human Rights: Activists and Networks* (Cambridge University Press 2018, with Danielle Chubb); and *Activists, Alliances, and Anti-U.S. Base Protests* (Cambridge University Press 2011). He received his Ph.D. from Cornell University in Government. He can be reached at @AndrewYeo.



YOUNG-KWAN YOON is professor emeritus in the Department of Political Science and International Relations at Seoul National University. He served as minister of foreign affairs and trade of the Republic of Korea (2003–4). He was a senior

visiting scholar at the Belfer Center and taught in the Department of Government of Harvard University as visiting professor in 2021. Before joining the faculty of Seoul National University in 1990, he taught at the University of California, Davis. He has published a dozen books and 80 articles, some of which appeared in *World Politics*, *International Political Science Review*, *The National Interest*, *Asian Survey*, and *Project Syndicate*. He received his Ph.D. from the Nitze School of Advanced International Studies at Johns Hopkins University.



SCOTT A. SNYDER is senior fellow for Korea studies and director of the Program on US–Korea Policy at the Council on Foreign Relations (CFR), where he previously served as an adjunct fellow from 2008 to 2011 and as project director for the

CFR's Independent Task Force on policy toward the Korean Peninsula. Before joining the CFR, Snyder was a senior associate in the international relations program of the Asia Foundation, where he founded and directed the Center for US–Korea Policy and served as the Asia Foundation's representative in Korea (2000–4). Snyder has worked as an Asia specialist in the research and studies program of the US Institute of Peace and as acting director of the Asia Society's contemporary affairs program. He received a B.A. from Rice University and an M.A. from the East Asia program at Harvard University.



CHAESUNG CHUN is a professor at the Department of Political Science and International Relations at Seoul National University. He is the chair of the Advisory Committee of the Ministry of Foreign Affairs and a director of the National Security

Center of East Asian Institute. He was the president of the Korean Association of International Studies and a Director of the Center for International Studies at Seoul National University. He received his Ph.D. degree from Northwestern University in the field of International Relations Theory. Major books include *Sovereignty and International Relations: Northeast Asian International Relations Theory: Politics among Incomplete Sovereign States* (2020), *Sovereignty and International Relations: Modern Sovereign States System and the Evolution of the Empire* (2019).



WENDY CUTLER is vice president of the Asia Society Policy Institute (ASPI) and the managing director of its Washington office. She joined the institute after an illustrious career of nearly three decades as a diplomat and negotiator in the Office of the US

Trade Representative (USTR), where she also served as acting deputy US trade representative. During her USTR career, she worked on a range of bilateral, regional, and multilateral trade negotiations and initiatives, including the US–Korea Free Trade Agreement, the Trans-Pacific Partnership, US–China negotiations, and the WTO Financial Services negotiations.



TAEHO BARK is currently the president of the Global Commerce Institute of Lee & Ko, a leading global law firm in Korea and professor emeritus of Seoul National University. Professor Bark served as both minister for trade and the chairman

of the International Trade Commission. He has taught at Georgetown University, served as a senior fellow of the Korea Development Institute (KDI), and served as the vice president of the Korea Institute for International Economic Policy (KIEP). In addition, he was a visiting scholar at the International Monetary Fund (IMF) and the World Bank. He authored books and articles on international trade, foreign direct investment, and the Korean economy. He received his B.A. from Seoul National University and his Ph.D. in economics from the University of Wisconsin–Madison.



MATTHEW P. GOODMAN is senior vice president and director of the Economics Program at the Center for Strategic and International Studies (CSIS) in Washington. He has over three decades of

experience in and out of government on US economic policy toward the Indo-Pacific region. For the past five years, he has organized and led the CSIS Allied Economic Forum, a private gathering of the United States and 10 allied countries—including the Republic of Korea—focused on sharing of information on technology-related concerns and policies. He can be reached at mgoodman@csis.org.



HYUNG-GON JEONG is the former vice president of the Korea Institute for International Economic Policy (KIEP) and a senior research fellow at the institute. Before joining the KIEP in 2006, Dr. Jeong was a Chief Executive Officer of the

Office of Strategic Planning at the National Security Council (NSC), the Blue House (Office of the President, ROK). He was a consultant at the Asian Development Bank (ADB) and a Fulbright Visiting Scholar at Johns Hopkins University, School of Advanced International Studies (SAIS). Dr. Jeong’s research area is international economics including trade and investment, global value chain, and transition economy, and he holds a Ph.D. in Economics from the University of Cologne. He can be reached at hkjeong@kiep.go.kr.



MIYEON OH is director and senior fellow of the Atlantic Council’s Asia Security Initiative. She is also the director and senior faculty lead of Korea studies at Johns Hopkins University’s Nitze School of Advanced and International Studies

(SAIS). She was a foreign policy pre-doctoral fellow at the Brookings Institution in 2013–2014 for her research on Sino-Russian energy and economic relations. Her areas of expertise include global supply chains of emerging technologies, energy security, infrastructure development, changing geopolitical and economic architecture in the Indo-Pacific, and US-ROK-Japan trilateral cooperation. She holds a Ph.D. in international relations from SAIS, and M.A.s from the Harvard’s Kennedy of Government and Yonsei University.



SANG HYUN LEE is president of the Sejong Institute in Korea. He also serves as president of the Korea Nuclear Policy Society (KNPS). He was a research fellow at the Korean Institute for International Studies (1987-88), the Korea Institute for

Defense Analysis (1988-90), and policy advisor for Ministry of Foreign Affairs, Ministry of National Unification, and Ministry of National Defense. He has served as director-general for policy planning, Ministry of Foreign Affairs (MOFA) from May 2011 to April 2013. He is a member of Asia-Pacific Leadership Network (APLN) for Nuclear Nonproliferation and Disarmament, and Korea-US Nuclear Policy Leadership Initiative (NPLI). His main research interests include international politics and security, Korea-U.S. relations, inter-Korean relations, nuclear security and nonproliferation, and East Asian security issues.



CLARA GILLISPIE is a senior advisor to the National Bureau of Asian Research, where she focuses on technology, energy, and public health debates in the Asia-Pacific. She also serves as the official US delegate to the Energy Research

Institute Network, an East Asia Summit linked network. She can be reached at cgillispie@nbr.org.



ADAM SEGAL is the Ira A Lipman Chair in Emerging Technologies and National Security, and director of the digital and cyberspace policy program, at the Council on Foreign Relations. His book *The Hacked World Order: How Nations Fight, Trade, Maneuver,*

and Manipulate in the Digital Age (PublicAffairs, 2016) describes the increasingly contentious geopolitics of cyberspace. His work has appeared in the *Financial Times*, the *New York Times*, *Foreign Policy*, the *Wall Street Journal*, and *Foreign Affairs*, among others. He currently writes for the blog, "Net Politics." He can be reached at asegal@cfp.org.



SOONMAN KWON is professor and former dean of the School of Public Health, Seoul National University (SNU) and he is currently on leave to serve as the president of the Korea Health Industry Development Institute, which is a

government agency supporting R&D of the health sector. He was the chief of the Health Sector Group of the Asian Development Bank (ADB) in 2016-2017 and was the founding director of the WHO Collaborating Centre for Health System and Financing at SNU. He has held visiting positions at the Harvard School of Public Health, London School of Economics, University of Toronto, University of Tokyo, Peking University, and University of Bremen. He holds Ph.D. from the Wharton School, University of Pennsylvania (1993) and taught at the University of Southern California School of Public Policy. He can be reached at kwons@snu.ac.kr.



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