

# Republic of Korea-Singapore Security Forum

*Shared Concerns, Common Goals*

## AUTHORS

Carol Chong

Gordon Kang

Ian Chong

Inwook Kim

Jaehyon Lee

Sarah Teo

Seong-Ho Sheen

Wonho Yeon

Yongwook Ryu



EDITOR  
Yongwook Ryu



## Introduction

The intensifying US-China strategic rivalry forces difficult alignment choices for all regional countries. While these countries carefully calculate the potential costs and benefits of their respective alignment choice, what is often neglected in this strategic consideration is the fact that the norms and principles upon which the postwar international order was constructed are weakening or even disappearing. This is unfortunate for all but particularly for the Republic of Korea (hereafter Korea) and Singapore, which are arguably the two countries in the region that benefited the most from that order.

With the growing complexity of the regional environment, both Korea and Singapore began to search for other potential partnerships beyond great powers. Korea broke its long-standing neglect of Southeast and South Asia with its New Southern Policy under the previous Moon Jae-in administration. The current Yoon Suk-yeol government, despite its disagreement with the previous administration, has continued and advanced Korea's turn to Southeast and South Asia under the slogan of 'Global Pivotal State.' With its support of ASEAN centrality and ASEAN Outlook on the Indo-Pacific, the Yoon government aims to play a greater role in regional affairs and seeks to upgrade its relationship with ASEAN, particularly in the security and economic domain.

ASEAN, including Singapore, on the other hand, is deeply concerned with the deteriorating US-China relationship that threatens to destabilize the region and weaken ASEAN's internal cohesion. Hence it has increasingly looked to other external powers to do more to promote and maintain regional peace and stability and to help Southeast Asia advance in socioeconomic development. Korea is thought of as a useful partner in this regard, especially when Seoul's significant technological prowess can benefit developing nations of ASEAN and create opportunities to set new norms and rules in emerging areas such as the digital economy.

Hence it is timely that experts from Korea and Singapore have gathered to discuss critical issues facing the region. We have identified three key issues, and they are the regional strategic assessment, maritime security, and supply chains. While these issues are by no means exhaustive, nor are they comprehensive, we believe that they are most critical for Korea and Singapore. The peace and prosperity of these two nations have greatly depended upon the symbiotic and collegial US-China relationship, the preservation of maritime peace and security, and participation in the existing global and regional supply chains. As such, they are deeply concerned with the changing landscape of regional strategic dynamics and its ensuing impact on maritime security and supply chains. It is the shared concerns and common goals that engendered the heightened need for bilateral cooperation for regional collective goods.

The one-day workshop was convened at Lee Kuan Yew School of Public Policy on 3 November to discuss and debate the three issues. The first session examined the assessment of the regional strategic environment. Yongwook Ryu (NUS) opened the workshop with his description of the US strategy toward China under Trump and Biden. While Trump sought to impose a set of what he calls 'unequal treaties' on Beijing, Biden began strategic competition with China. Ryu describes this competition as "tech vs resources", with the US seeks to reorganize the supply chains of semiconductors with marginalizing China's role and participation in them. To counter this, on the other hand, China is attempting to leverage its relative advantage over the US in critical minerals to hurt US interests. The aim of both countries is to generate costs on the other, and this indicates that the nature of the bilateral relationship has fundamentally changed from symbiotic, positive-sum to strategic, negative-sum nature.

Seongho Sheen (SNU) clearly illustrates Korea's concerns amidst the US-China strategic rivalry. While Seoul's alliance with the US is the backbone of Korea's national security strategy, its economic ties with China cannot be ignored. No doubt this difficult situation is further complicated by domestic politics and sluggish Korean economy. He argues that hedging has become a new feature of Korea's foreign policy, as a means of managing its relations with both

great powers. At the same time, he emphasizes the need for greater bilateral cooperation between Korea and Singapore, with their shared commitment to a free and open regional order and common interest in promoting international trade and vital sea lanes of communication.

Ian Chong (NUS) goes one step further, and argues that despite visible differences between Korea and Singapore, the two nations share common concerns and orientations. He identifies several areas of potential security cooperation such as cyber-security, safety of communications, supply chains, and transport, bolstering regional institutions, multilateral cooperation, and the rule of law, to name but a few. The details need to be worked out by the two governments, but what is significant is the recognition of the two nations as like-minded partners with the potential of bilateral cooperation for regional collective goods.

Ashton Cho and Inwook Kim (Sungkyunkwan Univ) looks at the specific issue of the Taiwan Strait and Korea's policy options. Realizing the strategic importance of the Taiwan Strait, Cho and Kim argue that Korea faces a dilemma and has three policy options of the status quo, strategic flexibility, or direct involvement. While there may be no optimal choice, their suggestion is that Korea's choice and demands to the US and China should be proportionate to the levels of abandonment and entrapment risks. In other words, the more sacrifice Seoul needs to make for either the US or China, it should demand more from the great power, and this should influence Seoul's ultimate policy choice.

Session Two dealt with regional maritime security, with two presentations. Jaehyon Lee (Asan Institute) focuses on two initiatives – Korea's Indo-Pacific Strategy (KIPS) and Korea-ASEAN Solidarity Initiative (KASI) – to show Seoul's interest in enhancing regional maritime security with cooperation with ASEAN. Some areas of cooperation include the protection of sea lines of communication, strengthening peace and security in the South China Sea, freedom of navigation and overflights, respect for the maritime international laws, and participation in regional Maritime Domain Awareness (MDA) system building. His policy recommendation is greater agency-to-agency cooperation between Korea and Singapore, to improve policy coordination, diplomatic promotion of rule-based maritime order, collective effort at maritime capacity building, and joint military exercise further down the line.

Gordon Kang and Sarah Teo (NTU) list a set of maritime challenges and concerns facing Singapore such as piracy and instability in the South China Sea and explicitly promote greater bilateral maritime cooperation between Korea and Singapore. They also recognize these two countries as like-minded partners whose cooperation can be naturally extended to the maritime domain. Taking the Korea-Singapore co-chairmanship of the ADMM-Plus Experts' Working Group on Maritime Security (2017 – 2020) as a good precedent, they see other opportunities in hosting naval vessels for maintenance and resupply as well as joint exercises on the sidelines of multilateral drills, to improve interoperability and trust.

The final session looked at the issue of supply chains. Wonho Yeon (KIEP) presented a detailed discussion of US export controls on semiconductors. In line with Ryu's earlier point that reorganization of supply chains is at the heart of the US-China strategic competition, Yeon shows how the US is seeking to exert pressure and increase costs on Beijing through its semiconductor export controls, in partnership with its allies and friends. Yeon argues that while Korea is generally supportive of the US strategy toward China, the US policy is too focused on 'locking down Chinese capabilities' as opposed to 'running faster' by developing its own advanced technologies. Yeon calls for more consultation between Korea and the US, given their contrasting perspectives on semiconductor risk management. An extension of his policy suggestion can also apply to Singapore, to gain a wider viewpoint of how other concerned states understand and assess the risks that emanate from the current US export controls.

Carol Chong (MTI) is the director of supply chain resilience division and is the only policymaker at the workshop. She identifies two sources of current supply chain concerns, namely, Covid-19 and geopolitical risks from the intensifying US-China rivalry. To address the concerns, the Singapore government is supporting the appropriate use of stockpiling and

domestic production. But more importantly, new norms or principles have become salient. Rather than the ‘just in time’ model, the ‘just in case’ model is given more weight, with the enhanced importance of trust in supply chain networks and partners. Thus, she calls for partnership with like-minded countries to foster greater trust, to support diversification efforts, to strengthen connectivity and resilience, and to develop new systems and capabilities.

We would be the first to admit that these issues are extremely complicated and are ever-changing, thereby making it rather difficult to offer a concrete set of policy recommendations. However, what is obvious is that both Korea and Singapore share common concerns and goals as like-minded nations and are beginning to recognize the increasing importance of seeking third-party partnership beyond cooperation with great powers amidst the changing geopolitical landscape. We hope that the ROK-Singapore Security Forum has taken the first step to begin the process of promoting greater bilateral cooperation between the two countries that are natural partners for regional collective goods.

Finally, we would like to express our sincere thanks to the Republic of Korea Embassy in Singapore for its generous financial support that made the ROK-Singapore Security Forum possible. Particular thanks to His Excellency Choi Hoon for attending the workshop. We also want to thank all the participants for sharing their valuable perspectives and insights, and hope to continue the debate in the future.

Yongwook Ryu

Assistant Professor  
Lee Kuan Yew School of Public Policy  
National University of Singapore

## US-China Strategic Competition and Changing Supply Chains

Yongwook Ryu  
National University of Singapore

### Introduction

The US-China strategic competition is arguably the most important structural determinant that affects global and regional interstate affairs. This paper discusses how the US is seeking to contain China from Trump to Biden, and offers a new perspective on the US-China strategic rivalry as “tech vs resources” based on their respective effort to reorganize existing supply chains. The main argument is that the US strategy toward China has changed from forcing a set of agreements on Beijing during the Trump administration to intensifying strategic competition and testing the resilience and efficiency of the Chinese system during the Biden administration. The reconfiguration of global and regional supply chains is the key aspect of the US-China strategic competition.

Other countries, including Korea and Singapore, need to adjust to reconfiguring supply chains. While the precise stance will differ for each country depending upon one’s level of economic advancement and situation, political relationship with the US and China, and domestic politics, there is the heightened need for third-party cooperation beyond great powers. As like-minded nations that share common norms, principles, and future outlook of regional order, it is imperative for Korea and Singapore to increase their bilateral cooperation. One such area can be setting new regional norms and principles, with the aim of achieving collective goods.

### US Strategy Toward China: From Unequal Treaties to Strategic Competition

While the making of the US-China tensions dates back much earlier, there is little doubt that the conflict and confrontation rather than cooperation came to characterize the bilateral relationship since the Trump administration launched the trade war with China in 2018. Since then the form and manner in which the two countries clashed varied under the two different US administrations of Trump and Biden.

During the Trump administration the US government sought to negotiate a favorable deal with China. While often termed ‘trade war’, the Trump administration demanded more than trade concessions. It also asked for a structural reform of the Chinese economy, particularly state-owned enterprises (SOEs) and government subsidies.<sup>1</sup> When Xi Jinping was promoting his style of state-led socioeconomic development called *guojin mintui* (国进民退),<sup>2</sup> coupled with the fact that SOEs are the economic arm of the Chinese Communist Party (CCP), Beijing could not tolerate Washington’s demands. In the end, all both sides could manage was partial Phase I agreement, which essentially amounted to temporary ceasefire until the US presidential election was over in 2019. As Trump lost the election to Biden, the Phase I deal fell apart.

---

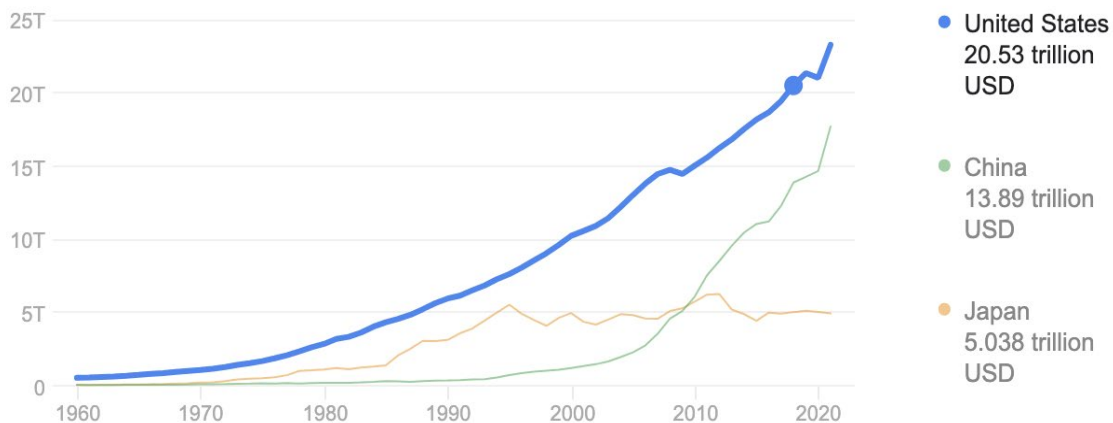
<sup>1</sup> “Trump presses China to reverse stance on structural reform” Reuters 12 June 2019 at <https://www.reuters.com/article/us-usa-trade-china-trump-idUSKCN1TC25G/>. Accessed on 16 Oct 2023.

<sup>2</sup> Willy Wo-Lap Lam, “State Companies Advance and Private Firms Retreat” *China Brief* 20(8) at <https://jamestown.org/program/state-companies-advance-and-private-firms-retreat-in-chinas-bid-to-resuscitate-the-economy/>. Accessed on 20 Oct 2023.

Those who are familiar with the US-Japan tensions in the 1980s will immediately notice the similarity between how the US government suppressed Japan's economic challenge to the US in the 1980s and how the Trump administration sought to contain China's rise. In both, the US was attempting to impose a set of what historians would call unequal treaties on the target state. The difference is that Japan had no choice but to accept such demands due to its complete dependence on the US for national security, while Beijing, with a different politico-cultural identity, contrasting philosophy and model of socioeconomic development, and greater hegemonic ambitions partly due to individual factors (i.e. Xi Jinping) rejected the US demands and decided to confront it.

Figure 1 below shows the GDPs of the US, China, and Japan from 1960 to 2020. When the Japanese economy was on course to surpass that of the US throughout the 1980s, the US imposed several unequal agreements such as the 1985 Plaza Accord and 1986 Semiconductor Agreement, to suppress Japan's economic rise. Combined with wrong policy of the then Japanese government, which caused Japan's property bubble to burst, Japan's economy flattened ever since, what is called 'lost three decades'. Similarly, as China's economic size is on trajectory to surpass that of the US, the latter is seeking to suppress China's challenge to the US.

**Figure 1. The GDPs of the US, China, and Japan, 1960 – 2020**



When the Biden administration took office, it took a different approach to 'deal with' China in two major ways. First, rather than focusing on trade, it focused on advanced technologies. Particularly, it identified the semiconductor sector as the key weapon by which to generate pressure on Beijing through an ever-expanding set of export controls.<sup>3</sup> And the other is that it seeks to confront and contain China in partnership with its allies and friends, deviating from Trump's 'America First' approach that targeted every country, regardless of friend or foe. The most salient and important aspect here is its attempt to reconfigure global and regional supply chains.

As such, the US approach under Biden changed to strategic competition that aims to test the resilience and efficiency of China. Here, there is another historical episode that comes to our mind immediately, and that is the Cold War competition between the US and the USSR. That competition was won by the US without any direct hot conflict, because the Soviet system internally collapsed, as it was not efficient as the US. The Biden administration is seeking to create similar competitive dynamics with China.

This approach of the Biden administration is not without its own challenges. Suffice it to mention two key challenges here. One is that while the approach can create pressure and costs on Beijing, it also hurts its own economic and business interests. Different quarters of the

<sup>3</sup> Emily Benson, "Updated October 7 Semiconductor Export Controls" CSIS at <https://www.csis.org/analysis/updated-october-7-semiconductor-export-controls>. Accessed on 16 Oct 2023.

US business community have often voiced their concerns about the US policy toward China to date,<sup>4</sup> though they ultimately have little choice but to bring their business practices in alignment with US government policies. And the other challenge is that as many of US allies and friends have a close economic relationship, the effort to bring allies and partners together and maintain the group's cooperation and cohesion could be hard to realize, for the costs of cooperation with the US and the benefits of defection (i.e. cooperation with China) are differentiated across the participating states.

All this reveals that the US-China relationship has fundamentally changed from the symbiotic, positive-sum game to the strategic, negative-sum game where winning is increasingly defined as hurting the other more even if one's action could create self-inflicted harm to oneself. This is most visible in the way the two sides are seeking to reconfigure supply chains.

### **Reconfiguration of Supply Chains: Tech (Chips) vs Raw Materials**

A central aspect of the US-China strategic competition is how each side seeks to reorganize global and regional supply chains and utilize its respective strengths against the other. Those countries that are clearly on the US side are allies and partners of the US, and they tend to be advanced economies with significant technological capabilities in global affairs. On the other hand, the countries that are close to China are typically communist and authoritarian regimes that have a difficult political relationship with the US, and which they tend to be resource-endowed countries. Both the US and China are trying to leverage their respective strength to generate costs on the other.

The US, with its tech capable allies and partners, seeks to create and impose costs on Beijing by decoupling China from the global tech supply chains, especially advanced technologies. This is most visible in the semiconductor sector where the US controls the upstream of chip production such as EDA, IPs, softwares and design. The initial export controls on advanced chips (those at or below 15 n.m.) has now expanded to include DRAM and Nand flash chips as well as equipment such as EUV from ASML. For this purpose, the US has gathered chip manufacturing powerhouses such as Taiwan and South Korea as well as major equipment and material producers such as the Netherlands and Japan.

Despite its official China policy has become de-risking from de-coupling, the US government is determined to achieve complete decoupling in advanced technologies such as semiconductors, AI, quantum computing, 5G/6G, etc. This is the meaning of 'small yard, high fence' by Jake Sullivan.<sup>5</sup> As for chip production, the US aims to force China to do everything alone, from R&D and IPs to equipment, materials, and fabrication, thereby raising the costs and inefficiency for chip production. Unfortunately for Beijing, there is no country on its side that is technologically capable, and hence so long as the US can sustain and manage its tech coalition, China must do everything for herself, if it wants to compete with the US.

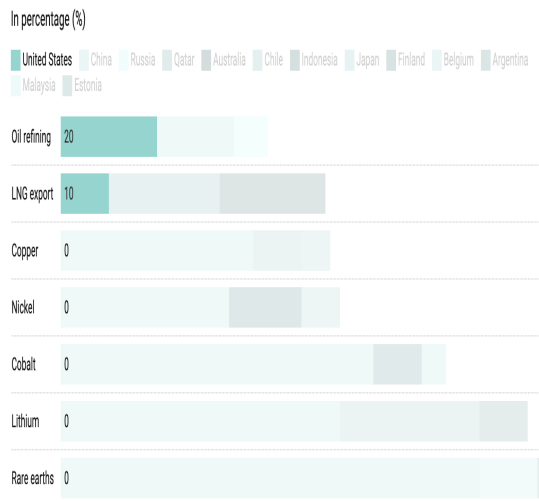
On the other hand, China has an advantage over the US when it comes to critical minerals, including rare earth elements (REEs). Figure 2 below shows a comparison of share of production of selected minerals and fuel between the US and China. Due to the shale gas revolution, the US has now become the largest oil producer in the world, but its share of mineral production is negligible. By comparison, China is the largest producer of REEs, lithium, and cobalt, and is a major player in the production of nickel and copper. Beijing has utilized, or threatened to weaponize, its critical minerals, including REEs, to increase costs for the US or those that are on the side of the US.

---

<sup>4</sup> A good example the Semiconductor Industry Association's statement on Oct 7 export controls. See the statement at <https://www.semiconductors.org/sia-statement-on-new-export-controls-2/>. Accessed on 16 Oct 2023.

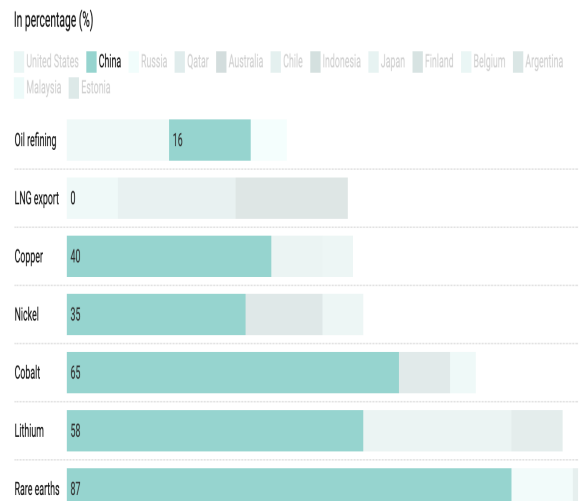
<sup>5</sup> White House, "Remarks by National Security Advisor Jake Sullivan" at <https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/04/27/remarks-by-national-security-advisor-jake-sullivan-on-renewing-american-economic-leadership-at-the-brookings-institution/>. Accessed on 17 Oct 2023.

### Share of top producing countries in extraction of selected minerals and fossil fuels, 2019



Source: IEA. Licence: CC BY 4.0 • Get the data • Created with Datawrapper

### Share of top producing countries in extraction of selected minerals and fossil fuels, 2019



Source: IEA. Licence: CC BY 4.0 • Get the data • Created with Datawrapper

The US recognizes its weakness in the resource dimension and seeks to address it through the Indo-Pacific Economic Framework (IPEF). A key pillar of the IPEF relates to supply chains, and US allies in the region and most of Southeast Asian countries participate in the IPEF. For instance, when the US concluded the comprehensive strategic partnership with Vietnam in August 2023, both sides agreed to cooperate on supply chains and minerals, with several exploration initiatives to be started by the Vietnamese government. While it is much too early to draw any conclusion, what is visible is the US effort to address a potential weakness in its supply chains by promoting the IPEF.

### Implications for the Region and Korea-Singapore Cooperation

As the US-China strategic competition intensifies, so will the effort to reorganize the current supply chains built on the symbiotic cooperation of the two great powers. As discussed earlier, there are challenges and costs for both great powers and the rest. However, the bilateral relationship has become one of negative sum strategic game and, in that context, what would occur that both great powers attempt to impose costs on the other, as happened in the US-USSR Cold War.

The emergence of conflictual great power relations, coupled with the ensuing reorganization of supply chains, creates significant pressure on all other regional countries to come up with their own adjustment strategies. The ‘security with the US, trade with China’ *modus operandi* is no longer the utility-maximizing formula.

At the same time, the principles of economic interactions are emerging. The postwar principles of multilateralism, non-discrimination, inclusivity, and openness are being recalibrated or giving way to new principles of resilience, trusted network, and selectivity. These new principles are yet to be fully accepted by the international community.

It is in areas such as this where both Korea and Singapore can improve their collaboration. Both countries are major trading nations, responsible citizens of the international community, and stand to gain from a peaceful and rule-based external environment. When the emerging principles and rules are not clear, and in the context of intensifying great power rivalry, there is greater incentive for like-minded middle powers with shared interests and goals to collaborate in order to construct a regional order that would serve greater collective goods. In other words, there is enhanced need for third-party cooperation beyond great powers, and it is



the time for Korea and Singapore to up their bilateral cooperation for collective peace and prosperity.

# US-China Competition and the Korean Peninsula

Seongho Sheen  
Seoul National University

## Introduction

Emerging from the ashes of the Korean War, South Korea has evolved into a robust middle power in the 21st century. Boasting a population of 50 million, its economy and military are ranked among the top ten globally. The nation's economic prowess is marked by a well-balanced portfolio of leading industrial sectors, particularly in the era of the 4th industrial revolution. South Korea stands as a global leader in steel, automobiles, shipbuilding, semiconductors, telecommunications, electric car batteries, renewable energy, and biosimilars. Simultaneously, South Korea's soft power has garnered global recognition through cultural exports such as K-Pop, K-Movie, K-Drama, K-Webtoons, and K-Esports, penetrating international markets. As a vibrant and prosperous democracy with a robust industrial and military foundation, South Korea assumes a new role as a middle power in regional and global affairs. However, it grapples with the enduring legacy of the Cold War – the division with a nuclear-armed North Korea. Deterring North Korean threats remains the nation's top strategic priority, and its geographical position exposes it to the dynamics of great power rivalry in the era of U.S.-China competition.

## The Korean Peninsula at the heart of the 21<sup>st</sup> Century Geo-political Rivalry

Situated between the Chinese continent and the Japanese archipelago in the Northeast Asian region, the Korean Peninsula has been a focal point of great power rivalry in the past. At the end of the 16th century, the formidable army of Hideyoshi from unified Japan invaded the Chosun Kingdom on the Peninsula, challenging the Ming Empire. Following the Japanese retreat, the newly rising Qing army invaded from the north, imposing a humiliating truce on another Chosun king before eventually conquering the Ming Empire. In the early 20th century, Korea became a battleground for great power rivalry once again, involving Qing, Russia, and Japan. This rivalry ultimately led to the colonization of the peninsula under the emergent Japanese empire. The colonial legacy left a lasting impact, culminating in the tragedy of the division between North and South Korea and the subsequent Korean War in 1950.

Seven decades after the armistice, Korea remains divided by the most heavily armed border in the world. The potential for conflict on the Peninsula looms large as North Korea escalates tensions with its nuclear weapons development and concurrent conventional military buildup. Complicating matters further, South Korea faces a deteriorating security environment amid the escalating geo-strategic rivalry between the United States and China in recent years. Seoul finds itself navigating a challenging dilemma, caught between its alliance with Washington, a critical security partner, and its economic ties with Beijing, a pivotal trading partner.

As such, South Korea find itself at a critical inflection point in history once again. Escalating tensions, especially in the maritime domain, have resulted in heightened military risks. China is adjusting its maritime security strategy, shifting its focus from defending against and deterring U.S. involvement in the region to adopting a more offensive approach. In response, the U.S. is conducting naval exercises with its regional allies and partners and promoting minilateral cooperation through QUAD and AUKUS. As the US-China competition intensifies, the growing alignment among China, Russia, and North Korea has led to weakened cooperative momentum for addressing regional security issues, such as the North Korean nuclear problem. Meanwhile, various current issues, including historical disputes, maritime jurisdiction, and marine and atmospheric pollution, are affecting the development of mutual relations among Korea,

China, and Japan.<sup>6</sup> While trying to deter ever growing North Korea's nuclear threat, South Korea faces acute geo-political rivalry surrounding the Korean Peninsula among the US, China, Japan and Russia.

### **ROK-US Alliance to Deter North Korean and Other Threats**

Alliance with the US has been a backbone of South Korea's grand strategy as an external balancing against threats from North Korea and other sources. Saved by US intervention against North Korea's full invasion during the Korean War, South Korea has faced existential threats posed by North Korea's overwhelming conventional forces throughout the Cold War during which North Korea initiated various military provocations. The US Forces in Korea (USFK) has provided critical deterrence, as well as assurance against North Korean invasion. With the North Korean nuclear development since the early 1990s, the US provides another key assurance of extended deterrence with its nuclear umbrella to non-nuclear South Korea. The alliance partnership also plays a similar external balancing against other outside threats including China's rapidly growing military forces right next to the Korean peninsula. About 28,000 American troops are stationed in South Korea today. And South Korea provides about US 1 billion dollars to compensate the cost of US troop deployment.

After serious concern and worries about US commitment to the alliance under the Trump administration, South Korea was much relieved to see Biden administration came back with US traditional emphasis on alliance partnership. Biden's made it sure that he wanted to restore and strengthen alliance partnership with South Korea. Immediately after Biden took office, the US and South Korea reached agreement on SMA (a military burden sharing) that has been long over-due under the previous Trump administration. Washington accepted Seoul's offer of 13 percent increase in burden sharing with five-year term. The increase was modest compared to Trump's demand for 500 percent increase with one-year deal.<sup>7</sup>

Welcoming Biden's top security team, Secretary of State Antony Blinken and Defense Secretary Lloyd Austin at Blue House, President Moon said "having been a partner for seven decades, sharing values and philosophy on democracy and human rights, ROK and the US will continue to act together on shared challenges, including a thorough cooperation for a complete denuclearization and permanent peace in the Korean Peninsula".<sup>8</sup> In their joint statement after summit in May 2021, Biden and Moon pledged their recommitment to "an ironclad alliance" and announced "a partnership that continues to provide peace and prosperity for our peoples, while serving as a linchpin for the regional and global order."<sup>9</sup> Such strong partnership was reiterated

---

<sup>6</sup> ROK Office of the President, National Security Strategy: Global Pivotal State for Freedom, Peace, and Prosperity, June 2023, 22-30.

<sup>7</sup> Under the 11th Special Measures Agreement, a six-year defense cost-sharing deal reached after 18 months of negotiations, Seoul will pay 1.1833 trillion won (\$1.059 billion) in 2021, a 13.9 percent increase from 2019, for the upkeep of some 28,500 U.S. troops in Korea. Korea is expected to pay more from 2022 to 2025 at a rate that mirrors increases in its own defense spending compared to the previous year. Sarah Kim, "After 18 months of tough talks, SMA is signed with U.S.," Korea JoongAng Daily, April 8, 2021, <https://koreajoongangdaily.joins.com/2021/04/08/national/defense/defense-costsharing-SMA-Special-Measures-Agreement/20210408181500393.html> (accessed January 30, 2022); Mitch Shin, "South Korea and US Reach Agreement on Defense Cost Sharing," The Diplomat, March 08, 2021 <https://thediplomat.com/2021/03/south-korea-and-us-reach-agreement-on-defense-cost-sharing/> (accessed January 30, 2022)

<sup>8</sup> Jessie Yeung and Yoonjung Seo, "South Korea president welcomes 'return of diplomacy' in first meeting with top US diplomat" CNN, March 18, 2021 <https://edition.cnn.com/2021/03/18/asia/moon-blinken-seoul-trip-intl-hnk/index.html> (accessed January 30, 2022)

<sup>9</sup> The White House, U.S.-ROK Leaders' Joint Statement, MAY 21, 2021 <https://www.whitehouse.gov/briefing-room/statements-releases/2021/05/21/u-s-rok-leaders-joint-statement/> (accessed January 30, 2022)

by Moon's successor. President Yoon went to elevate the alliance as "global comprehensive strategic alliance" in his joint statement with Biden.<sup>10</sup>

Meanwhile, the ROK-US alliance, officially established as a treaty alliance signed in 1953, is going through a transformation suited for 21<sup>st</sup>-century security dynamics on the Korean Peninsula. And the two allies need to complete the transformation of the military partnership that has been going on since the end of the Cold War. One of the key issues is the wartime operational control (OPCON) that has been held by the US since the Korean War. Following the fall of the Soviet Union, Presidents Bill Clinton and Kim Young-sam agreed to return peacetime OPCON to South Korea in 1994. It took over a decade before President Roh Moo-hyun, in 2007, agreed with President George Bush on an initial timetable aiming for the completion of the transfer of wartime control by April 2012. Yet the transfer has been delayed due to North Korea nuclear tests as well as domestic politics under the conservative governments by Lee Myung-Bak and Park Geun-hye.

Coming to office following President Park's impeachment in 2017, Moon announced his new policy to expedite the OPCON transfer. Moon's announcement reflected South Korea's strategy of internal balancing that will enhance South Korea's autonomy backed by strong military buildup. The OPCON transfer, along with a bolstered ROK military, would deter North Korean aggression and make South Korea into a Northeast Asian security hub, Moon argued. The Moon administration has since initiated "Defense Reform 2.0," aiming to complete the OPCON transfer by 2022. As part of these efforts, Moon, dubbed as a progressive liberal, has expanded the defense budget with an average annual increase of 7.5 percent, compared to 4-6 percent under the two previous conservative Lee and Park administrations. In this regards, peace through strength and autonomous self-defense have been consistent themes in South Korean liberals' defense policy.<sup>11</sup> Especially Seoul and Washington have drawn up "customized deterrence strategies," as Pyongyang reinforces its asymmetric power with nuclear armed missiles. For this ends, the South Korean military is establishing strategically guided munitions and a domestically developed missile defense system for independent deterrence.

Meanwhile, Moon announced peace on the peninsula as his top priority. He declared the three principles of his government policy to solve the Peninsula conundrum; objection to any war, mutual security guarantees between the two Koreas, and common prosperity. His aggressive peace initiative led to the third inter-Korean summit and first meeting with Kim Jong-un in 2018. The meeting produced a much more detailed and comprehensive agenda for a peace process on the peninsula including denuclearization.<sup>12</sup> In their following summit in the fall same year, the two governments signed a military agreement on specific confidence building measures.<sup>13</sup> In order to build peace with North Korea, official end of the Korean War was

---

<sup>10</sup>The White House, U.S.-ROK Leaders' Joint Statement, MAY 21, 2022 <https://www.whitehouse.gov/briefing-room/statements-releases/2022/05/21/united-states-republic-of-korea-leaders-joint-statement/>

<sup>11</sup> Nathan Park, "Why South Korea's Liberals Are Defense Hawks," Foreign Policy, OCTOBER 22, 2021 <https://foreignpolicy.com/2021/10/22/south-korea-slbm-liberals-defense-hawks/>

<sup>12</sup> "Panmunjom Declaration for Peace, Prosperity and Unification of the Korean Peninsula (2018.4.27)," ROK Ministry of Foreign Affairs [https://www.mofa.go.kr/eng/brd/m\\_5478/view.do?seq=319130&srchFr=&srchTo=&srchWord=&p;srchTp=&multi\\_itm\\_seq=0&itm\\_seq\\_1=0&itm\\_seq\\_2=0&company\\_cd=&company\\_nm=&page=1&titleNm=](https://www.mofa.go.kr/eng/brd/m_5478/view.do?seq=319130&srchFr=&srchTo=&srchWord=&p;srchTp=&multi_itm_seq=0&itm_seq_1=0&itm_seq_2=0&company_cd=&company_nm=&page=1&titleNm=) (accessed on September 23, 2021)

<sup>13</sup> Both Koreas made notable concessions affecting their current combat readiness in all three battlespaces: land, sea, and air. They have committed to establishing so-called peace zones near the NLL and the MDL, without any military withdrawals or redeployment of troops from either side. Within these new buffer zones, live-fire artillery drills, major maneuvers, and new weapons will not be permitted; there will also be no-fly zones, including for unmanned aerial vehicles (UAVs), and joint fishing areas crossing the NLL. The existing Demilitarized Zone (DMZ) stretches for 2 kilometers on either side of the MDL; the new buffer zones will extend to 5 km. Both sides agreed to withdraw a number of guard posts. Sukjoon Yoon, "North and South Korea's New Military Agreement," The Diplomat, October 2, 2018. <https://thediplomat.com/2018/10/north-and-south-koreas-new-military-agreement/> (accessed on January 30, 2022)

sought as a first major step. Especially given the stalemate of nuclear negotiation between Pyongyang and Washington since the failed Hanoi summit in 2019, the Moon government has sought the end of war declaration to revive the Peninsula Peace process. In his speech to the United Nations General Assembly in September 2021, President Moon reiterated a proposal to formally end the Korean War, calling for the support of the U.S. and China. “Today, I once again urge the international community to mobilize its strengths for the end-of-war declaration on the Korean Peninsula and propose that three parties of the two Koreas and the U.S., or four parties of the two Koreas, the U.S. and China, come together and declare that the war on the Korean Peninsula is over,” Moon said in his [address](#) to the 76th session of the U.N. General Assembly. “When the parties involved in the Korean War stand together and proclaim an end to the war, I believe we can make irreversible progress in denuclearization and usher in an era of complete peace.”<sup>14</sup>

However, Moon’s peace initiative ran out of time as his government was replaced by the conservative party candidate. Coming to office in 2022, the Yoon government’s hawkish approach emphasizing deterrence by force against North Korea led to a complete stalemate in inter-Korean relations with each sides exchanging sharp criticisms between Seoul and Pyongyang. And the Korean War armistice remains intact 70 years after of its signing in 1953.

### **Hedging to Manage the Dilemma of US-China Competition**

Hedging has become a new features of South Korea’s grand strategy in managing the relationship with two most important bilateral partners; the US and China with their intensifying competition in the 21<sup>st</sup> century. THAAD was the hard lesson that Seoul could be suddenly involved into the dangerous dynamics of US-China strategic competition regardless of its original intention. Seoul never intended to provoke China and the THAAD deployment was pursued purely against North Korean threat. Yet, it was Seoul who has become a target of Chinese economic sanction, not the Washington, by accepting American offer of US missile defense deployment. In this context, South Korea would not want to seek further deployment of US missile defense system. South Korea would be very cautious not to be caught in between China and the US in their strategic competition.

There is a growing concern in Seoul about intensifying US-China strategic competition which put South Korea in difficult position of making a choice between the two important partners. As much as Seoul appreciates the importance of alliance partnership with the US, it also perceives the growing influence of China in both economic and political issues on the Korean Peninsula. China has become by far the biggest trading partner for South Korea. Yet, South Korea first learned the danger of US-China competition when the US missile defense system was deployed in its soil. Triggered by North Korea’s nuclear development, the Terminal High Altitude Area Defense (THAAD) missile defense on the Korean Peninsula has caused lots of controversy. After North Korea’s fourth nuclear test in January 2016 followed by months long consultation with the US, the South Korean government officially announced in July that THAAD would be installed as a “defense measure to protect the people of South Korea and the armed forces of the South Korea-U.S. alliance.” Seoul also tried to satisfy Beijing by stressing that the system “will focus only on the threats from North Korea and will not be used against a third party”.<sup>15</sup>

---

<sup>14</sup> Chaewon Chung, “Moon Jae-in again calls for formal end to Korean War in speech at UN,” NK News, September 21, 2021 <https://www.nknews.org/2021/09/moon-jae-in-again-calls-for-formal-end-to-korean-war-in-speech-at-un/> (accessed on September 23, 2021)

<sup>15</sup> “:ROK-US, The Decision to Deploy THAAD to USFK Has been Reached,” ROK, Ministry of National Defense, July 8, 2016 [https://www.mnd.go.kr/user/newsInUserRecord.action?command=view&newsId=I\\_669&siteId=mnd&page=1&id=mnd\\_020400000000&newsSeq=I\\_9465](https://www.mnd.go.kr/user/newsInUserRecord.action?command=view&newsId=I_669&siteId=mnd&page=1&id=mnd_020400000000&newsSeq=I_9465)

In response, however, the Chinese government expressed “strong dissatisfaction and firm opposition” and took measures to sanction the South Korean economy. South Korea and the US has argued that THAAD is a pure defensive measure against the North Korean nuclear threat. Yet, China’s strong opposition reflects Beijing’s concern about the strategic implications of THAAD on the US-China nuclear competition. Chinese authority suspects that THAAD could damage China’s minimum strategic nuclear deterrence against the United States. Furthermore, THAAD may implicate Seoul’s de facto membership to the US missile defense system in Northeast Asia, and the possibility of a closer military cooperation between Korea and Japan.

Indeed, China imposed various sanctions on South Korea as a protest against Seoul’s decision to host US missile defense system. The unofficial but effective sanctions included ban on Korean shows, movies, celebrities in China market, shut down of Chinese tour bound for South Korea, penalties on South Korean consumer goods companies. Since then South Korea tried to restore the relations with Beijing. The Moon administration soon tried mend the strained relations with Beijing by pledging “three no’s”; Seoul had no intention to (1) install additional THAAD batteries, (2) participate in a regional missile defense system, and (3) form a trilateral alliance with the United States and Japan. In November 2018, President Xi and Moon announced a joint statement on their rapprochement which included high level contacts and the renewal of the bilateral currency swap deal followed by gradual easing of economic sanctions imposed on Seoul.<sup>16</sup>

Despite China’s sanction on South Korea over the THAAD controversy, the overall trade with China remains central to South Korean. US trade war against China created a strain on many South Korean companies for which China represents a major export market and business partner. South Korea’s business community are worried of becoming a hostage to US-China strategic competition and exclusive supply chain policy. At the same time, it is indisputable to see the Chinese interest and influence in security issues on the peninsula including nuclear and peace talks with North Korea. It is the President Xi who met with Chairman Kim five times in 2018 and 2019, most among leaders of the region, including the US, South Korea and Russia. Beijing remains the single biggest supplier of food and energy to much impoverished and isolated North Korean regime today. Both politically and economically Washington’s aggressive policy towards Beijing complicate Seoul’s strategic choice in dealing with North Korea, trade with China, alliance management and so forth.

Indeed, South Korea has been cautious on joining Washington’s aggressive policy toward China in its Indo-Pacific strategy. The joint statement<sup>17</sup> after Moon-Biden summit in May 2021 did not explicitly mention China—in contrast to the U.S.-Japan joint statement between Biden and Suga, which explicitly criticized Beijing on many issues. Nevertheless, the statement issued their opposition to “all activities that undermine, destabilize, or threaten the rules-based international order” and voiced their commitment to maintain peace and stability and defend international rules and norms in the South China Sea and Taiwan Strait. This was the first time a ROK-U.S. joint statement has included reference to Taiwan.<sup>18</sup> Chinese authority shortly responded with a certain concern. China’s Ministry of Foreign Affairs spokesperson issued statement noting that “the Taiwan question is China’s internal affair” and warned on both Washington and Seoul to “refrain from playing with fire.”

---

<sup>16</sup> Jeongseok Lee, “Back to Normal? The End of the THAAD Dispute between China and South Korea,” China Brief Volume: 17 Issue: 15, November 12, 2017 <https://jamestown.org/program/back-normal-end-thaad-dispute-china-south-korea/>

<sup>17</sup> The White House, “U.S.-ROK Leaders’ Joint Statement,” MAY 21, 2021 <https://www.whitehouse.gov/briefing-room/statements-releases/2021/05/21/u-s-rok-leaders-joint-statement/> (accessed on January 30, 2022)

<sup>18</sup> Hwang Joon Bum, “S. Korea-US joint statement mentions “Taiwan,” leaves China out,” Hankyoreh May 24, 2021 [http://english.hani.co.kr/arti/english\\_edition/e\\_international/996426.html](http://english.hani.co.kr/arti/english_edition/e_international/996426.html) (accessed on January 30, 2022)

The diplomatic tension with Beijing entered a new phase when Yoon mentioned Taiwan during an interview with foreign correspondent. He said the tensions over Taiwan have been intensifying because of the attempts to change the status quo by force and that he stands by the international community opposing such a change. Yoon also said the Taiwan issue is much like the issue of North Korea and a global one. Beijing refuted Yoon's claim and insisted the Taiwan issue is a completely different matter and warned Beijing would not allow others to meddle by word.<sup>19</sup> Concerns are growing over China's possible economic retaliation against Korea after President Yoon Suk Yeol's remarks on Taiwan elicited angry responses from Beijing. Notwithstanding the new tone, it is unlikely that South Korea will embrace an overtly competitive approach to China in the long run. Yet, Seoul-Beijing ties are going through another difficult time as the new Yoon government prioritizes its relations with Washington and Tokyo. With its increasing influence to both Koreas as well as intensifying competition with the US, China will increasingly become an important factor for South Korea's grand strategy in the future.

### **ROK-Singapore Partnership for Peace and Prosperity in Indo-Pacific**

Despite their geographic distance, the Republic of Korea (ROK) and Singapore find common ground in addressing the challenges of 21st-century geopolitics in the Indo-Pacific. Both nations aspire to foster a stable regional order and contribute to a growing global economy that promotes peace and prosperity. Recognizing the United States as a crucial security partner, they also maintain essential economic ties with China.

A shared commitment to an open, free, and inclusive regional order unites these countries. Given their roles as key trading states connecting Northeast and Southeast Asia through vital sea lines of communication, there is a compelling opportunity for collaboration. Both nations can actively engage in capacity-building initiatives for less developed economies in Southeast Asia.

Moreover, South Korea and Singapore, as responsible actors, can seek avenues to mitigate geopolitical rivalries between the U.S. and China. They may advocate for tension reduction, promote confidence-building measures, and facilitate the exchange of information. This diplomatic effort could be pursued within mini lateral and multilateral frameworks, fostering stability and cooperation in the broader Indo-Pacific region.

---

<sup>19</sup> "South Korea, China exchange harsh words over Yoon's remarks on Taiwan," Yonhap News, April 20, 2023 <https://en.yna.co.kr/view/AEN20230420009200320>

# **Recognizing Convergent Interests: Prospects and Possibilities for Singapore-ROK Security Cooperation**

Chong Ja Ian  
National University of Singapore

## **Introduction**

Singapore and the Republic of Korea (ROK) appear to have few areas in common at first blush, despite their healthy economic ties—they are major investors in each other's economies. Even though both are developed economies, one is a financial and services hub in Southeast Asia while the other is technology and manufacturing powerhouse situated in Northeast Asia. Singapore has remained a single-party dominant electoral authoritarian state while the ROK has moved beyond its authoritarian past to become a vibrant and self-confident mature democracy with significant freedoms and restraints on authority. The security environments of the two states are distinct. Singapore focuses on spillovers from regional crises and, historically, threats from non-state actors as well as being a much smaller actor amidst much bigger neighbours. The ROK's remarkable contemporary success is built on moving beyond colonial rule, war, authoritarian excess, and facing the constant threat from a nuclear-armed Democratic People's Republic of Korea (DPRK).

Despite differences in their circumstances Singapore and the ROK share enduring concerns which can serve as a basis for substantive security cooperation. Both are major beneficiaries of regional and global stability undergirded by an open economic system informed by a system of international institutions, laws, and norms that sufficiently restrain major powers. These conditions provide Singapore and the ROK access to the global markets and capital that are crucial to their prosperity while enabling their ability to exercise autonomy internationally. Intensifying rivalry between the United States and the People's Republic of China (PRC), informed in part by declining interest in continued economic liberalization, increasingly challenge Singapore and the ROK's approaches to security. Both states need, therefore, to mitigate the growing risks of disruption at a time when the needs and concerns non-major powers are more easily overlooked even as they become likely targets of pressure and coercion for major powers.

Given the common concerns and orientations of Singapore and the ROK, several areas stand out as avenues for security collaboration as the two states adjust to the evolving international and regional environment. Some considerations may include:

1. Enhancing cyber-security and protection against disinformation;
2. Ensuring the security and safety of communications, supply chains, and transport;
3. Mitigating the risks from economic coercion;
4. Supporting stability, particularly the management of regional flashpoints; and,
5. Bolstering institutions, multilateral cooperation, and the rule of law internationally.

I will discuss these approaches toward the end of this short memo.

## **Changing and Challenging Circumstances**

Working within the international and regional framework established by the United States provided clear advantages for Singapore and the ROK. Apart from markets, investment, and technology, both states were able to gain from participating in programs run by the World Bank as well as the structural economic stability undergirded by the United States and the Bretton Woods institutions. (Ikenberry, 2009) Within international institutions like the United Nations (UN), the ROK and Singapore had formal channels to regularly voice their interests and



concerns to other parties, opportunities that smaller and middle powers historically lacked. U.S. underwriting of security and common rules in Asia, especially over maritime space, meant that Singapore and the ROK had unhindered access to sea lanes and air routes as well as submarine cables carrying increasing amounts of critical data. Singapore and the ROK could as a result conduct unimpeded all the activities associated with contemporary international business—trade, import energy, invest, negotiate, or send and receive designs.

Two decades into the twenty-first century, the ground that allowed for Singapore and the ROK to succeed seems to be shifting in fundamental ways. Rising US-PRC rivalry spells declining interest in economic and technological integration by the two major powers, whether in terms of US de-coupling and de-risking or the PRC's internal circulation. A practical result of US-PRC competition are efforts by the United States and the PRC to reduce mutual economic and technological dependence, which dovetails with lower domestic appetite for economic openness. The United States also seems to have less interest in investing in international institutions, walking away from the Trans-Pacific Partnership and continuing to block appointments to the WTO's appellate body. For economies like those of Singapore and the ROK that gained by bringing together and serving commercial interests in the United States and PRC, this shift spells reason to re-orientate existing models for success prosperity beyond just rising costs in the PRC.

US-PRC competition, accompanied by rapidly growing PRC capabilities, translates as well into more robust PRC efforts to pursue its interests, including in ways that potentially erodes the existing international and regional order. Beijing has become more vigorous in asserting its claims over the South China Sea, Taiwan, and East China Sea, seen in the increasingly frequent use of paramilitary and military vessels as well as military aircraft to challenge others in and over disputed waters. The PRC's most extensive claims are at odds with international law, while some PRC attempts to pursue its claims challenge prevailing procedures for behavior at sea and in the air. Beijing's actions prompt other claimants to defend their claims more robustly, while encouraging the United States and others to contest PRC efforts in support of current laws, rules, and norms governing behavior. A result is a rise in the frequency of risky incidents that could unravel into crises and uncontrolled escalation, which could in turn disrupt communications, transport, and commerce anywhere between the Strait of Malacca and the Yellow Sea.

Against a context of intensifying major power competition, both the PRC and United States have become more willing to pressure each other and third parties. The United States and PRC persist in levying punitive tariffs on each other while also limiting access to key technologies and raw materials. Beijing has been willing to economically punish states that it considers having created offense for various reasons. The ROK and ROK companies were the target of PRC reprisals for everything from tariffs on minimal PRC garlic imports to the deployment of a missile defense system to guard against potential threats from the DPRK. The PRC may have detained Singapore armored vehicles transiting Hong Kong to demonstrate displeasure at Singapore's initial support for an arbitral tribunal process initiated by the Philippines over the South China Sea to determine the nature of disputed features. Under the Trump administration, the United States sought to force the ROK to pay more for its alliance while threatening to label Singapore a currency manipulator for likely economic concessions.

A more contested regional and even global environment creates impetus for other actors to advance their interests and positions in Asia. Russia has been engaging in more and larger scale military exercises as well as aerial and naval patrols with the PRC in waters and air space adjacent to Japan and the ROK. Russia is also active in widespread disinformation campaigns globally, notably following its attack on Ukraine, sometimes in conjunction with the PRC. The DPRK is accelerating its development and deployment of nuclear and conventional weapons, while allegedly providing Russia with ammunition to persecute its aggression in Ukraine. The DPRK has apparently acquired formidable cyber capabilities which enable it to attack targets

overseas while engaging in large-scale fraud, even as it continues with counterfeiting, smuggling, money laundering, as well as drug production and smuggling. These acts complicate the security environment for the ROK and Singapore.

A consequence of the above developments for Singapore and the ROK is greater overall uncertainty and risk. A confrontation or major crisis involving the United States and PRC could threaten the air and sea routes as well as submarine cables and satellites on which their economies, security, and defense depend, creating costly and potentially dangerous disruptions. Such a situation would likely bring political, economic, and even military coercion from a PRC eager to prevent key regional states from supporting the United States that is determined to maintain access to the Western Pacific. The domination of Taiwan and, to a lesser extent the South China Sea, by the PRC could put permanent pressure on the ROK and Japan, possibly limiting their autonomy. A more serious rupture in the global economy between US- and PRC-leaning blocks mean that Singapore and the ROK will be less able to benefit from broad economic collaboration and must opt to emphasize ties with one side or the other. An emboldened Pyongyang could spell a serious increase in transnational crime, which may themselves be destabilizing for the weaker polities in Asia, while a desperate DPRK could spark a conflict that engulfs Northeast Asia.

**Figure 1:** Marine Traffic Density Chart—East Asia (Source: marinetraffic.com)

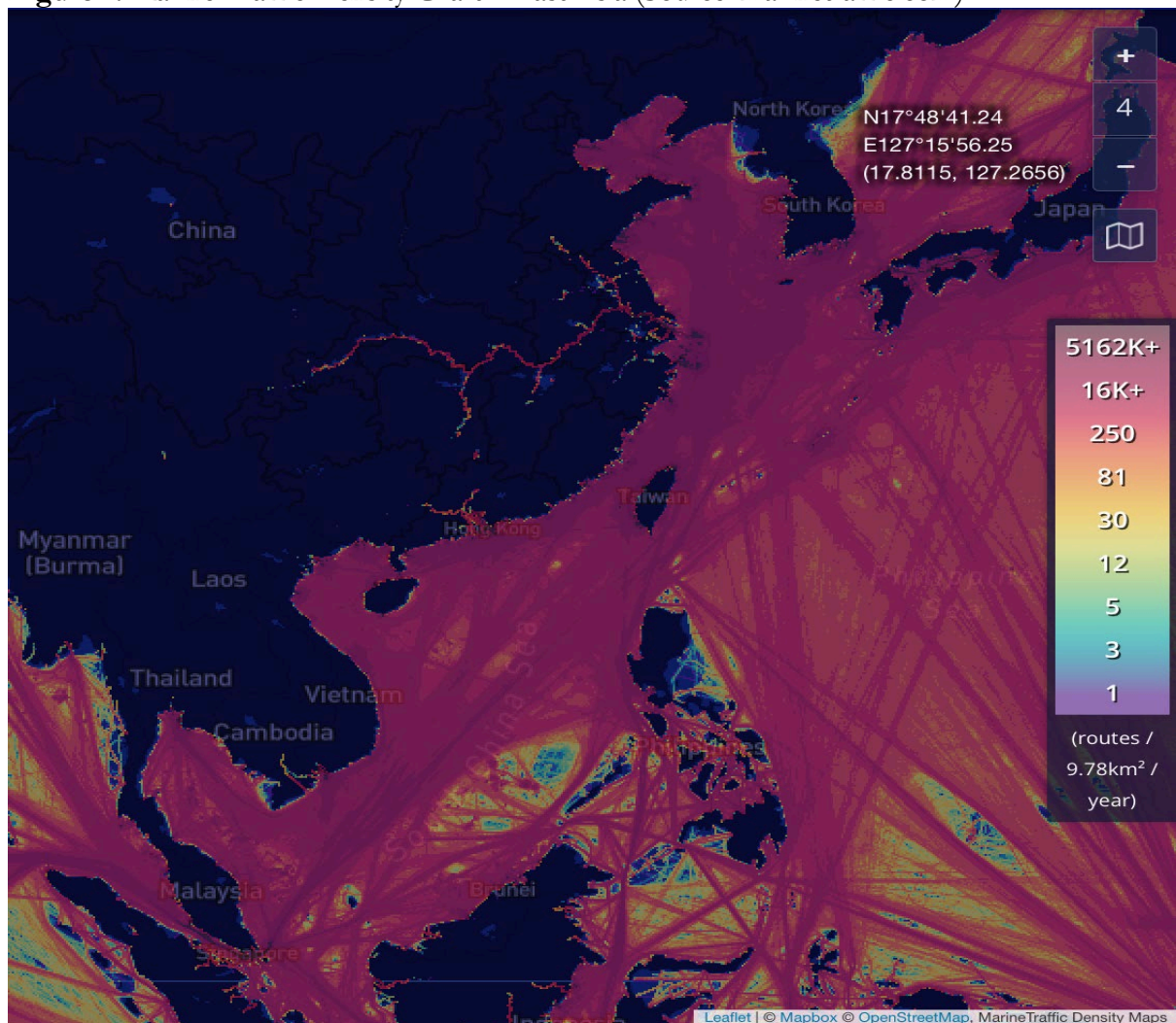


Figure 2: Aeronautical Airway Chart—East Asia (Source: skyvector.com)

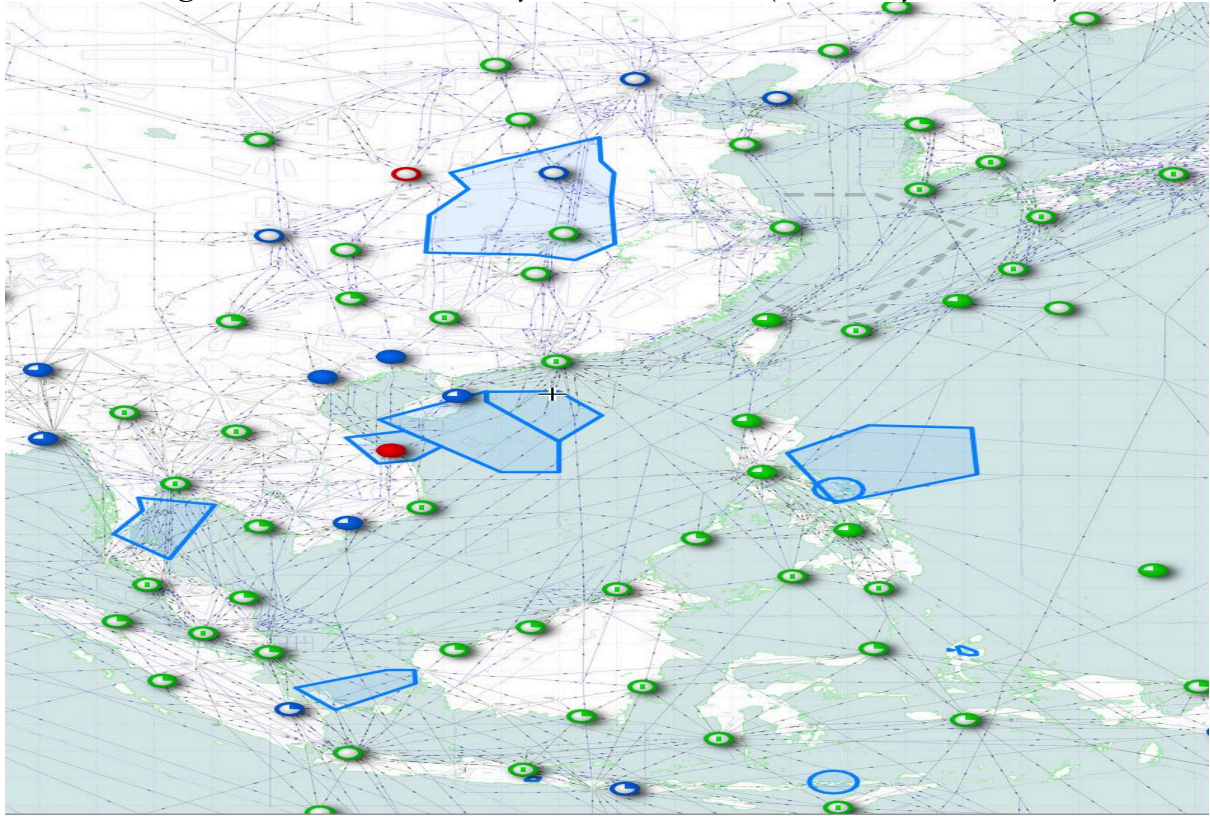
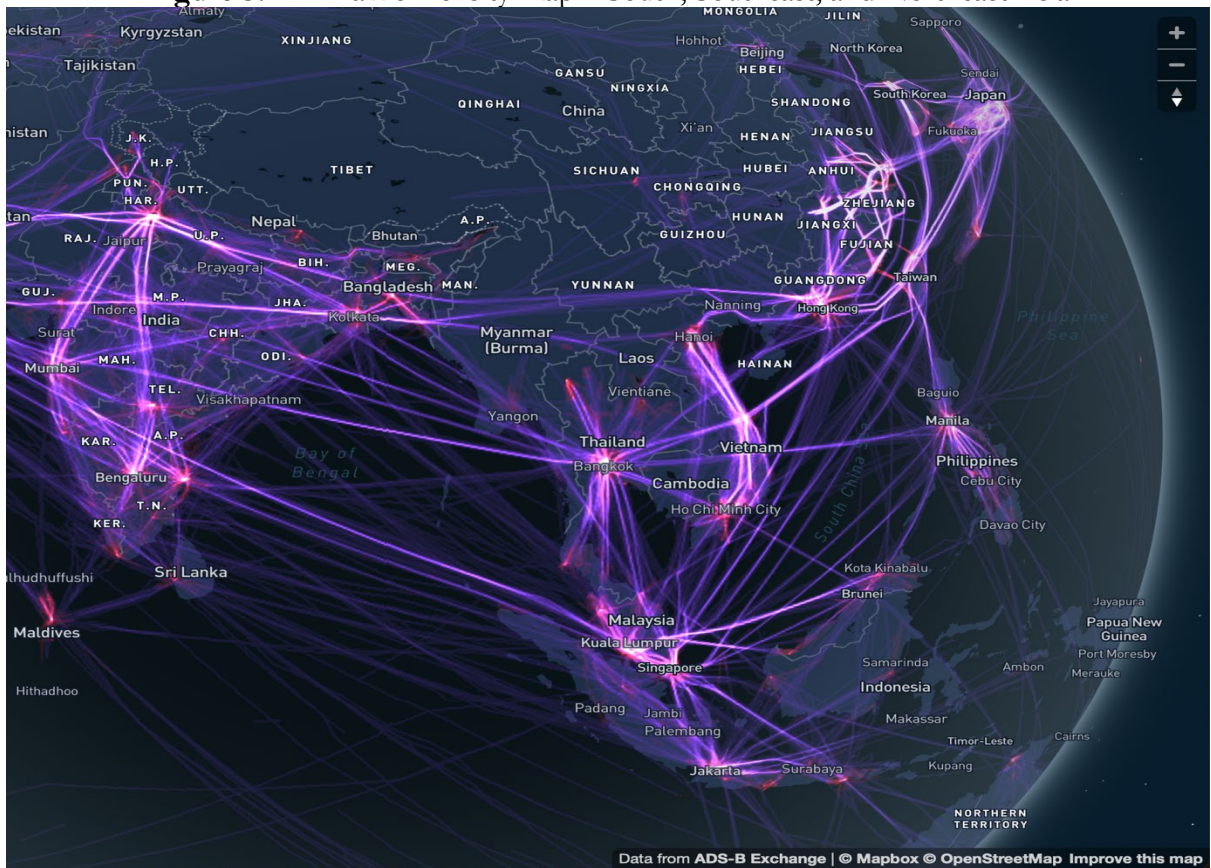


Figure 3: Air Traffic Density Map – South, Southeast, and Northeast Asia



(Source: <https://24h-global-air-traffic.cbergillos.com/#3/15.63/90.08>)

## Prospects for Cooperation

That neither Singapore nor the ROK can fully shape the fundamental contours of global and regional developments of concern does not mean that they are helpless. They can take active steps to protect their equities and cooperation can enhance the effectiveness of their efforts. At the tactical level, the ROK and Singapore can share information on cybersecurity and disinformation risks to develop a clearer threat picture and technical capabilities. Both face risks to their societies emanating from the DPRK, Russia, the PRC, and a host of other state and non-state entities whether in terms of cybercrime or their critical infrastructure. Collaboration can leverage the substantial technical capabilities both states possess, while the ROK's greater public sensitivity to executive excess can help ensure greater proportionality and moderation in the deployment of measures the two sides co-develop.

Maritime safety is another area the ROK and Singapore can explore cooperation given mutual interest in the integrity of sea lanes, air routes, and submarine cables traversing Northeast and Southeast Asia. Efforts can expand on the ROK's interest in supporting naval and coast guard capacity-building in Southeast Asia and Singapore's initiatives in information fusion and sharing in the maritime space. Together the two states can work on promoting norms and best practice in handling unexpected encounters and respect for prevailing international laws and regulations while enhancing region-wide capabilities for monitoring the maritime space. Work in this direction can encourage safer conduct at sea and better situational awareness that have the added benefits of tracking illegal fishing and ship-to-ship transfers. Moreover, advancing greater transparency over the maritime domain can also encourage more caution and adherence to prevailing international law and practice by all states active in the seas between Singapore and the ROK. Here, Singapore can highlight to partners in Southeast Asia where ROK expertise and technology may be particularly useful, such as on the regulation of smuggling and IUU fishing.

A more challenging but no less important area of security cooperation between the ROK and Singapore is working on the risks of mitigating economic coercion. The ROK's experience with economic punishment from the PRC demonstrates that it is possible to weather such pressure even if specific sectors, industries, and firms may suffer in the short-term. Singapore and the ROK can work on ways to better identify industries that are more vulnerable to economic pressure, develop approaches to smoothly diversify markets and the supply of key resources. The two states can even consider finding areas where they can mutually support each other along with other actors since the region lacks a body like the European Union that can spearhead a mechanism to counter-economic coercion. Finding ways to reduce the risks from economic coercion has the added benefit of allowing Singapore and the ROK to work on supply chain resilience, which may prove useful in the event of other systemic shocks.

Given that much of most severe sources of disruption and uncertainty for the ROK and Singapore come from potential regional crises and conflict, it is imperative for the two states to prevent and avoid such events. Of course, there is little that Singapore and the ROK can do on their own or even together to shape the actions of others. The two states currently also take different perspectives on dealing with such political crises. Seoul seems to place somewhat more emphasis on deterrence and dialogue while Singapore stresses the latter, likely because of its smaller size and less pressing concerns. These approaches are compatible and may be more effective if used in conjunction with each other. In this regard, Singapore and the ROK can examine ways to de-conflict and coordinate on ways to both promote the prioritization of engagement and deterrence to support broader regional attempts at preventing unilateral changes to the status quo.

A final and perhaps the most ambitious suggestion is for Singapore and the ROK to do what they can in bolstering the types of international institutions, laws, and rules they prefer to see. This longer-term approach may require coordination on coalition-building within existing institutions and arrangements to encourage effective implementation, clarify rules, and, where

necessary, advance reforms. Possible venues for such work include the UN, its commissions, and agencies, the WTO as well as regional arrangements such as the Regional Comprehensive Economic Partnership (RCEP) and Indo-Pacific Economic Framework for Prosperity (IPEF). Coalition-building can also go toward promoting more vocal collective support for key international legal frameworks that touch on Singapore and ROK security concerns, notably the United Nations Convention on the Law of the Sea (UNCLOS). These efforts may help maintain some restraint on major powers to reduce excessive behavior at a moment of greater US-PRC friction.

Singapore and the ROK can engage in efforts to identify areas where the two sides converge on issues relating to international institutions, multilateral cooperation, and rule of law. These areas can receive priority in terms of not just new initiatives, but also efforts in strengthening existing institutions. For instance, Singapore and the ROK can work together to build coalitions of other similar-minded states to collaborate at the United Nations and UN agencies. Activities in this regard includes the establishment and maintenance of friends that can advance and protect the rule of law as well as multilateral cooperation, or even to modify or block friendly decisions, whether this has to do with voting or key appointments. The ROK and Singapore can work to coordinate with other similar-minded states to use their collective networks and connections to lobby major actors to undertake decisions that are more amenable to their interests. Such efforts make use of the good standing, access and general goodwill that Singapore and the ROK enjoy internationally, especially in not being major powers.

Singapore-ROK collaboration and coordination can promote institutions outside the United Nations system where one or both states are members. For instance, the two countries can seek to work with others to encourage the United States to end the blockage of appointments to the WTO's appellate body. After all, the WTO tends to be more useful for economies that do not have the massive size of the United States. Should either state wish to join an organization the other already participates in and such cooperation could be of greater interest, the party in the organization can seek to promote an expansion of membership. Singapore could, for example, prompt inclusion of the ROK within the CPTPP or further ROK participation in ASEAN-related activities should there be interest from Seoul. Both parties could also work to encourage others with similar outlooks on access and stability to support existing regimes such as UNCLOS and Arctic Council or new initiatives like artificial intelligence regulation. Such efforts can reduce the risk of situations where major powers undermine or shape key international regimes in ways less congruent with Singaporean and South Korean interests.

## **Conclusion**

The many shared security concerns and outlook between Singapore and the ROK both historically and today give reason for the two sides to seek avenues for security cooperation. The two states traditionally took different approaches to safeguarding themselves, perhaps reflecting different strategic circumstances. Even as the ROK sought to safeguard its autonomy, Seoul worked through the formal US alliance system. Singapore proclaimed non-alignment but often found itself working in conjunction with the United States or its key allies in the region such as Australia and Japan in addition to partners from the Association of Southeast Asian Nations (ASEAN). Such experiences provide the ROK and Singapore with a basic set of interests in an open, rules-based international system.

Given the broad alignment in interests between Singapore and the ROK, the pair should today explore opportunities to cooperate and collaborate where possible, but at least to coordinate and harmonize efforts. Both are smaller actors caught in a moment of intensifying major power competition and would benefit from larger collective efforts. Singapore needs to consider ways of protecting its interests at a time when ASEAN seems less fit for purpose and

reform appears unlikely. The ROK is in a more immediately precarious situation, facing the constant threats from the DPRK, but also exists in a sub-region where region institutions apart from bilateral alliances with the United States are non-existent. Such conditions provide an underlying rationale for Singapore and the ROK to enhance their security cooperation to at least match the mutually beneficial relationship they share in economic cooperation.

## References

Cummings, B. (2005). *Korea's Place in the Sun: A Modern History*. Updated ed. New York: W. W. Norton.

Deery, P. (2007). Malaya, 1948: Britain's Asian Cold War? *Journal of Cold War Studies*, 9(1), 29–54. <https://www.jstor.org/stable/26925972>

Ikenberry, G. John. (2009). *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order after Major Wars*. Princeton, NJ: Princeton University Press.

Ngoei, W. (2019). *Arc of Containment: Britain, the United States, and Anticommunism in Southeast Asia*. Ithaca, NY: Cornell University Press.

Rotter, A. Jon. (1987). *The Path to Vietnam: Origins of the American Commitment to Southeast Asia*. Ithaca: Cornell University Press.

Slater, D., & Wong, J. (2022). *From Development to Democracy: The Transformations of Modern Asia*. Princeton, N.J.: Princeton University Press.

Yueh, L. Y. (2013). *China's Growth: The Making of an Economic Superpower*. Oxford: Oxford University Press.

# South Korea's Strategic Dilemma in the Taiwan Crisis: A Framework for Analysis and Response

Ashton Cho & Inwook Kim<sup>20</sup>

## Introduction

The escalating rivalry between the United States and China has presented new challenges for South Korea's national security community. Where in the past, Seoul's security concerns were primarily focused on the stability of the Korean Peninsula, it has become increasingly evident that they cannot be separated from the broader regional security landscape.

One contentious issue confronting Seoul is the matter of Taiwan. The significance of Cross-Strait relations is becoming increasingly recognized, and South Korea's President Yoon Suk-Yeol recently acknowledged that the Taiwan issue is "not simply an issue between China and Taiwan, but like the issue of North Korea, a global issue," and expressed its opposition to any attempt to forcefully change the status quo in the Taiwan Strait.

Nevertheless, there is an ongoing debate regarding the wisdom of intertwining Seoul's security strategy with a major flashpoint in U.S.-China relations. Moreover, specifics about how South Korea can respond to the Taiwan contingency are yet to be determined. Our project aims to contribute to this debate. We begin by examining why and how Taiwan is relevant to South Korea, discussing the expected strategic benefits, military and political risks, and the nature of wartime bargaining of various military response options available to South Korea.

## South Korea's Taiwan Dilemma

Korea's perception of Taiwan is multi-layered, but one defining element today is that Taiwan is a fellow democracy, liberal economy, and a member of US-led, rule-based world order. Together with rising anti-Chinese sentiment in Korea and intensifying US-China tension, Seoul has shown growing awareness of the Taiwan issue and willingness to openly discuss it. In fact, the President Yoon's remark had been preceded by the one by President Moon, his predecessor, who "emphasize[d] the importance of preserving peace and stability in the Taiwan Strait" in a joint statement with President Biden in 2021. Reflecting the rising salience of the Taiwan issue, attempts to understand the issue and its impact followed in the media and policy circles alike.

One key question is how Taiwan matters to Korea's national security. We posit that while Korea's national security is not independent of militarization of the Taiwan conflict, one must caution against overstating its impact. The war over Taiwan would affect the Korean Peninsula primarily in an indirect and limited fashion, and therefore Korea's Taiwan dilemma is unlikely to be about Taiwan itself. First, the linkages between the two flashpoints are less than straightforward—China's potential control over Taiwan does not fundamentally alter the balance of power in the Korean Peninsula, while the nature of China's ambition over Taiwan is distinctly absent over the Korean Peninsula. Second, the disruption of commercial traffic around Taiwan would present challenges to the Korea's economy, 40% of foreign trade and 90% oil imports which depend on the sea lane of communication around Taiwan. However, the economic costs would not be as overwhelming as they might initially appear. Options such as rerouting tankers and commercial traffic to the Philippines Sea, the operational difficulties of sinking large vessels, and China's primary focus on targeting military vessels would all help mitigate the economic impact on South Korea.

---

<sup>20</sup> Ashton Cho ([ashtonscho@gmail.com](mailto:ashtonscho@gmail.com)) is a Visiting Researcher at the National Defense University, Taiwan and holds Ph.D. in Political Science from Columbia University. Inwook Kim ([ikim@skku.edu](mailto:ikim@skku.edu)) is an Assistant Professor in the Department of Political Science and Diplomacy at Sungkyunkwan University.

Korea's Taiwan dilemma instead is built on the great powers' contrasting expectations on the Korea's wartime role, which is caught in the crossfire between the United States, which seeks to maximize South Korea's military contribution, and China, which aims to minimize it, South Korea. In wartime, it becomes virtually impossible to satisfy both great powers simultaneously. South Korea's military support would be appreciated by the United States but comes at the risk of escalating military tensions with China. On the other hand, South Korea's restraint from military involvement would help to avoid provoking China but may jeopardize South Korea's credibility as a reliable and trusted ally to the United States. In this scenario, Seoul's task is to formulate and execute an arrangement that avoids incentivizing both Beijing and Washington to take unacceptable punitive measures in response to South Korea's chosen course of action. In other words, Seoul should aim not to fully satisfy the two great powers but to keep their level of dissatisfaction sufficiently controlled, preventing the U.S. and China from launching undesired escalatory actions against South Korea.

The room for such political maneuvering is limited during wartime but not non-existent. Importantly, coercive actions by China and the U.S. against South Korea would be costly and risky security moves for the two powers as well. For instance, China's military actions, such as operating naval and air forces around South Korea, supporting North Korea's military provocations, or launching direct strikes on South Korean territories, are likely to provoke South Korea to increase its military involvement, thus risking opening a new front against South Korea's formidable military. This, in turn, hampers China's ability to defeat U.S. forces and conclude its invasion of Taiwan. Therefore, China's military retaliation is likely only when it perceives that the benefits of attacking Korea outweigh the costs of escalating the conflict.

South Korea's restraint in supporting the United States is certain to create alliance dissonance, possibly leading to a breakdown. While South Korea is not legally obligated to assist the U.S. in conflicts like Taiwan, historical pressure from the U.S. to contribute to its foreign wars persists. However, a lack of cooperation could lead to consequences such as the withdrawal of U.S. forces from South Korea and a general weakening of the alliance. Such a course of action would also prove costly for the U.S. South Korea is a valuable asset for U.S. grand strategy, and any signs of alliance dissonance would only serve the interests of U.S. adversaries. Therefore, how and whether the U.S. would retaliate against Korea is far from predetermined.

The fact that both the U.S. and China must carefully evaluate the costs and benefits when reacting to South Korea's decisions indicates a considerable level of South Korea's agency during the Taiwan contingency. As a result, Seoul should carefully consider what to demand, concede, and perform in order to maximize its strategic benefits while countering and controlling the costs of its chosen response.

## **South Korea's Options**

We propose three ideal types of responses to the Taiwan contingency: status quo, strategic flexibility, and direct involvement. Each response entails a distinct set of strategic logic and varying implications for South Korea's wartime bargaining with the U.S. and China.

### *Status Quo*

The status quo is defined by South Korea's inaction or its assumption of no supporting roles in U.S. military campaigns. In practice, it includes policy stances such as refraining from diverting South Korea's military power away from the Korean Peninsula, not granting permission for the use of South Korean territories for U.S. Taiwan operations, and strongly opposing the deployment of U.S. Forces Korea (USFK) assets for off-peninsula missions. The status quo intends to separate the capability of the U.S.-ROK alliance from the Taiwan contingency to the maximum extent possible.



The status quo aims to achieve two strategic objectives. First, it minimizes the security deficit that the Taiwan contingency creates, which emerges from diverting U.S. augmentation forces, deploying USFK units, and heightening the risk of North Korea's provocations. Second, the status quo seeks to minimize, if not eliminate, China's incentives to escalate its war to the Korean Peninsula, as South Korea's inaction effectively aligns with China's wartime objective to prevent South Korea's participation. In contrast, the United States may find it difficult to accept its long-time ally's inaction and consequently likely pressure South Korea for increased roles.

This tension creates leverage for South Korea. In return for staying inactive against the wishes of its patron ally, South Korea should seek assurances from China on two fronts. First, China should commit to not launching economic offensives against Seoul, and second, China should provide security assurances that it would not only oppose but actively resist any opportunistic behavior from North Korea. Public statements of such intent, the relocation of units away from the North Korea-China border area, or a reduction in missiles that can reach Seoul would enhance the credibility of China's assurances.

The desirability of the status quo is ultimately determined by U.S. responses. South Korea's inaction may upset but not threaten the alliance's integrity, as the costs of abandoning a major ally like South Korea are considerable while the benefits are unclear. A more optimal and likely response would be for the United States to seek South Korea's support in return for an enhanced supportive role in the Taiwan crisis. If Washington refuses to reward Seoul's switch to more supportive roles, an intra-alliance bargaining may not take place, and the status quo would establish itself as an equilibrium.

### *Strategic Flexibility*

Strategic flexibility represents a more dynamic approach compared to the status quo, whereby South Korea would permit U.S. bases and U.S. Forces Korea (USFK) to support or engage in operations beyond the Korean Peninsula. The concept of strategic flexibility has historical roots dating back to the Roh Moo-Hyun administration (2003-2008), but it has gained renewed interest from the United States amid rising tensions with China.

In fact, conventional wisdom holds strategic flexibility to be a most likely choice for Korea. This is because Korea's limited support may not fully satisfy Beijing or Washington but can keep their levels of dissatisfaction under control and therefore avoid unacceptable levels of retaliatory responses. In other words, strategic flexibility offers a second-best option that promises a delicate balance that Korea can strike under the Taiwan dilemma.

In practice, strategic flexibility entails a wide range of military actions and for policy discussion purposes, we divide them into low-enabling and high-enabling roles. In essence, the former refers to rear base support, while the latter concerns the forward-basing support. More specifically, under the low-enabling scenario, South Korea would authorize U.S. bases in the country, such as Osan and Kunsan Air Bases, Chinhae Naval Base, Camp Humphreys, and other U.S. military facilities and installations, to function as rear bases. These bases would play a pivotal logistical role, distributing fuel, ammunition, and weapon systems to front bases or combat forces. South Korea would also accommodate U.S. military personnel and forces arriving from the continental United States or other regional theater commands, staging them in South Korea before integration at forward-deployed bases for combat operations in and around Taiwan.

In the high-enabling roles, South Korea would extend its support further by allowing U.S. bases in Korea to serve as staging areas for U.S. forces from different theaters, prior to conducting direct military operations in and around Taiwan. Bases like Kunsan and Osan Air Bases would be utilized by the U.S. Air Force for conducting attack sorties against invading People's Liberation Army (PLA) forces under its Eastern Theater Command and Southern Theater Command, such as PLAA amphibious forces and PLAN amphibious attack vessels crossing the Taiwan Strait. These bases would also be involved in ground-attack operations

against PLARF anti-surface missile fire positions targeting U.S. naval assets. Should PLA's Northern Theater Command Navy capabilities mobilize as augmentation forces to the Taiwan Strait, these USFK Air Force bases would be well-positioned for interdicting strikes. Additionally, the use of Kunsan and Osan Air Bases could apply pressure on Beijing more directly, as they would represent the closest U.S. force presence to the heart of China.

Implementing strategic flexibility is expected to trigger responses from China, which may escalate in proportion to South Korea's level of support roles. China's response options range from mild forms of retaliation, such as economic coercion and large-scale military mobilizations and drills, to indirect offensives, such as gray zone operations and information warfare, and even direct strikes against targets of military value in South Korea.

In this context, South Korea's wartime diplomacy should focus on controlling the escalation ladder with China while bargaining for greater security assistance and assurance from the US. On China, Korea must communicate what would be treated as non-escalatory actions to which Korea's responses would focus on defensive and damage-controlling measures thereby avoiding escalation, and unacceptable belligerence against which Korea would take up escalatory measures. Korea may even consider coordinating with China about expected actions and non-actions to avoid unintended escalation during the wartime.

In dealings with the United States, South Korea should demand proportionate levels of security assistance and assurance to address the heightened risk of North Korea's opportunistic provocations and the potential for China's military retaliation. At a minimum, the U.S. should publicly assure its commitment and consider deploying additional naval and air assets and even putting nuclear options on the table. We note that, however, any move involving nuclear options, such as dispatching nuclear submarines or introducing tactical nuclear weapons in the Korean Peninsula, would be highly escalatory and could destabilize the nuclear crisis stability involving North Korea and China, a significant risk tag that comes with nuclear assurance measures.

#### *Direct Involvement*

Lastly, South Korea could opt for direct military participation by deploying its own military units to engage Chinese forces. While assisting U.S. campaigns for Taiwan is not a treaty obligation, South Korea has previously made significant contributions, most notably in the deployment of 320,000 Korean troops to fight in Vietnam from 1964 to 1973. Direct involvement signifies the highest level of South Korea's military commitment, entailing the greatest level of entrapment risk but also the potential for the highest level of appreciation by Washington during and after the Taiwan contingency.

A prerequisite for South Korea's direct involvement is the provision of the highest level of security assurances by the U.S., and, if feasible, a promise of substantial rewards in the event of victory. Engaging Chinese forces directly would involve significant sacrifices, including military and civilian casualties, disruptions to economic activities, the likelihood of strikes against South Korean territories, and the risk of nuclear escalation. Such actions could also tempt North Korea into military attacks. The specific forms of assurance and inducements would vary based on the level of military threats facing South Korea, the extent of military involvement, prospects for victory, and the nature of attainable rewards.

In contrast, South Korea's bargaining leverage against China is considerably diminished. Nonetheless, South Korea must continue efforts to control the escalation of the crisis. Historically, wartime diplomacy has allowed belligerents to negotiate ceasefires, establish safe passages for civilian and commercial traffic, and prevent uncontrollable escalation. Running a full-scale campaign against China serves no serious national security interests, nor does waging an all-out war against South Korea serve China's wartime objectives. The shared commitment to limit engagement and avoid unwanted escalation makes a wartime communication channel,

either direct or through intermediaries, necessary and feasible.

### **Korea's Choice?**

Our paper serves both a descriptive and prescriptive purpose by outlining three military response options and discussing what South Korea should seek under each option. In essence, we emphasize that South Korea's wartime demands to the U.S. and China should be proportionate to the levels of abandonment and entrapment risk.

One unaddressed question is determinants for Seoul's ultimate choice. Seoul's response would be a function of external pressure and domestic politics. More specifically, a balance of pressure from Washington and Beijing, subject to several factors including war's intensity, prospect for victory, or amount of political and economic leverage, may strengthen one great power's coercive pressure more credible and capable over the other. Seoul's agency, on the other hand, is built on factors such as the administration's political orientation, public tolerance to escalation, or military projection capability. An interaction of external and domestic factors would gear Korea towards one of the response options.

In this paper, we refrain from evaluating the relative merits of each response option and, as such, do not offer specific policy recommendations at this stage. Instead, we anticipate that our analysis will provide a valuable framework for opening discussions on how to think about, prepare for, and respond to the Taiwan contingency.

## Session II Regional Maritime Security

### Korea's Maritime Indo-Pacific Strategy and The Bilateral Cooperation between Singapore and Korea

Jaehyon Lee  
Asan Institute of Policy Studies

As for the peace and security of the Indo-Pacific region, one can imagine three potential flashpoints - the South China Sea, the Taiwan Straits, and the Korean Peninsula. The South China Sea issue is almost entirely a maritime security issue. The Taiwan Strait situation has substantial maritime implications since Taiwan is an island, and one can expect some maritime tactics, such as a maritime blockade of Taiwan upon an emergency unfolding. Korean Peninsula issue, as the name indicates, has significant maritime strategic implications since the utilisation of the maritime domain holds one of the keys to preventing (or terminating) war. As for the region's prosperity, likewise, the maritime domain has the utmost importance since many regional countries are heavily dependent on the sea lines of communication for their international trade and energy security. For example, maritime trade accounts for more than 99% of Korea's international trade, and 70% of Korea's crude oil import passes through the South China Sea. Not surprisingly, maritime policy stands out as one of the most critical elements in many countries' Indo-Pacific strategy.

#### Korea's Maritime Indo-Pacific Strategy

Last December, the Korean government announced the Indo-Pacific Strategy (KIPS).<sup>21</sup> The official document of KIPS first emphasised the economic stake of Korea in the region and then highlighted the importance of the maritime domain in the region. Among the nine main focuses of Korea's efforts in the Indo-Pacific region, the fourth, 'Expanding Comprehensive Security Cooperation', contains lots of elements on maritime policies.

#### Two initiatives - KIPS and KASI

Two specific areas of maritime cooperation were put forward. First, it promised Korea's efforts in regional maritime security, which includes the protection of sea lines of communication, strengthening peace and security in the South China Sea, freedom of navigation and overflights, respect for the maritime international laws, participation in regional Maritime Domain Awareness (MDA) system building; and more active participation in joint maritime exercises.

Second, KIPS made it clear that Korea would enhance maritime cooperation with ASEAN countries. The efforts include assisting ASEAN countries with defence materials such as naval ship transfer and other military logistics support, working with ASEAN member states in the areas of countering maritime terrorism, enforcement of maritime laws, and strengthening AMS' MDA capabilities. It does not just include security issues but also economic and social issues such as the marine economy and maritime environment. What is more, KIPS enhanced its commitment to regional multilateral cooperation frameworks led by ASEAN, such as the East Asia Summit (EAS), as a way to enhance maritime cooperation with ASEAN countries.

---

<sup>21</sup> The Government of the Republic of Korea. 2022. "Strategy for a Free, Peaceful, and Prosperous Indo-Pacific Region" ([https://www.mofa.go.kr/eng/brd/m\\_5676/view.do?seq=322133](https://www.mofa.go.kr/eng/brd/m_5676/view.do?seq=322133)).

Korea-ASEAN Solidarity Initiative, or KASI, reiterates the points of maritime cooperation of the KIPS.<sup>22</sup> Under the theme of “expanding ASEAN-ROK comprehensive security cooperation, the KASI has two agendas - maritime cooperation and cyber security cooperation. The former includes major elements of maritime cooperation of KIPS, such as strengthening maritime law enforcement cooperation. In addition, KASI added some ASEAN-specific items such as active participation in the naval exercise along with AMS, setting up channels for maritime cooperation with AMS, utilising Korea’s BIMP-EAGA cooperation fund for maritime resource management, and maritime environment protection focusing on reducing marine plastic. The initiative also displayed Korea’s support for the status quo in the South China Sea and respect for international maritime laws.

### On major maritime issues

After announcing KIPS, the Korean government repeatedly stressed the importance of the status quo in the region, particularly in the **South China Sea** and that the government is against any unilateral attempt to change the status quo. Although not widely known in the region, the Korean government has maintained its clear stance toward the South China Sea issue since 2016. The stance consists of 1) respect for international laws, including UNCLOS, 2) freedom of navigation and overflights in the SCS and 3) opposition to militarisation in the South China Sea.<sup>23</sup> The emphasis on freedom of navigation and overflight and more importantly non-militarisation were new additions in 2016 to make Korea’s stance clearer.

This came out a few months after the 2016 Permanent Court of Arbitration’s award regarding China’s 9 dashed line claim. Korean government’s official statement on the award was “take note” of the decision rather than ‘support’ or ‘respect’ which is stronger than ‘take note’.<sup>24</sup> A year before, President Obama asked the Korean government to “speak out” to make China “abide by international norms and rules”.<sup>25</sup> In between the U.S. pressure on the Korean government and the PCA award, Korea’s position did not change much. But, after the PAC award, the Korean government changed its position by mentioning non-militarisation although it is not clear if the new position in 2016 was directly influenced by the PCA award.

Despite the Korean government’s unwavering position on the issues of the South China Sea since 2016, it is not widely acknowledged in the region.<sup>26</sup> The fact that South Korea’s position is not well known reflects the need for South Korea to participate more actively in regional maritime multilateral cooperation and forums and to publicise its position. The next step will be joining in the freedom of navigation operation (FONOP) mobilising naval assets, but this is very unlikely anytime soon because of some reasons discussed later in this essay.

The Korean government has been and is keen to extend its resources to enhance the maritime capacities of ASEAN member states. In the past, the Korean government transferred old naval and coast guard vessels to Southeast Asian countries such as the Philippines and Vietnam. The Korean Navy offered training courses for submarine crews from Southeast Asian countries. Korean Coast Guard has institutional linkages with some AMS Coast Guard

---

<sup>22</sup> The Ministry of Foreign Affairs. 2023. “Korea-ASEAN Solidarity Initiative” ([https://mys.mofa.go.kr/www/brd/m\\_3924/down.do?brd\\_id=13007&seq=363570&data\\_tp=A&file\\_seq=2](https://mys.mofa.go.kr/www/brd/m_3924/down.do?brd_id=13007&seq=363570&data_tp=A&file_seq=2))

<sup>23</sup> Park Appeals to Beijing on South China Sea,” *Korea JoongAng Daily*, November 24, 2015. (<http://koreajoongangdaily.joins.com/news/article/Article.aspx?aid=3011908>).

<sup>24</sup> Lee Jehoon. 2016. “Government, cautious statement of two sentences after 16 hours of the South China Sea judgement” *Hankyreh*. 13 July. (originally in Korean, translation is author’s)

<sup>25</sup> The Dong-A Ilbo. 2015. “Is Pres. Park ready to answer to Pres. Obama’s request about `dealings with China’” *The Dong-A Ilbo*. October 19.

<sup>26</sup> After the Permanent Court of Arbitration ruling on the South China Sea in 2016, the Korean government ‘noted’ the decision. The Ministry of Foreign Affairs. 2016. “Statement by the Spokesperson of the Ministry of Foreign Affairs of the Republic of Korea on the South China Sea Arbitration Award”, dated 13 July. ([https://www.mofa.go.kr/eng/brd/m\\_5676/view.do?seq=316765](https://www.mofa.go.kr/eng/brd/m_5676/view.do?seq=316765)). The position, although not as strong as major regional powers supportive of the Philippines’ claim, is as strong as many other ASEAN member states’ position.

authorities and has offered training courses for AMS Coast Guard officers. Backed up by KIPS and KASI, the capacity-building efforts will further increase and become more systematic in the coming years. This will be also assisted by naval asset transfers, defence asset sales, and defence industry cooperation between AMS and Korea.

Korea's cooperation with AMS in maritime capacity building and the defence industry does not aim at a particular country. Regional peace and stability is the basis of economic prosperity, as has been proven by the history of ASEAN cooperation. Regional peace and security is fully realised when regional countries have the capacity to monitor their own maritime domain, respond to any non-traditional threats such as transborder crimes, terrorism, disaster, etc., and secure their own sovereignty and sovereign territories. Therefore, Korea's maritime security cooperation with AMS is to uphold regional peace and security, neither to promote an arms race in the region nor to target specific countries.

To this end, there will be increased efforts and activities by the Korean Navy and Coast Guard. Their cooperation with AMS dates back well before the introduction of the New Southern Policy. The scale was small and not so frequent, however. With the whole-of-the-government approach of the New Southern Policy, more resources have been invested in maritime cooperation with Southeast Asian countries. This is succeeded by KASI, and the two maritime security agencies know that their contribution to the more significant region has to start from Southeast Asia.

Transferring old naval ships will continue to strengthen the capacities of AMS navies and coast guards, which will be a basis for further arms sales to AMS and for enhancing interoperability between Korea and AMS while strengthening the MDA capabilities of AMS. Regarding the MDA capacities of AMS, Korea needs to share its satellite-based maritime information with AMS while investing more in the maritime information fusion centre by increasing the number of Korean liaison officers deployed in those centres.

Korean Coast Guard is focusing on cooperation with its counterparts in AMS to upgrade the capacities of the AMS Coast Guard through sharing knowledge and know-how and joint exercise and training courses. Notably, the Korea Coast Guard has vast experience in law enforcement campaigns, including management of IUU fishing, which the AMS Coast Guard will find valuable. In the longer term, the Korean Navy and Coast Guard intend to start a joint exercise with the AMS counterpart, which is not led by superpowers, but a new model of joint military exercise led by small and middle regional powers.

#### Assessment - barriers to overcome

Korea's more active participation in the maritime security cooperation with AMS is much easier said than done. There are some barriers to overcome. The Korean security community and the general public alike have to break the tradition of Korean Peninsula-focused security thinking. More activities on new security fronts, including Southeast Asia, require reallocating security assets and resources. As long as North Korea poses security threats, the lion's share of the security resources will be invested in the front. Nevertheless, Korea has to go beyond the narrow Korean Peninsula. It has to allocate more resources to other fronts, including Southeast Asia, to meet the rising expectations of Korea's role in regional peace and security.<sup>27</sup>

Second, besides the limited resources, the Korean government has been highly concerned with potential entrapment in superpower competition in the Southeast Asian region, especially in the South China Sea issue when it tried to extend security cooperation with AMS. The concern is not baseless, but Korea needs to contribute to regional peace and security based on its security and strategic principles. As mentioned above, Korea's cooperation with AMS is neither to increase strategic and military tension nor to target specific countries. The effort

---

<sup>27</sup> In fact, for a bigger and more meaningful role of Korea in regional security and strategic scene, re-allocation of resources is needed not just among regional focuses but also among different military and security components - army, navy, air force and possibly coast guard.

intends to elevate the capacities of AMS to secure and protect their sovereignty and welfare. Once agreed upon, the Korean government has to keep heralding the principle and build meaningful and practical cooperation with AMS without fear or favour.

### **Recommended Bilateral Cooperation with Singapore**

Against this backdrop of South Korea's enhanced will and awareness regarding maritime cooperation with Southeast Asian countries, there are a few ways for Singapore and South Korea to cooperate bilaterally. They include 1) in-depth bilateral dialogues between the agencies, 2) building a joint programme for capacity-building for AMS countries, and 3) joint maritime exercises between the two parties.

#### Agency-to-Agency Dialogue

First, there should be more agency-to-agency dialogues for maritime cooperation. Often, there are types of strategic dialogues between the two countries, focusing on broader strategic issues. What is needed now is a practical dialogue between the agencies, such as navies and coast guards from both countries, to discuss practical cooperation. The depth and the level of practicality of dialogues between navies or coast guards will be different from those of government-level strategic dialogues. Notably, the Korean Navy and Coast Guard, having long been focused on protecting South Korea and its coastal area, do not have a comprehensive understanding of the maritime situation in Southeast Asia and what sorts of cooperation AMS want from Korea. Many in Korea talk about maritime capacity-building cooperation with AMS, but not many have concrete and practical suggestions. Through this dialogue, Korean maritime security agencies will get valuable advice from their Singaporean counterparts.

In addition, the in-depth dialogue does not need to be only between Navies and Coast Guards of Korea and Singapore. In the maritime domain, a clear-cut division of labour between the Navy and Coast Guard often does not work. For example, offshore maritime law enforcement is basically the job of the Coast Guard, but often requires a joint effort of the two agencies to ensure more effective response to transborder maritime crimes of various scales. Some countries in the region often adopt grey zone tactic in the maritime domain that requires a Navy-Coast Guard joint operation. Therefore, it is essential to coordinate the tactics and strategies between the navy and coast guard in a country and in the region. Given this, it would be pretty useful if Korea and Singapore could establish Navy and Coast Guard 2+2 dialogue.

#### Joint Endeavour for AMS Capacity Building

Second, Singapore is more advanced than other AMS regarding the capacity for maritime domain awareness (MDA). Given this, Singapore and Korea can work together to enhance other AMS's maritime security capacity. Individually, Korea or Singapore may need more capacity and financial resources. But if the two countries jointly develop plans and implement maritime capacity-building initiatives towards other AMS, it would be much more effective than one country's initiative. Capacity building, including laying required infrastructure, takes a long time. Before the Singapore-Korea joint effort gets into implementation, additional time is needed to coordinate between Singapore and Korea as well. Given this, long-term planning is a must.

There are a few practical items for joint initiatives. AMS have to advance their coast guard capability or build a new one if a country does not have one to cope with low-intense, grey zone tactics that impinge upon their maritime sovereignty. They also need to effectively respond to IUU fishing in their sovereign waters or their EEZ. To this end, the Coast Guard is a more effective instrument than the Navy, with less chance of controversies. As a starting point, the Coast Guards have to have an effective and centralised mechanism of monitoring their EEZ and ships in their EEZ with an effective communication system covering not just Coast Guard ships

but civilian fishing boats. This task requires developing both the basic capacity of the Coast Guard and, at the same time, advanced surveillance and communication infrastructures.

More than a Coast Guard is needed to safeguard their territorial water, and one needs an effective joint operation between the Coast Guard and Navy. The Navy is a military branch, but the Coast Guard in AMS is an organ of many different ministries, such as the Ministry of National Defense, the Ministry of Maritime Affairs, the Ministry of Internal Affairs (Home Affairs) or the police. Although the two maritime security agencies look similar, effective joint action is not guaranteed but needs to be built. They have to develop joint emergency operation concepts, channels of communication and effective joint command and control infrastructure. Given the geographic characteristics of maritime Southeast Asia, efficient communication and operational cooperation among maritime AMS coast guards and navies is also needed.

### Joint Exercises

In the long term, South Korea has to make its maritime presence in the Southeast Asian region for deeper and more meaningful cooperation with its Southeast Asian counterpart. That is the ultimate way for South Korea to make a due contribution to regional maritime peace and prosperity. Joint maritime exercise with its Southeast Asian counterpart is a way to make South Korea's presence felt in the region. Most of the joint exercises in the region are led and organised by superpowers - the US and China. There is no point in rejecting those superpower-led joint military or non-traditional security issue-related exercises. Still, it would be likewise meaningful if regional small and medium powers organised their own exercise reflecting regional countries' interests rather than superpowers' strategic intentions. Korea and Southeast Asian countries are ideal partners of joint exercise in that sense.

It is, however, not easy to develop a joint exercise right away, and there are a few challenges. Regarding military exercise - even if it mainly focuses on non-traditional and human security issues, South Korea is new in the region. In addition, there are not many capable countries in the region that can have an effective and meaningful joint exercise with the South Korean navy or coast guard. Given the level of capacity and professionalism, the Singaporean Navy and Coast Guard are ideal partners for a joint exercise for the South Korean Navy and Coast Guard. From the beginning, the exercise does not have to focus on traditional security issues. We can start with low-hanging fruits such as search and rescue campaigns, disaster relief operations, and response to IUU fishing, then move on to maritime law enforcement operations against people, arms, wildlife, drug smuggling, and transnational crimes. While Singapore and South Korea are advancing the joint exercise, other AMS countries can be added as participants when ready to join.

Beyond Singapore, Korea and Singapore may invite some AMS to participate in the joint exercises. The initial invitees could be the AMS affected by transnational maritime crimes, such as the Philippines, Malaysia, Indonesia and so on. The joint exercise can start from some low-hanging fruits of disaster relief, SAR (search and rescue) and maritime law enforcement, including IUU (Illegal, unreported, and unregulated) fishing. Korean Coast Guard accumulated quite extensive experience and know-how from its operations on the West Sea against Chinese IUU fishing. From then on, the parties of joint exercise can expand cooperation to deal with more serious crimes as well as threats to maritime sovereignty.

### Maritime Rules-based Order

Today, rules-based order is one of the buzzwords in international relations. Indo-Pacific is not an exception. Most of the regional countries, be it the US and its allies or China and the countries rallying around China, argue for a rules-based order in the region. The rules-based order that they argue contains a variety of different elements in it. No consensus on the ideal



rules-based order exists.<sup>28</sup> If rules-based order is a desirable one for regional countries and if regional countries have to work together to strengthen it, they must have a consensus on what it means by rules-based order and what the core elements are. The same goes for the maritime rules-based order. Regional like-minded countries like Singapore and Korea first need make efforts to define what the desirable regional maritime rules-based order is.

Korea and Singapore already have a venue to discuss desirable maritime rules-based order. Both countries are members of various regional multilateral forums - ASEAN Regional Forum, ASEAN+3, East Asia Summit and ASEAN Defense Ministers' Meeting Plus and etc. More to the point, the East Asia Maritime Forum (EAMF) is an ideal place to discuss and make a consensus on regional maritime rules-based order. Singapore and Korea, as regional leading like-minded countries, have to make the most of these institutions to build a regional consensus on maritime rules-based order and spread it out to regional countries. Given the multilateral nature of these regional institutions, regional small and medium like-minded countries can persuade or even force superpowers to subscribe to this version of rules-based maritime order. The institutions are also ASEAN-centred and ASEAN-led, through which ASEAN countries can realise and exercise ASEAN centrality as well.

## Conclusions

It is a fact that South Korea has turned a blind eye to many regional security and strategic issues despite its capacities. Slowly, however, South Korea recognises that it has to make a due contribution to regional security issues beyond the Korean Peninsula. Some attempts are made, and Korea's Indo-Pacific Strategy and KASI's new emphasis on strategic and security cooperation with ASEAN countries are examples of the attempts. At the same time, it should be remembered that such a re-orientation is much easier said than done and takes time to see the tangible consequences of the re-orientation are recognised. Also, given the nature of security cooperation, Korea and its counterpart are very cautious at the initial stage of the cooperation. That is why this author put agency-to-agency dialogue as the first item for bilateral cooperation between Korea and AMS, particularly Korea and Singapore.

The Korean Coast Guard has much practical experience and know-how regarding maritime law enforcement, including illegal smuggling and IUU fishing. Korean Navy is equipped with quite reliable and advanced maritime defence assets. More importantly, the two agencies understand that their regional contribution has to be enhanced regionally in the era of the Indo-Pacific. Given the capacity, Singapore is one of the best partners of the Korean Navy and Coast Guard among AMS to kickstart maritime security cooperation. Starting from agency-to-agency dialogue, the two parties can unveil many maritime security cooperation initiatives for the benefit of not just the two parties and AMS but also the whole region.

---

<sup>28</sup> For example, Kwa Chong Guan. 2003. Competing Rules-Based Order in Southeast Asia. RSIS Commentary. CO23151. 18 October.

## **A View from Singapore: Regional Maritime Security and Cooperation with the Republic of Korea**

Gordon Kang and Sarah Teo  
Nanyang Technological University

### **Introduction**

As a maritime country sitting at the convergence of key shipping routes and lacking in natural resources, Singapore is heavily reliant on the sea for its security and economic prosperity. Not only was the island the world's busiest transshipment hub as of 2022, but its maritime industry also accounts for about 7 percent of its gross domestic product.<sup>29</sup> While Singapore's geographical location makes it "a strategically ideal hub" for commercial seaborne activities, this also makes Singapore extremely vulnerable to threats that disrupt safety and stability in the sea lines of communications (SLOCs), such as piracy and armed robbery, maritime terrorism and violations of the maritime rules-based order.<sup>30</sup> To counter these challenges, Singapore has pursued multi-agency and multilateral cooperation, including with like-minded partners such as the Republic of Korea (ROK).

This paper is organised as follows. The next section discusses the challenges facing Singapore in the context of regional maritime security and the city-state's response towards those challenges. This is followed by the third section which narrows in on ROK-Singapore maritime cooperation and suggests some potential areas for further collaboration, before the paper concludes.

### **Singapore and Regional Maritime Security: Key Challenges and Approach**

Piracy and armed robbery in both the Singapore Strait and Malacca Strait are a perennial concern for Singapore. Attacks in the Singapore Strait reached a seven-year high in 2022 with 55 incidents, while three incidents occurred in the Malacca Strait from January to June 2023 (compared with zero incidents in 2022).<sup>31</sup> Such activities pose a challenge to freedom of navigation, risking the safety of the ships and their crew travelling through the SLOCs. Maritime terrorism has also been on the agenda, following incidents such as the 9/11 attacks on the United States in 2001 and the Abu Sayyaf attack on the MV *SuperFerry 14* in February 2004. These threats have taken on another dimension in the wake of the Mumbai terrorist attacks in 2008, during which the perpetrators arrived via the sea.

---

<sup>29</sup> "PSA makes waves in the future of maritime operations," Infocomm Media Development Authority, August 3, 2022, <https://www.imda.gov.sg/resources/blog/blog-articles/2022/12/psa-makes-waves-in-the-future-of-maritime-operations>; Yogesh Hirdaramani, "How Singapore's Maritime and Port Authority is crafting the vessel management system of the future," GovInsider, June 28, 2023, <https://govinsider.asia/intl-en/article/how-singapores-maritime-and-port-authority-is-crafting-the-vessel-management-system-of-the-future>.

<sup>30</sup> Collin Koh, "Seeking Balance: Force Projection, Confidence Building, and the Republic of Singapore Navy," *Naval War College Review* 65, no. 1 (2012): 1-18, at 2; Yinghui Lee, "Singapore's Conceptualization of Maritime Security," Asia Maritime Transparency Initiative, December 1, 2021, <https://amti.csis.org/singapores-conceptualization-of-maritime-security>.

<sup>31</sup> "59 Incidents of Armed Robbery Against Ships in Asia in First Half of 2023," ReCAAP Information Sharing Centre, July 21, 2023, [https://www.recaap.org/resources/ck/files/news/Press%20release%20-%20ReCAAP\\_ISC\\_Half-Year\\_Report%20\(Jan-Jun%202023\)%20-%20Final.pdf](https://www.recaap.org/resources/ck/files/news/Press%20release%20-%20ReCAAP_ISC_Half-Year_Report%20(Jan-Jun%202023)%20-%20Final.pdf); Nadine Chua, "Piracy, robberies in Singapore Strait hit 7-year high in 2022," *The Straits Times*, January 17, 2023, <https://www.straitstimes.com/singapore/piracy-robberies-in-singapore-strait-hit-7-year-high-in-2022>; ReCAAP Information Sharing Centre, "Annual Report 2022: Piracy and Armed Robbery Against Ships in Asia," 2022, <https://www.recaap.org/resources/ck/files/reports/annual/ReCAAP%20ISC%20Annual%20Report%202022.pdf>, 8.

Alongside increasing instability arising from the South China Sea disputes over the last decade, Prime Minister Lee Hsien Loong has highlighted three key issues that matter to Singapore: upholding international law, maintaining freedom of navigation, and promoting a united ASEAN.<sup>32</sup> A *CNBC* report published in November 2022 found that other than China, five other countries—Singapore, along with Indonesia, Japan, ROK and Vietnam—would be most dependent on freedom of navigation in the SLOCs running through the South China Sea.<sup>33</sup> An earlier article noted that Singapore relied on the South China Sea for 66 percent of its total trade in 2016.<sup>34</sup> Consequently, although Singapore is not a claimant state in the territorial disputes, its officials have underscored the need to adhere to international law, including the United Nations Convention on the Law of the Sea (UNCLOS), in the South China Sea.

In responding to its maritime challenges, Singapore adopts a whole-of-government approach at the national level and embraces a multilateral cooperative approach at the international level. In 2011, Singapore established the National Maritime Security System to help with “the detection and monitoring of maritime security threats and the coordination of operational responses”.<sup>35</sup> Under this framework, the permanent secretaries of the Ministry of Defence and the Ministry of Home Affairs provide policy direction, while the chief of navy leads incident managers in the Police Coast Guard (PCG) and Maritime Port Authority (MPA), among other agencies, to operationalise and implement policies.<sup>36</sup> As then Minister for Manpower and Second Minister for Home Affairs Josephine Teo said at the commissioning of three Republic of Singapore Navy (RSN) littoral mission vessels in 2020, close inter-agency coordination is necessary for “robust and prompt Whole-of-Government responses to incidents at sea, thus serving as an important force multiplier for Singapore”.<sup>37</sup>

Beyond the national level, Singapore pursues regional and global cooperation to more effectively tackle maritime threats which are, to a large degree, transnational in nature. This involves not only participating in dialogue platforms related to maritime issues, but also implementing practical initiatives. The Information Fusion Centre (IFC) to facilitate maritime information sharing, for instance, is hosted by the RSN at the Changi Command and Control Centre. At the time of writing, there were 24 international liaison officers from various countries stationed at the IFC. Singapore has also hosted or co-hosted maritime exercises, many of which have been convened via ASEAN-led platforms such as the ASEAN Regional Forum, the ASEAN Defence Ministers’ Meeting (ADMM) and the ADMM-Plus. Singapore’s interest in reinforcing a rules-based maritime order in the region has been reflected in its efforts—as co-chair of the ADMM-Plus Experts’ Working Group on Maritime Security, along with the ROK—for the Code of Unplanned Encounters at Sea (CUES) to be adopted by all 18 ADMM-Plus navies in 2017. Outside of the ASEAN framework, Singapore organised the inaugural multilateral submarine

---

<sup>32</sup> Chong Zi Liang, “National Day Rally 2016: Singapore must stand by its own principles on South China Sea,” *The Straits Times*, August 21, 2016, <https://www.straitstimes.com/politics/national-day-rally-2016-singapore-must-stand-by-its-own-principles-on-south-china-sea>.

<sup>33</sup> Sean M. Holt, “Five countries, other than China, most dependent on the South China Sea,” *CNBC*, November 17, 2022, <https://www.cnbc.com/2022/11/18/five-countries-other-than-china-most-dependent-on-the-south-china-sea.html>.

<sup>34</sup> Ankit Panda, “How Much Trade Transits the South China Sea? Not \$5.3 Trillion a Year,” *The Diplomat*, August 7, 2017, <https://thediplomat.com/2017/08/how-much-trade-transits-the-south-china-sea-not-5-3-trillion-a-year>.

<sup>35</sup> “Fact Sheet: Safeguarding Singapore’s Maritime Security,” MINDEF Singapore, June 30, 2017, [https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2017/june/30jun17\\_fs4](https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2017/june/30jun17_fs4).

<sup>36</sup> Collin Koh, “Second Amongst Equals? The Police Coast Guard within Singapore’s Maritime Security Architecture,” *KIMS Policy Report Series*, no. 2022-10, 2022, <https://en.kims.or.kr/publication/kims-policy-report/kims-22-10>, 17-19.

<sup>37</sup> “Speech by Minister for Manpower and Second Minister for Home Affairs Josephine Teo at the Commissioning Ceremony of RSS Fortitude, RSS Dauntless and RSS Fearless,” MINDEF Singapore, January 31, 2020, [https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2020/January/31jan20\\_speech](https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2020/January/31jan20_speech).

rescue drill, Exercise Pacific Reach, in 2000. Navies from Japan, ROK and the United States participated. To date, Singapore has hosted four exercises under the Proliferation Security Initiative, as part of efforts to “safeguard against the illicit movement of items through [its] ports”.<sup>38</sup>

Singapore’s deep and enduring interest in maintaining maritime security in its key SLOCs are certainly unsurprising, given that any instability or tensions in its maritime environment would affect its economic prosperity and survival. To combat threats such as piracy and armed robbery, maritime terrorism, as well as violations of the maritime rules-based order, Singapore has embraced multi-agency cooperation domestically and multilateral cooperation externally.

## **Maritime Cooperation between Singapore and the ROK**

Considerations for advancing Singapore’s maritime cooperation have thus naturally extended to like-minded partners, such as the ROK. Regional security and stability between shared SLOCs across the Straits of Malacca and Singapore to the East China Sea are similarly critical to the ROK’s economic interests. More broadly, the ROK’s approach towards ASEAN and its member states in recent years has indicated a growing emphasis on maritime cooperation, including with Singapore. The Korea-ASEAN Solidarity Initiative (KASI), as part of the ROK’s Indo-Pacific Strategy, aims to build up various areas of policy dialogue and coordination, naval exercises and capacity-building initiatives.<sup>39</sup> Particularly, its focus on maritime connectivity and the environment demonstrates the ROK’s intent to closely align with the priority areas stated in the ASEAN Outlook on the Indo-Pacific (AOIP) and the ASEAN-ROK Plan of Action to Implement the Joint Vision Statement for Peace, Prosperity and Partnership (2021-2025).

Under the Yoon Suk-yeol administration, the ROK has also appeared more willing to call out China’s violations of rules and norms in the South China Sea. The joint statement from the ROK, Japan and the United States following their summit at Camp David in August 2023 highlighted “the dangerous and aggressive behavior supporting unlawful maritime claims” by China, while President Yoon emphasised the need for a rules-based maritime order in the South China Sea at the East Asia Summit in September 2023.<sup>40</sup> This firmer stance is likely to be welcomed by ASEAN, particularly those member states engaged in maritime territorial disputes with China. To substantiate this rhetoric, the ROK could consider further leveraging its strengths in defence industry and augmenting its capacity-building contributions to maritime Southeast Asian countries. These would include not just beefing up the “hardware” of maritime agencies and coast guards, but also bolstering the “software” (that is, human resources and training) that would help Southeast Asian claimant states respond to maritime incidents.<sup>41</sup> At the ASEAN-ROK level, relevant cooperation—such as in information sharing and implementing CUES—would be driven by mutual interests in maintaining a rules-based order, as well as the safety and freedom of navigation through the SLOCs.

Bilateral maritime collaboration between Singapore and the ROK has been anchored in a series of initiatives and agreements which reflect an awareness of shared regional circumstances

---

<sup>38</sup> “Singapore Hosts Fourth Proliferation Security Initiative Exercise,” MINDEF Singapore, October 28, 2021, [https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2021/October/28oct21\\_nr](https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2021/October/28oct21_nr).

<sup>39</sup> “Korea-ASEAN Solidarity Initiative (KASI),” Ministry of Foreign Affairs, Republic of Korea, April 21, 2023, [https://www.mofa.go.kr/eng/brd/m\\_5467/view.do?seq=366745](https://www.mofa.go.kr/eng/brd/m_5467/view.do?seq=366745).

<sup>40</sup> “The Spirit of Camp David: Joint Statement of Japan, the Republic of Korea, and the United States”, The White House, August 18, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/08/18/the-spirit-of-camp-david-joint-statement-of-japan-the-republic-of-korea-and-the-united-states>; “Remarks by President Yoon Suk Yeol at the East Asia Summit”, Office of the President, Republic of Korea, September 7, 2023, <https://eng.president.go.kr/speeches/KPrayKMS>.

<sup>41</sup> The authors are grateful to participants of the ROK-Singapore Security Forum, held on November 3, 2023 in Singapore, for this point.

balanced against geopolitical sensitivities. Maritime navigational safety and environmental protection, for example, have been the focus of cooperation with a Memorandum of Understanding (MOU) signed in 2010 between the MPA and the ROK's Ministry of Land, Transport and Maritime Affairs (MLTM). The RSN and the ROK Navy (ROKN) also co-hosted the 2nd Submarine Operational Safety Conference in 2016 alongside Exercise Pacific Reach, with a Submarine Rescue Memorandum of Agreement signed on the sidelines of the event.<sup>42</sup> To enhance maritime information sharing and domain awareness, a ROKN international liaison officer has been attached to the IFC in Singapore since 2019, with another MOU also signed between the RSN and the ROKN in 2021.<sup>43</sup>

Under the ROK-Singapore co-chairmanship of the ADMM-Plus Experts' Working Group on Maritime Security from 2017-2020, both navies jointly conducted the Future Leaders' Programme in 2018 and the ADMM-Plus Maritime Security Field Training Exercise in 2019.<sup>44</sup> High-level exchanges saw the MPA Distinguished Visitors Programme host senior officials from the MLTM in 2011 and 2013, and the RSS Stalwart participate in the ROKN's International Fleet Review in 2018.<sup>45</sup> With maritime security a key aspect of an enhanced MOU for defence cooperation signed in 2022, it is clear that this sector continues to hold potential for both countries to build towards their strategic interests.<sup>46</sup>

Future cooperation should continue to advance on these efforts. Convening joint exercises on the sidelines of multilateral drills could help to bolster interoperability and trust. Importantly, it is in both countries' interests to send a cohesive signal of an intent to carefully navigate geopolitical sensitivities while collaborating on pressing maritime security issues. Indeed, broader ASEAN-wide multilateral efforts, including with external partners, point toward similar trends on identifying possible aspects of cooperation, focusing on anti-piracy, search and rescue, counterterrorism, and humanitarian assistance and disaster relief (HADR). Facilitating the development and institutionalisation of platforms to share relevant information and expertise in such domains would also be a critical step to respond to regional contingencies.

Other bilateral opportunities also exist to build towards a more robust partnership. Potentially hosting ROKN vessels for maintenance and resupply in Singapore would contribute towards joint logistical efficiency and enhance the operational effectiveness of both countries in the region, across bilateral and multilateral frames. Considering the inter-agency nature of such issues, Singapore entities such as the PCG, MPA or the Immigration and Checkpoints Authority could deepen collaboration with the ROK Coast Guard and other relevant agencies on capacity-

---

<sup>42</sup> "Singapore and Korean Navies Co-Host Multilateral Conference to Promote Submarine Safety in the Asia-Pacific Region," MINDEF Singapore, June 1, 2016,

[https://www.nas.gov.sg/archivesonline/data/pdfdoc/MINDEF\\_20160601001.pdf](https://www.nas.gov.sg/archivesonline/data/pdfdoc/MINDEF_20160601001.pdf).

<sup>43</sup> Tay Hong Yi, "South Korea's defence minister concludes introductory visit to Singapore," *The Straits Times*, December 24, 2021, <https://www.straitstimes.com/singapore/politics/south-korea-defence-minister-concludes-introductory-visit-to-singapore>.

<sup>44</sup> "Singapore and Republic of Korea Navies Co-Host Maritime Security Exercise to Strengthen ADMM-Plus Cooperation," MINDEF Singapore, April 28, 2019, [https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2019/april/28apr19\\_nr](https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2019/april/28apr19_nr).

<sup>45</sup> "Republic of Korea Senior Maritime Official Visits Singapore Under the Distinguished Visitors Programme," MPA Singapore, November 4, 2011, <https://www.nas.gov.sg/archivesonline/speeches/record-details/81581baf-115d-11e3-83d5-0050568939ad>; "RSS Stalwart Participates in International Fleet Review in Republic of Korea," MINDEF Singapore, October 12, 2018, [https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2018/october/12oct18\\_nr](https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2018/october/12oct18_nr); "Senior Maritime Official from the Republic of Korea Visits Singapore Under the Distinguished Visitors Programme," MPA Singapore, January 24, 2013, <https://www.nas.gov.sg/archivesonline/speeches/record-details/81c22def-115d-11e3-83d5-0050568939ad>.

<sup>46</sup> "Singapore and the Republic of Korea Sign Two Memorandums to Enhance Cooperation," MINDEF Singapore, June 10, 2022, [https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2022/June/10jun22\\_nr5](https://www.mindef.gov.sg/web/portal/mindef/news-and-events/latest-releases/article-detail/2022/June/10jun22_nr5).

building programmes for maritime law enforcement amongst ASEAN member states.<sup>47</sup> Singapore and the ROK could potentially also consider pursuing joint research and development projects on advanced maritime platforms.<sup>48</sup>

Finally, further cooperation on safeguarding shared maritime critical information infrastructure, such as undersea submarine cables, is a key area for consideration. Such submarine cables are a core aspect of regional connectivity, but remain especially susceptible to a range of cyber, physical or natural disruptions.<sup>49</sup> Their importance is further accentuated when considering recent efforts to advance ROK-Singapore cooperation in digitalisation—with the Korea-Singapore Digital Partnership Agreement (KSDPA) coming into force in January 2023—and Singapore’s intention to double its submarine cable landings in the next 10 years.<sup>50</sup> Bilateral dialogue and coordination could encompass sharing of technical knowledge and regulatory practices, comprehensive assessments on the current threat landscape and frameworks for incident response and development, and raising regional awareness of necessary action to spur future multilateral collaboration involving other ASEAN member states.

## Conclusion

It is important to remain mindful that Singapore and ROK’s maritime interests have potential divergences due to differing strategic contexts, geopolitical sensitivities, and political change or crises otherwise. Notably, Seoul’s bilateral maritime engagements with ASEAN member states have generally been kept to smaller exchanges rather than substantive field exercises, with maritime exercises involving Singapore and the ROK also primarily occurring in the context of broader regional frameworks.<sup>51</sup> More broadly, however, care should be taken to ensure that maritime cooperation is not sidetracked by the politicisation of strategic approaches or domestic politics. Achieving concrete, incremental gains through cooperation in such sectors are demonstrable milestones in building resilience and adaptability to pressing issues, and towards future opportunities of deeper cooperation.

---

<sup>47</sup> Lee Jaehyon, “South Korea’s Indo-Pacific Strategy and the Role of the ROK Navy and Coast Guard,” *Asan Issue Brief*, June 27, 2023, <https://en.asaninst.org/contents/south-koreas-indo-pacific-strategy-and-the-role-of-the-rok-navy-and-coast-guard>.

<sup>48</sup> See, Max Broad and Evan A. Laksmana, “South Korea’s defence relations in Southeast Asia,” *IJSS Online Analysis*, September 29, 2023, <https://www.ijss.org/online-analysis/online-analysis/2023/09/south-koreas-defence-relations-in-southeast-asia>.

<sup>49</sup> Elsa B. Kania, “Enhancing the Resilience of Undersea Cables in the Indo-Pacific,” *RSIS Commentary*, no. 113, August 21, 2023, <https://www.rsis.edu.sg/rsis-publication/rsis/enhancing-the-resilience-of-undersea-cables-in-the-indo-pacific>; Sean O’Malley, “Assessing Threats to South Korea’s Undersea Communications Cable Infrastructure,” *The Korean Journal of International Studies* 17, no. 3 (2019): 385-414.

<sup>50</sup> Gordon Kang, “Singapore in South Korea’s Indo-Pacific Strategy,” *The Diplomat*, September 7, 2023, <https://thediplomat.com/2023/09/singapore-in-south-koreas-indo-pacific-strategy>.

<sup>51</sup> Broad and Laksmana, “South Korea”.

# Korea's View on the US Semiconductor Export Controls

Wonho Yeon

Korea Institute for International Economic Policy

## Introduction

The semiconductor industry in Korea is a major contributor to the country's economy in sectors like exports and investment, ranking second in the world for semiconductor production and first in memory chip fabrication.<sup>52</sup> For instance, Korea's semiconductor manufacturing capacity is 80 percent domestic and 20 percent foreign, meaning that most production and value added are produced domestically and contribute around 20 percent of the country's exports.<sup>53</sup> Almost half of all manufacturing expenditures were spent in the sector in 2021, a particularly active investment year with KRW 52 trillion in investment.<sup>54</sup> To support this, the government has announced a \$25 billion mega cluster project in March 2023,<sup>55</sup> strengthened the foundation for the growth of the semiconductor industry by enacting a special law in August 2022 to protect and foster the nation's high-tech strategic industries centered on semiconductors, and announced a semiconductor future technology roadmap in April 2023 that declares the fostering of 45 core semiconductor technologies.<sup>56</sup>

## Strengthening U.S. Checks on China's Semiconductor Industry

Essentially, the Korean government and semiconductor companies recognize that the increasing pace of digital transformation and green transformation will result in a sustained increase in the demand for semiconductors. This, in turn, would create favorable opportunities for the Korean economy in the long run. However, Korea's semiconductor industry is currently facing significant vulnerability as a result of the US government's implementation of stricter sanctions on China.

Reviewing the history of US government's sanctions imposed on China's semiconductor sector, we may identify two significant turning points. The initial turning point occurred with the imposition of semiconductor restrictions on Huawei in 2020. After the implementation of the Export Control Reform Act (ECRA) and the Foreign Investment Risk Review Modernization Act (FIRRMA) in 2018, the United States focused its regulatory measures specifically on China's information and communications technology (ICT) industry.<sup>57</sup> Huawei and ZTE, both engaged in

---

<sup>52</sup> Wonho Yeon, *함께보기: 자국 내 반도체 기술·제조 기반 확보를 위해 치열한 경쟁 중*, 월간통상 [View Together: Fierce Competition to Securing Domestic Semiconductor Technology and Manufacturing Bases], (Seoul, Korea: Monthly Commerce, 2022).

<sup>53</sup> Author's own calculation based on UN COMTRADE data.

<sup>54</sup> “반도체 산업 글로벌 경쟁 파고에 공동 대응 나서다 [Joint response to the wave of global competition in the semiconductor industry],” Korea Ministry of Trade, Industry and Energy, 2022; “2021 년 제조업 설비투자 동향 및 특징 [2021 Manufacturing Facility Investment Trends and Characteristics]” KDB Future Strategy Research Institute, 2022, <https://rd.kdb.co.kr/fileView?groupId=CAC73969-BD6C-33AF-96D4-7EF808DAA716&fileId=9CD0E4E0-6F14-DC04-9123-7D165B72510D>.

<sup>55</sup> “尹 대통령, 민간 투자로 세계 최대 '반도체 메가클러스터' 조성 나선다 [‘President Nang sets out to create the world’s largest ‘semiconductor megacluster’ with private investment],” Office of the President of Korea, March 15, 2023, <https://www.president.go.kr/download/6411227acf66c>.

<sup>56</sup> “3 대 주력기술 초격차 연구개발(R&D) 전략 발표 [Announcement of R&D strategy for the super-gap of three major technologies],” Korea Ministry of Science and ICT, November 2, 2023, <https://www.msit.go.kr/bbs/view.do?sCode=user&mId=113&mPid=238&pageIndex=&bbsSeqNo=94&nttSeqNo=3182908&searchOpt=ALL&searchTxt=>

<sup>57</sup> U.S. Congress, House, *John S. McCain National Defense Authorization Act for Fiscal Year 2019*, HR 5515, 115<sup>th</sup> Cong., introduced in House April 13, 2018, <https://www.congress.gov/bill/115th-congress/house-bill/5515/text>.

5G technology, were the primary targets. As part of its offensive against Huawei, the United States levied semiconductor restrictions in May and August 2020. The United States' foreign direct product rule (FDPR) prohibited any firm from producing and marketing semiconductors that were specifically designed by Huawei and its subsidiary HiSilicon. As a result of limited availability of advanced chips, Huawei, which was the leading player in global smartphone market share in 2020, has essentially withdrawn from the smartphone industry. This made the US government acknowledge China's susceptibility in the semiconductor industry. Subsequently, the US government has bolstered its control over China's semiconductor industry, including foundry SMIC in 2020, supercomputing CPU developer Tianjin Phytium Information Technology in 2021, and YMTC and SMEE in 2022, through its own export control measures.<sup>58</sup>

The second pivotal occasion occurred in July 2022 when TechInsights conducted a study of SMIC's 7nm chip production.<sup>59</sup> The report states that SMIC surpassed the 10nm limit by employing multi-patterning technology and deploying older generation deep ultraviolet (DUV) lithography equipment instead of EUV equipment, which was already subject to export regulation. The US government responded promptly. The US government has extended the existing export ban on manufacturing equipment related to sub-10nm processes to include sub-14nm technology. This information has been verified by US semiconductor equipment companies such as Applied Materials, LAM Research, and KLA.<sup>60</sup> The report has seemingly influenced the United States to abandon its previous objective of maintaining a two-generation technological disadvantage with China in semiconductors, in order to maximize the gap between the two countries. In August 2022, President Biden enacted the CHIPS and Science Act following his recent awareness of SMIC's achievements. One month later, National Security Advisor Jake Sullivan gave a speech stating that the United States will no longer use flexible limits that change based on circumstances for certain technologies. Instead, they will implement fixed restrictions to prevent China from acquiring any additional technology beyond what it already possesses.

While the primary focus of the United States has been on thwarting China's progress in advanced semiconductor technology, South Korean semiconductor factories in China have also suffered negative consequences. In 2019, the United States imposed a ban on China's importation of ASML's EUV lithography equipment. This technology is essential for the production of advanced logic circuits below 10nm. The Chinese foundry SMIC was the primary target, although SK Hynix, a manufacturer of DRAM memory chips in China, was also prohibited from importing EUV equipment necessary for producing advanced DRAM in November 2021.

The scrutiny of US inspections targeting China in the semiconductor industry has escalated in recent years. It is no longer limited to advanced semiconductors with dimensions of 10nm, but is seeking to implement more extensive penalties. The CHIPS and Science Act, enacted in early August 2022, serves as a prime illustration. The objective of the new legislation is to infuse \$52.7 billion into the national semiconductor industry with the intention of incentivizing companies to construct and enhance domestic manufacturing capabilities. However, a crucial

---

<sup>58</sup> Bureau of Industry and Security, Department of Commerce, "Commerce Adds China's SMIC to the Entity List, Restricting Access to Key Enabling U.S. Technology," Press Release, December 18, 2020, <https://2017-2021.commerce.gov/news/press-releases/2020/12/commerce-adds-chinas-smic-entity-list-restricting-access-key-enabling.html>; Bureau of Industry and Security, Department of Commerce, "Commerce Adds Seven Chinese Supercomputing Entities to Entity List for their Support to China's Military Modernization, and Other Destabilizing Efforts," Press Release, April 8, 2021, <https://www.commerce.gov/news/press-releases/2021/04/commerce-adds-seven-chinese-supercomputing-entities-entity-list-their>; Bureau of Industry and Security, Department of Commerce, "Commerce Adds 36 to Entity List for Supporting the People's Republic of China's Military Modernization, Violations of Human Rights, and Risk of Diversion," Press Release, December 15, 2022, <https://www.bis.doc.gov/index.php/documents/about-bis/newsroom/press-releases/3195-bis-press-release-clean-2022-12-14/file>.

<sup>59</sup> "SMIC 7nm technology found in MinerVa Bitcoin Miner," TechInsights, <https://www.techinsights.com/blog/disruptive-technology-7nm-smic-minerva-bitcoin-miner>.

<sup>60</sup> Debby Wu, et. al, "US Quietly Tightens Grip on Exports of Chipmaking Gear to China." *Bloomberg*, July 30, 2022, <https://www.bloomberg.com/news/articles/2022-07-29/us-pushes-expansion-of-china-chip-ban-key-suppliers-say>.



provision of this law prohibits companies that receive financial support from the U.S. government from making investments in China specifically for logic semiconductors that are smaller than 28nm, for a duration of ten years.<sup>61</sup> The March 2023 release of a Notice of Proposed Rulemaking for the Guardrails also prohibits investments in NAND memory beyond 128 layers and DRAM memory below 18nm. For the first time, the United States has officially designated "semiconductors important to national security" and expanded investment restrictions to encompass all forthcoming semiconductors. It includes compound semiconductors, photonic semiconductors, and quantum communications semiconductors. Essentially, it seems that the US restrictions were designed to enable China to reach a certain level of technological advancement, but not to surpass it. The Chinese government strongly criticized the plan, denouncing it as a "Cold War approach with a zero-sum mentality."<sup>62</sup>

Another instance is the utilization of multilateral forums by the United States. The United States also employs the Wassenaar Arrangement (WA) as a means to impose restrictions on China. On August 12, 2022, the Bureau of Industry and Security (BIS) of the Commerce Department included gallium oxide-diamond (UWBG) semiconductors and electronic CAD software for integrated circuit development in its roster of technologies subject to export controls. The aforementioned technologies were incorporated into the Wassenaar Arrangement list, which was ratified in December 2021. Their inclusion aligns with the United States' strategic objective of restraining China's progress in semiconductor technology. In addition, the United States has been seeking to include advanced etching equipment necessary for the production of high-level NAND memory chips as a strategic item under the Wassenaar Arrangement. If this equipment is classified as an export-restricted item,<sup>63</sup> Samsung and SK Hynix, who produce NAND memory in China, may have challenges in manufacturing future-generation products in their Chinese fabs.

Moreover, following the United States' compelling endeavors, the Netherlands and Japan have announced their intention to impose export restrictions on DUV-related equipment by 2023. In the absence of widespread availability of sub-28nm process equipment and materials, particularly DUV equipment, in China, Korean semiconductor companies would face obstacles in producing semiconductors in China.

## South Korea's View

South Korea generally supports the United States' stance on China's semiconductor industry.<sup>64</sup> Advanced semiconductor technology is the core of intricate and evolving technologies that have potential military uses. Consequently, South Korea endorses the United States' endeavors to restrict the transfer of semiconductor technology to the countries of concern.<sup>65</sup>

China will persist in implementing an import substitution strategy and will utilize domestic products only if the disparity in technology between international and domestic products is not substantial. Korea's objective is to expand the technology disparity to a level where China is unable

---

<sup>61</sup> "FACT SHEET: CHIPS and Science Act Will Lower Costs, Create Jobs, Strengthen Supply Chains, and Counter China," White House Briefing Room, August 9, 2022, <https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/09/fact-sheet-chips-and-science-act-will-lower-costs-create-jobs-strengthen-supply-chains-and-counter-china/>.

<sup>62</sup> Matt Haldane, "US Chips and Science Act ramps up China semiconductor tensions with Taiwan (again) caught in the middle," *South China Morning Post*, August 20, 2022, <https://www.scmp.com/economy/article/3189695/us-china-chip-war-overheating>.

<sup>63</sup> Updated October 7 Semiconductor Export Controls, issued on October 17th, 2023, includes these devices.

<sup>64</sup> Author's analysis based on interviews with Korean government officials and industry representatives, including the Ministry of Trade, Industry, and Energy, Samsung, and SK Hynix.

<sup>65</sup> "The Spirit of Camp David: Joint Statement of Japan, the Republic of Korea, and the United States." The White House Briefing Room, August 18, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/08/18/the-spirit-of-camp-david-joint-statement-of-japan-the-republic-of-korea-and-the-united-states/>.

to substitute imported semiconductors with domestically produced chips. This goal exactly aligns with the United States' China strategy.

South Korea believes that the United States' export restriction regulations will impede the emergence of Chinese semiconductor capabilities in the short term. According to some estimates, South Korea would have already been surpassed by China in the NAND memory industry if the United States had not imposed recent export limits on China.<sup>66</sup>

However, the technical gap may be widened through two simultaneous means: by locking down Chinese capabilities and by 'running faster' (developing advanced technologies). by constraining Chinese capabilities and by accelerating innovation to develop cutting-edge technology. Korea asserts that the United States is too fixated on export rules as a means to curtail China's semiconductor production capacity, instead of strategizing on how to exploit the Chinese market, which happens to be the largest global consumer of semiconductors.

Currently, China represents 60% of the global demand for semiconductors.<sup>67</sup> This revolves around the domestic electronic device manufacturing industry, which heavily relies on semiconductors. Neither the United States nor its allies can easily substitute China in this context. The United States is home to several globally renowned fabless companies, however, China serves as the ultimate consumer of the chips they produce and sell. If China aggressively endeavors to substitute its need for semiconductors with domestically produced chips, Samsung, SK Hynix, and other companies would be unable to provide consistent cash inflows, so limiting their ability to allocate funds towards research and development and reorganize their supply chain. While the United States, Europe, and Japan have expressed their intentions to support these companies in their own markets, the subsidies they provide are insufficient to make up for the loss of the Chinese market.

We must consider why the semiconductor sector has become oligopolized. This occurred not just in the semiconductor manufacturing business, but also in the semiconductor manufacturing equipment and semiconductor components and materials industries. The answer is simple. Recent technological progress requires a substantial financial investment, which is beyond the means of most enterprises. Put simply, maintaining a consistent influx of funds is equally crucial to preventing the expansion of the technical gap, which is vital for one's survival. The perception of economic security threats varies among different countries. Nations' economic security interests will differ, especially in the semiconductor industry, where there is a distinct division of labor. The United States, known for its expertise in design and equipment, and South Korea, known for its proficiency in manufacturing, will have contrasting perspectives on semiconductor risk management. Now is the moment for the United States and South Korea to develop a win-win strategy centered around a comprehensive understanding of the semiconductor industry

---

<sup>66</sup> Jaeyoung Lee, "미중 공급망 경쟁과 양안 갈등 속 한국의 경제안보 외교 [Korea's Economic Security Diplomacy in the midst of US-China Supply Chain Competition and Cross-strait Conflict]," Korea institute for National Unification, January 20, 2023, <https://www.kinu.or.kr/pyxis-api/1/digital-files/d6c50cd7-8361-41fa-8b57-870ec8b93d43>; Jeong Se-jin, "[불붙은 미중 반도체 전쟁] ③ 중국 견제나선 미국의 히든카드는 통할까 [The U.S.-China Semiconductor War on Fire ③ Will the U.S. Hidden Card Work in Control of China?]," *OpinionNews Korea*, <https://www.opinionnews.co.kr/news/articleView.html?idxno=48896>; Wonho Yeon, "U.S.-China Strategic Competition and Economic Security Strategy of Korea," (article presented at the Wilson Center Event: Between the Eagle and the Dragon: Challenges and Opportunities for South Korea in the US-China Competition, Washington, DC, November, 2022), <https://www.wilsoncenter.org/event/between-eagle-and-dragon-challenges-and-opportunities-south-korea-us-china-competition>; Martin Chorzempa, "How U.S. chip controls on China benefit and cost Korean firms," Peterson Institute for International Economics, *Policy Brief*, July 2023, <https://www.piie.com/publications/policy-briefs/how-us-chip-controls-china-benefit-and-cost-korean-firms>.

<sup>67</sup> Foreign Policy, *Semiconductors and the U.S.-China Innovation Race*, (Washington, DC: FP Group, February 16, 2021), <https://foreignpolicy.com/2021/02/16/semiconductors-us-china-taiwan-technology-innovation-competition/>; Author's calculation based on UN COMTRADE data also supports that China (including Hong Kong) imports 60 percent of all chips exported in the world every year.

## Building Trust in Supply Chain Networks

Carol Chong  
Ministry of Trade and Industry

In the wake of increasing supply chain disruptions, governments and businesses need to build trusted supply chains to manage and mitigate the negative impacts of disruptions. Singapore believes in working with the industry and international partners to strengthen global supply chain networks.

### Challenges to the Global Economy

The nature of global trade is changing. Following a rebound of trade in 2021, year-on-year growth in trade is slowing.<sup>68</sup> The share of global trade in GDP, which gauges the importance of international trade in relation to overall GDP, has been on an overall downward trend since it peaked in 2008. The WTO has also observed an increase in trade concerns particularly on measures referring to “national security” in 2022.<sup>69</sup>

Disruptions have been on the rise, and these may further impact trade flows. According to McKinsey, disruptions lasting more than a month are expected to occur every 3.7 years.<sup>70</sup> These disruptions can be broadly categorised as climate-related, geopolitical, technological, as well as operational related. The January 2023 edition of the Global Value Chain Barometer found that risk events have increased significantly over the course of 2022. Climate-related risks spiked by 146%, while geopolitical risks increased by 110% compared to 2021.<sup>71</sup> In particular, geopolitical disruptions are prompting governments to introduce policies that would require companies to reassess and reconfigure their supply chains to countries that are part of an alliance or network – a phenomenon popularly known as ‘friendshoring’.

For many companies, geopolitical risks are at the top of mind as they could lead to outsized impact on their global supply chains. In a Gartner survey of global supply chain executives, 25% of respondents identified with mitigating geopolitical risk as a key driver in calibrating their manufacturing capacity and networks.<sup>72</sup> Aside from friendshoring, governments have also introduced policies to support reshoring or nearshoring as strategies to secure their critical supply chains by reducing overdependence on foreign imports. However, such policies may have unintended impact on the overall resilience of global supply chain flows. In a 2023 report by the National Center for APEC, it was noted that policies which restricted healthcare firms from accessing established sourcing, production, and distribution markets hindered the efficient flow of healthcare supply chains due to the limited number of highly specialised suppliers.<sup>73</sup>

Companies that tried to work around by re-routing and sourcing via intermediaries ended up with greater supply chain visibility challenges.<sup>74</sup> The WTO found that since the start of the Russia-Ukraine War in February 2022, trade within hypothetical ‘blocs’ of similar foreign policy has grown at an average of 4% to 6% more than trade between blocs.<sup>75</sup> Such supply chain trends will have a larger impact on smaller, open-market economies due to their heavy reliance

---

<sup>68</sup> WTO, “World Trade Statistical Review 2023”.

<sup>69</sup> WTO, “World Trade Report 2023 – Re-globalization for a secure, inclusive and sustainable future”.

<sup>70</sup> McKinsey Global Institute, “Risk, resilience, and rebalancing in global value chains”, August 2020

<sup>71</sup> WEF, “Navigating global disruption: introducing the Global Value Chain Barometer”, 13 Jan 2023

<sup>72</sup> Gartner, “2023 Trends in APAC Supply Chain Highlight Manufacturing Expansion”, 4 Sep 2023.

<sup>73</sup> National Center for APEC, “The State of Healthcare Supply Chains in APEC”, July 2023.

<sup>74</sup> Financial Times, “How rising conflict is reshuffling global supply chains”, 13 Oct 2023

<sup>75</sup> WTO, “World Trade Statistical Review 2023”.

on open trade. Supply chain disruptions are estimated to cost ASEAN businesses US\$17 billion annually from lost sales.<sup>76</sup>

## **Building Trust in Global Supply Chain Networks**

Against this volatile backdrop, it is even more pertinent that governments seek to instil greater trust in global supply chains. Trust has primarily been understood in the supply chain context as fulfilling contractual obligations on time, with the right quantity and quality. Lately, the concept has expanded to include transparency, i.e. more open communication and visibility of supply chains.

From Singapore's perspective, trust is essential for the smooth functioning of global supply chain networks as it creates reliability and predictability, which provide companies the assurance of keeping their operations running even during unexpected crises. Trust that is built on a rules-based multilateral trading system, whereby international trade is conducted according to transparent, non-discriminatory and impartial rules agreed upon by WTO members, creates a predictable environment for businesses internationally. Trust can be tested but also strengthened in times of crisis when a country honours its commitments to businesses and its trading partners.

## **Singapore's COVID-19 Experience**

By virtue of Singapore's geographical and market size, Singapore is naturally predisposed to imports. Hence, it is no surprise that Singapore is an advocate of promoting greater trust in global trade. Efficient connectivity and unimpeded flow of trade is integral to the survival and success of Singapore's economy. Restrictions on the movement of people, as well as stoppages to production and logistics flows during the COVID-19 pandemic disrupted the supply of some goods and services. Many countries in the world experienced severe supply shortages of healthcare supplies, equipment, food and daily necessities. Some of the supply shortages that caught the world by surprise included items like wooden pallets and toilet paper. Singapore was not spared of these supply disruptions although comparatively, the situation was more manageable here.

Singapore's position as a strong business and logistics hub helped to mitigate the impact and to recover from the disruptions. Singapore tapped on its global network of suppliers to source for alternative food sources. In addition, throughout the pandemic, Singapore maintained its connectivity to the world by keeping the ports and land links open. In April 2020, Singapore initiated a joint declaration with port authorities from 19 countries to keep ports open for maritime trade.<sup>77</sup>

As the one of the world's leading transshipment ports, PSA port provided the needed connectivity during the height of COVID-19 pandemic to bring critical supplies efficiently back to Singapore. PSA port played the role of a 'catch-up' port as they helped businesses make up for the lost time in shipping through expediting the handling of time-sensitive cargo. Singapore's national air carrier, Singapore Airlines, also played a pivotal role in providing expedient transportation solutions for people and goods during the pandemic. Singapore's strong connectivity supported the likes of global manufacturers, such as 3M, which continued to fulfil global demand for essential medical supplies amidst a global shortage of surgical masks and personal protective equipment.

## **Approach towards Supply Chain Resilience**

---

<sup>76</sup> CIPS, "What is costing ASEAN businesses \$17bn a year?", 26 Apr 2023.

<sup>77</sup> MPA Singapore, "20 Port Authorities Signed Declaration to Keep Ports Open to Seaborn Trade to Support Fight Against the COVID-19 Pandemic", 24 Apr 2020.

The pandemic exposed the vulnerabilities in Singapore's supply chains, particularly Singapore's ability to secure essential supplies such as food and medical supplies. Since then, Singapore has doubled down on several key strategies to mitigate the impact of short-term supply chain disruptions. The first is reducing import concentration risk through greater diversification. Diversification of sources provides Singapore the flexibility to adapt and shift its supply chains, ensuring a reliable supply of essential supplies. Singapore trades with a wide range of trade partners, and the number of import sources has grown from 157 countries in 2010 to 241 countries in 2022. More notably, Singapore's food sources are now more diversified. As of 2022, Singapore imports more than 90% of its food from 183 countries,<sup>78</sup> up from 140 countries in 2004.<sup>79</sup>

The Singapore Government is also supporting the relevant and appropriate use of stockpiling and domestic production. The Government is considering maintaining strategic reserves of selected essential supplies that are vulnerable or at risk of supply shocks. It is also supporting domestic production that would reduce Singapore's dependence on imports during supply chain disruptions. To promote greater food resilience, Singapore has set an ambitious "30 by 30" goal to produce 30% of Singapore's nutritional needs locally and sustainably by 2030. These include a S\$60 million Agri-Food Cluster Transformation Fund to support local farms in adopting sustainable technology and advanced farming systems, the redevelopment of Lim Chu Kang into a high-tech agrifood zone, as well as encouraging R&D in sustainable urban food production, future foods, and food safety science and innovation.<sup>80</sup> Nonetheless, there are limits to how much Singapore is able to produce domestically, given the country's size constraints.

## The Role of Partnerships

The key strategies mentioned above are about risk and disruption mitigation. For economies to thrive during peacetime and prolonged crises, governments and businesses need to foster greater trust and collaboration among key stakeholders within the global supply chain network. Public-private partnerships bring together the expertise of the private sector to address supply chain vulnerabilities. Several of Singapore's stockpiles, such as the Rice Stockpile Scheme, are done in partnership with the private sector. Such partnerships help ensure that the stockpiles are refreshed and economically sustainable. Industry partnerships could also result in the joint development of new systems and capabilities, such as digital supply chain solutions and early warning systems. In June 2022, the Government and business leaders established the Singapore Trade Data Exchange (SGTraDex), a secure common data highway to facilitate trusted and secure data exchange between supply chain ecosystem partners which could help provide companies with greater visibility of their supply chain network and trade flows.

Collaborative activities foster greater trust between countries, but also with the industry as it provides them some level of predictability, allowing economies to thrive in peacetime and prolonged crises. These can be pursued under partnerships with other like-minded countries with the following objectives and focus:

1. Firstly, the smooth and open flow of trade. The COVID-19 pandemic highlighted how export controls and movement restrictions could impede the flow of trade. Hence, Singapore signed joint commitments with several countries, including Australia, China, New Zealand, Japan, South Korea, and within ASEAN to keep trade lanes open during the pandemic. Singapore is also part of the Indo-Pacific Economic Framework for

---

<sup>78</sup> MSE Singapore, "Speech by Senior Minister of State Dr Koh Poh Koon – Food and Climate Resilience", 2 Mar 2023.

<sup>79</sup> SFA Singapore, "Our Singapore Food Story", last updated on 26 Sep 2023.

<sup>80</sup> SFA Singapore, "Media Release: New \$60 million fund to support transformation and growth of local agri-food sector", 4 Mar 2021.

Prosperity (IPEF) Supply Chain Agreement, which builds on our collective experience from COVID-19 to minimise unnecessary restrictions and impediments to trade. This is the world's first multilateral supply chain agreement to make supply chains more resilient.

2. Secondly, partnerships support diversification efforts. This would allow Singapore to adapt when a source is disrupted, and to work with trusted partners to ensure the flow of supplies.
3. Thirdly, the expansion and strengthening of connectivity links. By expanding physical and digital connections for resources and markets, it reduces the risk of disruptions while enhancing the ability to respond. Singapore is investing in new and existing infrastructure as well, such as the Tuas Port, which will handle 65 million TEUs when fully operational in the 2040s.<sup>81</sup> This development will further reinforce Singapore's status as a leading logistics and connectivity hub.
4. Lastly, developing new systems and capabilities. Greater coordination and ways of working are required to address unexpected disruptions. One such example is the establishment of the Crisis Response Network in the IPEF Supply Chain Agreement. The Network aims to facilitate timely exchange of information between the members on imminent disruptions and to coordinate countries' policy responses.

In this regard, Singapore and The Republic of Korea (ROK) are both open economies that can partner each other to uphold the multilateral rules-based trading system, and encourage greater trust and resilience in global supply chains. Singapore and ROK share a close bilateral relationship. The ROK's first free trade agreement with an ASEAN state was with Singapore, through the Korea-Singapore Free Trade Agreement (KSFTA), which entered into force in 2006. The Korea-Singapore Digital Partnership Agreement (KSDPA), the first digital economy agreement concluded between two Asian countries, entered into force in January 2023. The KSDPA sets common rules and standards that enhance digital trade, and ensures that transfer of data is not prohibited for legitimate business purposes. Singapore and ROK are also part of regional agreements including the ASEAN-ROK Free Trade Agreement, the Regional Comprehensive Economic Partnership (RCEP), as well as IPEF, which is the first multi-country arrangement to strengthen supply chain resilience and connectivity, and to collectively explore innovative ideas to enhance supply chain resilience in areas of mutual interest.

## Conclusion

The global economy is undergoing unprecedented changes to global trade and the economic environment. These call for both governments and businesses to act with agility and innovativeness. Whilst Singapore has put in place strategies to address the supply chain vulnerabilities, these are meant to mitigate the impact of short-term supply chain disruptions. Resilience provides the lead time for the Government to restore the people's livelihoods and the economy to rebound and grow. True long-term supply chain resilience would come from greater connectedness with other countries and not the lack thereof. Hence, Singapore would continue to pursue industry and international partnerships to bring together ideas, expertise, and resources.

---

<sup>81</sup> MOT Singapore, "Press Release: Enhancing Singapore's Connectivity; Securing Our Future", 21 Aug 2022.



MANASSEH MEYER

CENTRE ON ASIA  
AND GLOBALISATION

469A Bukit Timah Road  
Level 10, Tower Block  
Singapore 259770  
[cag@nus.edu.sg](mailto:cag@nus.edu.sg)