

New Convergences in EU-ROK Economic Security Relations





edited by Aurelio Insisa

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Introduction

Both the Republic of Korea (ROK) and the European Union (EU), along with its member states, are confronting a complex, challenging, and increasingly insecure global security environment shaped by the aftermath of the Covid-19 pandemic, Russia's invasion of Ukraine, and great power competition between China and the United States. To withstand the pressure from significant economic and geopolitical shifts, liberal democratic middle powers have intensified their commitment to multilateralism and international cooperation with like-minded countries. It is at this historic juncture that the ROK and the EU have a crucial opportunity to enhance their security cooperation to counteract disruptive tendencies that threaten their economic stability and security. Against this backdrop, and following the workshop titled "New Convergences in EU-ROK Economic Security Relations" held at the Istituto Affari Internazionali (IAI) in Rome on 30 January 2024, and supported by the Korea Foundation, four scholars – two from the EU and two from the ROK – were invited to produce policy-oriented papers on economic security issues concerning the ROK-EU relationship, aiming ultimately to advance relations between the two sides.

The first paper, "European Union–Republic of Korea Cooperation on Economic Security: Opportunities, Limits, and Challenges" by Françoise Nicolas, focuses on the EU's difficulty in shifting focus from its traditional concerns of economic competitiveness and efficiency to broader security concerns. Nicolas describes this shift as particularly challenging for the EU due to potential differences in security perceptions across its member states and because its economic model has relied on an open, intervention-free economy. Consequently, the EU's economic security strategy places greater emphasis on protecting its economy rather than enhancing competitiveness through industrial policy measures. Nicolas positions the ROK as the ideal partner for implementing a new economic security strategy, citing the existing bilateral mechanisms between Brussels and Seoul that address economic security issues. The second paper, "South Korea's Challenges and Opportunities in the Indo-Pacific Economic Security" by Lim Sojin, assesses the critical importance of Indo-Pacific trade routes for both the EU and the ROK. Both entities heavily rely on the export sector and require critical imports of materials and energy resources. Lim argues for deepening comprehensive cooperation between the EU and the ROK to ensure the security and openness of these trade routes and strategic chokepoints. This is essential amidst growing great power competition between China and the US, Beijing's assertiveness in maritime and territorial disputes, and the resulting risks of economic dependency on Beijing for Brussels and Seoul. Lim proposes that the ROK and the EU should jointly advance their Indo-Pacific strategies to effectively address challenges posed by China.

The third paper, "Russia's Invasion of Ukraine, Global Polarisation and Yoon's Security Strategy" by Matteo Dian, examines how Russia's invasion of Ukraine and the intensifying US-China rivalry have deepened political and strategic divisions in Northeast Asia and the broader Indo-Pacific region, including the Korean peninsula. Dian shows how these developments intersect with the Yoon administration's proactive turn in foreign policy which has aimed at further strengthening its alliance with the United States and investing in multilateral security cooperation both in the triangular framework with Washington and Tokyo. Against this backdrop, cooperation with NATO and specifically with EU member states in the defence industrial sector has appeared as a promising avenue for enhancing the ROK's position at an international level. From this baseline, Dian identifies cybersecurity, supply chain resilience, and technological cooperation in key industries as crucial steps for enhancing cooperation between the ROK and the EU in the near future.

Finally, Choi Sunkung's paper, "Supply Chain Risks in EU-South Korea Relations: Semiconductor Industries", examines the causes, effects, and implications of the supply chain crisis that erupted during the Covid-19 pandemic, from the perspective of EU-ROK economic relations. Choi shows how both sides have recognized the importance of addressing supply chain vulnerabilities and have initiated collaborative efforts in the production of semiconductors. Against this backdrop, Choi suggests that the two sides should cooperate in enhancing supply chain resilience, investing in research and development, and fostering technological cooperation to ensure economic stability and navigate future challenges.

European Union-Republic of Korea Cooperation on Economic Security: Opportunities, Limits and Challenges

by Françoise Nicolas

Over the past few years, national "economic security" has become a buzzword in the lexicon of global administrations. This is a broad concept encompassing a set of interconnected issues, including supply-chain resilience, anti-coercion measures and strategic autonomy. Although the concept remains relatively fuzzy, it reflects an increasingly common concern for governments and business. Indeed, in a context of heated great power rivalry and geopolitical tensions, security concerns have become front and centre, and now tend to prevail over considerations of economic efficiency. This change in context is particularly challenging for the European Union, first because of the potential differences in security perceptions across the twenty-seven member states, and secondly because its economic model has been based on an open, intervention-free economy. While the quest for economic security is, by definition, a national (or EU) concern, there may be scope for cooperation in this domain between like-minded countries. The objective of the paper is to examine whether and how the EU and the Republic of Korea (ROK) may join forces to enhance their respective economic security.

The paper starts by providing a brief account of the reasons for the rise of economic security concerns. As a second step it examines the EU's response, emphasising the paradigm shift in the way of thinking of the European Commission and highlighting the objectives and instruments of the Commission's economic security strategy. The concluding section identifies the potential for cooperation with like-minded partners such as South Korea and lists recommendations as to the way forward.

1.1 The rise of economic security concerns

Cross-border supply chains, as one of the main features of a globalised economy, were long perceived unanimously as positive developments. This organisation of production, based on the full exploitation of comparative advantages, led to the so-called fragmentation of production and the emergence of global value chains (GVCs) that could shift from one place to another based on comparative advantages. GVCs used to be based on efficiency. However, in a context of heated great-power rivalry, security concerns have changed the calculus. Over the past few years, the need to safeguard national "economic security" has become a widely shared mantra.¹

1.1.1 The discontent with globalisation

The emergence of economic security as a major concern can be accounted for by two main developments, which reflect an overall disappointment with economic globalisation as it has developed so far. Until recently, globalisation was deemed to be economically optimal – because it was based on cost-efficiency – and politically desirable – because it was thought to contribute to peace in international politics.² These two points, however, are increasingly challenged.

First, doubts started to emerge about the unequivocal advantages of globalisation as early as the late 1990s. Public authorities realised that globalisation was often associated (at least in developed economies) with deindustrialisation, the hollowing out of the manufacturing basis, and jobs lost to low-wage countries,³ all of this potentially a source of social costs. There

¹ Jaichul Heo, "Geopolitical Risk in the Era of U.S.-China Strategic Competition and Economic Security", in *KIEP World Economy Brief*, Vol. 12, No. 35 (30 August 2022), https://www.kiep.go.kr/galleryDownload. es?bid=0007&list_no=10308&seq=1.

² The idea that trade is an agent of peace dates back to Montesquieu, who argued in *The Spirit of Laws* (*De l'esprit des lois*, 1748) that "The natural effect of commerce is to lead to peace. Two nations that trade with each other become reciprocally dependent; if one has an interest in buying, the other has an interest in selling, and all unions are founded on mutual needs." Montesquieu, *The Spirit of the Laws*, translated and edited by Anne M. Cohler, Basia Carolyn Miller and Harold Samuel Stone, Cambridge, Cambridge University Press, 1989, p. 338.

³ In the case of France for instance, there was a sharp drop in industrial employment from about 6

were losers as well as winners of globalisation, but the gains of the latter were supposed to compensate the former and economists tended to downplay the losses. As a result, the negative side-effects of globalisation were vastly underestimated.

Initially, little attention was paid to such considerations by the business sector, for which economic and cost considerations prevailed. Over time, however, these actors found out that fragmented production processes were prone to disruptions that could generate vulnerabilities, and potentially raise costs. To be sure, so long as the disruptions were temporary (as when they are triggered by some form of natural disaster), they were not perceived as all that serious, were guickly brushed aside and did not result in a reorganisation of the production processes. The limited changes induced by the Fukushima nuclear accident in Japan and the flooding in Thailand in 2011 are good illustrations of this line of reasoning. The Covid-19 pandemic, and the magnitude of the disruptions in supply-chains associated with the lockdowns imposed in response, resuscitated and amplified such concerns. The crisis laid bare the vulnerabilities resulting from vertically integrated supply chains and called for securing them, be it through reshoring, diversifying suppliers or relocating production in what were deemed safer places. As a result, there was a gradual convergence of views between the public and private sectors about the downsides of globalisation and the costs in terms of security of the supply-chains. It is worth stressing, however, that the Covid-19 crisis acted as an accelerator, while the real drivers of change had been gradually building up over time.

A second, and probably more important, development is the realisation that such disruptions in the supply-chains can also be the result of deliberate and malicious manoeuvring. The conviction that globalisation would protect against conflict because the tight interdependencies associated with it would act as powerful deterrents, became deeply questioned.⁴ In a context of intensifying technological and economic rivalry, the security of supply-chains, which was almost exclusively perceived as a technical problem (to be solved by

million in 1970 to merely 3,1 million in 2019.

⁴ The experience of the first World War should have led us to be more cautious or less hopeful. Before the 1st World War economic interdependencies were quite deep but this did not prevent the war from breaking out.

companies), has become a geopolitical problem. Far from being a guarantee for peace, globalisation can be turned into an instrument of war, because economic interdependencies can be easily weaponised. The perception of a rising risk of weaponisation of interdependence results from the combination of the rise of China and the intensification of the China-US rivalry. Examples of such weaponisation can be observed in many countries in the Asia-Pacific such as Japan, South Korea and Australia, and even within the EU, with Lithuania as a case in point. Overdependence on China is increasingly perceived as a source of concern and even a threat. In this context, companies have become wary of supply-chain overreliance on China – 'the world's factory' – and are either implementing or considering "China plus one" strategies aimed at building production across multiple markets.

These various developments mean that the 'economics trumps geopolitics' era may have come to an end. The decisions to relocate production and reorganise value-chains are no longer the result of pure economic calculations. Countries and companies now need to recalibrate their strategies to adapt to this new context, factoring in geopolitical considerations. Some technical changes such as digitalisation may also make previously costly adjustments possible.

1.1.2 Defining economic security

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Economic security is an imprecise term that refers to the shoring up of national interests from an economic perspective.⁵ Broadly defined, an economic security strategy aims at preserving national sovereignty, in other words a country's ability to define or shape its own fate, and the well-being of the population. As a result, an economic security strategy can be expected to be two-pronged. One pillar concerns threat detection and suppression, aiming at protecting the country against foreign predatory moves. The other pillar, industrial policy, is aimed instead at promoting endogenous economic capacities through a strategy of industrial reconquest and the creation of competitive poles.

⁵ David E. Adler, "What the EU Doesn't Get about Economic Security", in *Foreign Policy*, 30 October 2023, https://foreignpolicy.com/?p=1128292.

1.2 The EU and economic security

The United States, Japan and now the EU have all in recent times embraced 'economic security' although they may differ in their definition of the term. What sets the EU apart from the United States and Japan is its reluctance to embrace industrial policy as a key component of its economic security strategy. There are two major hurdles to the development of a full-fledged EU's economic security strategy. The first hurdle is the ideology on which the single market has developed. The second hurdle is the distribution of powers between the European Commission and the individual member states.

1.2.1 The need for a paradigm shift in the EU

The EU has been for a long time a resolute defender of a liberal approach to trade. Open, rules-based trade has always been at the heart of its approach to international trade. For this reason, the EU has always been favourable to globalisation. Moreover, EU competition law has been built to prevent imbalances within the single market, thus calling for as little state intervention as possible in support of industrial development.⁶ In particular, the EU favours an anti-trust logic over competitiveness concerns, as was exemplified by the Siemens-Alstom case (2019), when the Commission prohibited Siemens' proposed acquisition of Alstom in the name of customer protection under the EU Merger Regulation. In line with this approach, state aids were very tightly controlled by the Commission. Placing restrictions on trade for political and security purposes therefore was not part of the EU's toolkit. It is worth noting at this stage that, unlike trade, measures of industrial policy do not fall into the remit of the Commission but belong to the individual member states' competencies.

Yet, with technology at the heart of current competitive dynamics, the need for some form of industrial policy has become increasingly accepted. Faced with these new challenges, the EU has been forced to modify its approach

⁶ Mathieu Duchâtel, "Economic Security, the Missing Link in EU-Japan Cooperation", in *Institut Montaigne Policy Papers*, April 2023, https://www.institutmontaigne.org/en/publications/economic-security-missing-link-eu-japan-cooperation.

to industrial policy and state support to strategic sectors.⁷ First the so-called "Important Projects of Common European Interest" (IPCEI) that jointly mobilise companies and member states have been revived.⁸ In IPCEI, projects that meet a set of criteria are allowed an exemption from the usual regulations against member state aid. More specifically, IPCEI provisions allow for direct support to be given to companies seen as vital to European political and industrial objectives. Such a departure from the traditional liberal approach is justified by the fact that the support provided to promote the execution of an IPCEI is deemed compatible with the internal market.⁹

Key changes in the international environment (the Covid-19 pandemic, China's rising economic assertiveness, the rising Sino-US economic and technological rivalry, US industrial policy initiatives such as the Inflation Reduction Act (IRA) and, more recently, Russia's aggression of Ukraine) have converged to lead the EU to further adjust its approach. One of the first move made by the Commission was the announcement of the EU Chips Act in February 2022, in the wake of the Covid-19 pandemic, the semiconductors production crisis in Taiwan between 2020 and 2021 and the manifest EU's vulnerability exposed by it. The objective of the Chips Act is to stimulate the production of semiconductors within the union's territory to better respond to a rapidly growing global demand for chips.

1.2.2 The EU's economic security strategy: Derisking as a priority

In June 2023, the European Commission and the High Representative for Foreign Affairs and Security Policy published a Joint Communication on a European Economic Security Strategy that focuses on minimising risks among certain economic flows in the context of increased geopolitical tensions and accelerated technological shifts, while preserving maximum levels of economic openness and dynamism.

⁷ Elvire Fabry, "Sécurité économique: l'Europe est-elle prête à changer de paradigme?", in *Institut Jacques Delors Blog*, 16 October 2023, https://institutdelors.eu/publications/securite-economique-leurope-est-elle-prete-a-changer-de-paradigme.

⁸ Although present in European treaties since 1957, the IPCEI provision had been little used until recently.

⁹ It is worth stressing that the IPCEI rules ensure that the EU economy at large benefits from the supported investments and limit potential distortions to competition.

It aims at (1) "promoting the EU's competitiveness, by strengthening the Single Market, supporting a strong and resilient economy, investing in skills and fostering the EU's research, technological and industrial base"; (2) "protecting the EU's economic security through a range of existing policies and tools, and consideration of new ones to address possible gaps", and (3) "partnering with the broadest possible range of partners to strengthen economic security".¹⁰ This strategy aims essentially at "derisking", in other words at reducing the vulnerabilities resulting from excessive dependencies.

Although the definition of what may put economic security at risk is very broad, the strategy identifies four categories of risks that need to be addressed as a matter of priority: risks to the resilience of supply chains; to the physical and cyber security of critical infrastructure; for technology security and of technology leakage; and of weaponisation of economic dependencies or economic coercion. A list of "critical technologies" provided by the EU should help shape export controls and outbound investment screening, but it suggests that derisking will not be easy.¹¹ Such an approach would be particularly difficult – and risk-enhancing – in the case of China, given Beijing's crucial role in many manufacturing sectors, in particular those related to green and clean technologies.¹² For example, derisking from China may delay the EU's decarbonisation efforts.

Following the communication on economic security strategy issued in June 2023, the European Economic Security Package (EESP) was approved in January 2024. It aims at reducing EU's dependence on products and investments from third countries (with a particular focus on China). To that end, it seeks to enhance the EU's significant trade protection arsenal and is a further indication of the EU's determination to seek additional means of protecting EU companies from unfair external competition.

¹⁰ European Commission, *An EU Approach to Economic Security*, 20 June 2023, https://ec.europa.eu/ commission/presscorner/detail/en/IP_23_3358.

¹¹ Agathe Demarais, "What the EU List of Critical Technologies Tells Us About Its De-Risking Plans", in *ECFR Commentaries*, 11 October 2023, https://ecfr.eu/?p=112993.

¹² Also, isolating China may be a risky strategy as China may be pushed to behave even more aggressively.

1.2.3 The instruments of EU's economic security strategy

The EU's economic security strategy implies a sounder deployment of existing tools – such as foreign direct investment (FDI) screening and export controls – and the adoption of new ones in order to protect the EU from economic security risks.

A first set of instruments are aimed at tackling unfair competition and economic distortion from third countries, among which the anti-coercion instrument (ACI), export controls and inbound and outbound investment screening mechanisms. Of note is the ACI that is designed to act as a deterrent against any potential economic coercion through tariffs or other trade restrictions. Its objective is to shield the EU and member states from coercive pressure by third countries by providing a legal basis for an expedited procedure for the EU to take anticoercion countermeasures, including the ability to impose new customs duties or additional charges on the import or export of goods and services. A second set of instruments are aimed at bolstering EU competitiveness, with the EU Chips Act as a case in point. Another such example is the Net Zero Industry Act, an initiative stemming from the Green Deal Industrial Plan that aims to scale up the manufacturing of clean technologies in the EU. The Critical Raw Materials Act seeks to reduce the EU's dependence on single third-country suppliers and promote circularity. With regards to financing, the new Temporary Crisis and Transition Framework for state aid extends,¹³ in an unprecedented way, the relaxation of controls on financing or tax credits granted by national authorities to their economic players in response to the pandemic, and more recently to the war in Ukraine. The initial objective was to facilitate and accelerate Europe's green transition,¹⁴ but this approach is set to expand well beyond the energy sector. Also, industrial alliances and the IPCEI now encompass many sectors, including batteries and microelectronics. Although these projects primarily

¹³ European Commission, Amendment to the Temporary Crisis and Transition Framework for State Aid Measures to Support the Economy following the Aggression against Ukraine by Russia (C/2023/8045), 21 November 2023, https://eur-lex.europa.eu/eli/C/2023/1188/oj. See also European Commission DG Law website: Temporary Crisis and Transition Framework, https://competition-policy.ec.europa.eu/ node/712_en.

¹⁴ In January 2024, the Commission has approved a 902-million-euro German State aid to support Northvolt in the construction of an EV battery production plant. This was the first individual aid to be approved under the Temporary Crisis and Transition Framework.

focus on research and development (R&D) activities, they all contribute to enhance the EU's economic security.

For the time being, however, instead of a pan-European funding solution, national spending for industrial policy still dominates. This is due to the way the EU is organised and competencies are distributed between the Commission and individual member states. But there are also diverging views within the EU, with France (not surprisingly) showing more support to state intervention and financial support to technological development.¹⁵ EU member states still tend to be reluctant to engage in a bold financial strategy that would bolster the union's technological and industrial capabilities. The failure of the Sovereignty Fund proposed by Commission President Ursula von der Leyen in her State of the Union address in September 2022 is a testament to this state of affairs. The Sovereignty Fund would have enabled the European Commission to co-fund early-stage, capital-intensive critical technology projects, but the proposal was never turned into reality. Following this debacle, in June 2023 the Commission proposed a new platform to improve investment in strategic technologies in the 2024 to 2027 period.¹⁶ Called the Strategic Technologies for Europe Platform (STEP),¹⁷ it is intended to direct funding toward projects that contribute to European competitiveness in strategic technologies and secure value chains. This platform is a downsized version of the proposed Sovereignty Fund and a far cry from the original ambition. The mobilised amounts are far from being close to what would be needed.¹⁸ Moreover, out of the 160-billioneuro investments earmarked for strategic industries under STEP, only 10 billion euro would be new funds, while the rest would come from existing funds or private capital.

¹⁵ France embraced the concept of economic security a long time ago. The first concerns about "economic intelligence" were expressed in the Martre Report in 1994, followed a decade later (2003) by the Carayon Report that highlighted the linkages between economic security, economic intelligence and national security. As a result, the Economic Security and Strategic Information Service (SISSE) was established in 2016 within the Ministry of Economy.

¹⁶ European Commission, *Proposal for a Council Regulation amending Regulation (EU, Euratom) 2020/2093 Laying Down the Multiannual Financial Framework for the Years 2021 to 2027 (COM/2023/337), 20 June 2023, https://eur-lex.europa.eu/legal-content/en/TXT/?uri=celex:52023PC0337.*

¹⁷ Nathan Crist, "How STEP Investment in Strategic Technologies Could Help EU Regions Catch Up", in *Global & European Dynamics*, 8 November 2023, https://globaleurope.eu/?p=33659.

¹⁸ The European initiative pales in comparison with similar initiatives like the US Inflation Reduction Act (IRA).

In line with the United States and Japan, the EU's economic security strategy has integrated elements of national security. Overall, however, the EU's economic security strategy appears to be relatively imbalanced, with a heavier focus placed on defensive measures (the first of the three "Ps") rather than on offensive (industrial policy-like) measures.

1.3 Scope for cooperation on economic security

1.3.1 General considerations on the challenges of bilateral cooperation

International cooperation on economic security is not an easy task. First because of the potential differences in the definition of economic security between countries, secondly because of the close to oxymoronic nature of the term, and thirdly because of the differences in risk assessments.

In the case of the ROK and the EU, the perceptions of economic security risks are indeed quite different, with the former putting an almost exclusive focus on China, while the latter has a broader view based on the conviction that protecting against risks is not country-specific. This may be especially clear in the case of investment screening, which is about protecting "strategic assets" that are not exclusively threatened by China. Another point worth noting is that the EU's economic security strategy is still recent and very much work in progress, while the ROK's strategy has been under discussion for some time already. The two partners have also been going through very different trajectories in terms of industrial policy. Seoul has been traditionally more reliant on government intervention, while the EU remains reluctant to take measures that may be perceived as "anti-market". These differences in economic and policy "cultures" make the discussion on economic security a complex one.

Lastly, given Seoul's heavy reliance on the alliance with the United States, especially under the Yoon Administration, the EU does not appear to be part of the equation when it comes to cooperation on economic security. By contrast,

Seoul is perceived by the EU as a promising partner. This is because the EU considers free trade agreements (FTAs), such as the one signed with the ROK in 2009, as one of the most effective instruments to improve European resilience and preserve supply-chain security by allowing for the diversification of sources of supply.

1.3.2 The way forward

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Partnering is one of the three pillars of the EU's economic security strategy. There is thus scope for cooperation with South Korea in this domain, and even more so since the two share the same concerns and have been close partners for a long time. As put by Yoon Soongu, former ROK ambassador to Belgium, Luxembourg, the EU, and NATO, Seoul and the EU are "born to be the best likeminded partners, united by the common values and principles of democracy, market economy and the rule of law, as well as a shared commitment to global peace and prosperity."¹⁹ ROK-EU cooperation could advance by making the best of existing mechanisms and at the same time setting up new ones. Among the former, the EU Chips Act plans cooperation with the United States, Japan, Singapore, the ROK and Taiwan on standardisation, talent development and information exchange on chokepoints. Further efforts related to economic security could be pushed in the context of the ROK-EU FTA and the recently signed bilateral digital partnership. Although new issues are now almost systematically included in FTAs negotiated by the EU, (such as sustainable development or labour rights considerations), rules on digital services and e-commerce were rather thin in these agreements. Since 2021, the EU has developed a 'model' digital chapter that advances its own digital trade regulatory agenda, which has only been included in the most recent deals.²⁰

¹⁹ Alexandra Brzozowski, "Ambassador: EU and South Korea Born to Be Best Like-Minded Partners", in *Euractiv*, 5 May 2021, https://www.euractiv.com/?p=1600744. See also Sohyun Zoe Lee and Françoise Nicolas, "Trade", in Ramon Pacheco-Pardo (ed.), *South Korea-EU Cooperation in Global Governance*, KF-VUB Korea Chair Report, Brussels, December 2021, p. 60-73, https://brussels-school.be/sites/default/ files/Korea%20Chair%20Tecember%20December%202021-ROK-EU%20cooperation.pdf.

²⁰ Françoise Nicolas, "The EU, the Indo-Pacific and the US-led IPEF: Which Way Forward?", in Amitendu Palit and Ramita Iyer (eds), *The Making of the Indo-Pacific Economic Framework for Prosperity (IPEF)*, Tokyo, Konrad-Adenauer-Stiftung Japan, 2023, p. 197-209, https://kas-japan.or.jp/en/pub/consolidated-publication-the-making-of-the-indo-pacific-economic-framework-for-prosperity-ipef.

As a preliminary attempt to upgrade existing FTAs, the European Commission has negotiated Digital Partnerships with some of its partner countries (Japan, Singapore and the ROK) with a view to advancing cooperation on the full range of digital issues, including trade facilitation, trusted data flows and data innovation, digital trust, standards, digital skills for workers, and the digital transformation of businesses and public services. The main goal of these partnerships is to develop and entrench standards for emerging technologies in line with EU principles and values, but they can also provide a promising channel for cooperation on economic security-related issues such as supplychain resilience. In the wake of the first Digital Partnership Council that took place in June 2023 between Brussels and Seoul, both sides agreed to exchange information on the semiconductor supply chain and to expand cooperation on secure digital connectivity infrastructure links, including submarine cables; digital skills and capacity-building; and exchange of best practices on digital start-ups.²¹ Moreover, in the context of their bilateral strategic partnership, the two parties have committed to pursuing dialogue on economic security, including supply-chain resilience, export controls and economic coercion. They are also committed to an Industrial Policy dialogue as well as consultation on legislation covering access to supply of critical materials and the development of batteries.

What remains to be done is to walk the talk. To that end, the two partners should draw from their respective experiences with the Indo-Pacific Economic Framework (IPEF, South Korea) with the United States and the Trade and Technology Councils (TTCs, the EU) with the United States and India. The IPEF and the TTCs are platforms for discussion and cooperation on trade-related issues. A similar mechanism would be useful to deepen cooperation between the EU and the RoK. The first area that comes to mind is cooperation with regards to supply chain resilience.²² Seoul and Brussels could seek to identify items that are at risk of supply network disruption, share information in normal times, expand sources for the procurement of important goods and items, as well as allow for flexible procurement during crises. To that end, setting

²¹ European Commission, *EU and Republic of Korea Digital Partnership: Strengthening Our Economic Resilience*, 30 June 2023, https://digital-strategy.ec.europa.eu/en/node/11903.

²² The IPEF Supply Chain Agreement is the first one to enter into force on 24 February 2024, after Japan, the United States, Fiji, Singapore and India deposited their instruments of ratification.

up a TTC between the EU and the ROK may be an option, as an alternative to the EU joining IPEF. Lastly, Seoul and Brussels have agreed to strengthen cooperation on early warning systems to detect and address potential supply chain disruptions in key industries both through bilateral and multilateral cooperation. The ROK and the EU have a long history of support to multilateral settings such as the World Trade Organisation.²³ They can now build on this experience to push the topic at this level as well.

²³ Sohyun Zoe Lee and Françoise Nicolas, "Trade", cit.

2. South Korea's Challenges and Opportunities in the Indo-Pacific Economic Security

by Sojin Lim

The Indo-Pacific is a region with growing economic, demographic and political importance: it produces 62 per cent of the global gross domestic product (GDP); represents two-thirds of global growth; and hosts 46 per cent of international trade and 50 per cent of global maritime transport.¹ In recent years, the focus on the Indo-Pacific region is increasing rapidly due to the United States and China's trade war. Indeed, for the past ten years, the Indo-Pacific has opposed the ever-growing Chinese power to the United States and like-minded countries. In an attempt to contain China's growing role in the region, the United States announced its Free and Open Indo-Pacific strategy,² which relies on the development of bilateral and multilateral ties with the Asia-Pacific countries. One of the roots of the Sino-American rivalry is caused by Beijing's decision to launch the Belt and Road Initiative (BRI), in 2013.³ The BRI is a major technopolitical and geoeconomic tool that, amongst others, seeks to mitigate threats to the energy supply to Beijing.⁴ It aims to secure China's access to energy sea lines of communication and find alternative routes to mitigate energy import disruptions. Consequently, the BRI consists of increased investments in the infrastructure and industrial sectors across Eurasia and the Indo-Pacific region.⁵ It focuses on two routes, respectively the Silk Road Economic Belt and the

¹ South Korea Government, *Strategy for a Free, Peaceful, and Prosperous Indo-Pacific Region*, December 2022, p. 4, https://www.mofa.go.kr/eng/brd/m_5676/view.do?seq=322133.

² Derek Grossman, "Vietnam Is Losing Its Best Friends to China", in *The Diplomat*, 2 November 2020, https://thediplomat.com/?p=188057; Felix Heiduk and Gudrun Wacker, "From Asia-Pacific to Indo-Pacific. Significance, Implementation and Challenges", in *SWP Research Papers*, No. 9/2020 (July 2020), https://doi.org/10.18449/2020RP09.

³ Man Hung Thomas Chan, "The Belt and Road Initiative – the New Silk Road: a Research Agenda", in *Journal of Contemporary East Asia Studies*, Vol. 7, No. 2 (2018), p. 104-123, https://doi.org/10.1080/2476 1028.2019.1580407.

⁴ Raphaël P.P. Dosson, "The Malacca Dilemma & The Belt and Road Initiative. Securing China's Energy Supply (Oil & Gas): Between Geo-Strategic Competition & Geo-Economic/Technical Cooperation", in *ResearchGate*, May 2023, https://www.researchgate.net/publication/374416021.

⁵ Mingjiang Li, "The Belt and Road Initiative: Geo-economics and Indo-Pacific Security Competition", in *International Affairs*, Vol. 96, No. 1 (January 2020), p. 169-187, DOI 10.1093/ia/iiz240.

Maritime Silk Road.⁶

Upon the announcement of the BRI, democratic states voiced concerns, arguing that it would amplify Chinese geopolitical influence and threaten the liberal status quo in the Indo-Pacific region.⁷ China's assertiveness can be explained by the prism of its high dependency on oil and natural gas imports transported by pipelines in the Indian Ocean and Eastern Siberia Pacific Ocean.⁸ More broadly, it is related to China's will to defend its security and economic interests in the region.⁹ This explains the growing Chinese presence in regional waters, which has materialised by the launching of a naval strategy that relies on the intensification of China's missile and naval capacity.¹⁰ As a result, China has become a hard power threat to maritime stability in the region.¹¹ Chinese naval bases have been built in neighbouring countries, such as Myanmar, but also along key sea lines of communication.¹² A significant example is Djibouti, in the direct vicinity of the Bab El Mandeb strait linking the Indian Ocean with the Red Sea, where Beijing built a 'supply centre' for its People's Liberation Army Navy.¹³

As such, China's assertiveness in the Indo-Pacific affects other actors both within and without the region, including the Republic of Korea (ROK, hereinafter, South Korea) and the European Union. The EU is the leading investor and one of the biggest trading partners in the region,¹⁴ while South Korea's exports in the

⁶ Ulrich Jochheim and Rita Barbosa Lobo, "Geopolitics in the Indo-Pacific: Major Players' Strategic Perspectives", in *EPRS Briefings*, July 2023, https://www.europarl.europa.eu/thinktank/en/document/ EPRS_BRI(2023)751398.

⁷ Sung Chul Jung, Jaehyon Lee and Ji-Yong Lee, "The Indo-Pacific Strategy and US Alliance Network Expandability: Asian Middle Powers' Positions on Sino-US Geostrategic Competition in Indo-Pacific Region", in *Journal of Contemporary China*, Vol. 30, No. 127 (2021), p. 53-68, DOI 10.1080/10670564.2020.1766909.

⁸ Thangavel K. Balasubramaniam and Ashok Kumar Murugesan, "China's Rising Missile and Naval Capabilities in the Indo-Pacific Region: Security Implications for India and Its Allies", in *Journal of Indo-Pacific Affairs*, Vol. 3, No. 2 (Summer 2020), p. 98-111, https://media.defense.gov/2020/Jun/08/2002312001/-1/-1/1/DO_BALASUBRAMANIAM.PDF.

⁹ You Ji, "China's Emerging Indo-Pacific Naval Strategy", in *Asia Policy*, No. 22 (July 2016), p. 11-19, DOI 10.1353/asp.2016.0035.

¹⁰ Ibid.; Thangavel K. Balasubramaniam and Ashok Kumar Murugesan, "China's Rising Missile and Naval Capabilities in the Indo-Pacific Region", cit.

¹¹ Sarabjeet S. Parmar, "Towards Shaping a Favourable and Positive Maritime Environment in the Indo-Pacific", in *National Maritime Foundation Articles*, 27 July 2022, https://maritimeindia.org/?p=15282.

¹² Ulrich Jochheim and Rita Barbosa Lobo, "Geopolitics in the Indo-Pacific", cit.

¹³ Mingjiang Li, "The Belt and Road Initiative", cit.

¹⁴ Federica Mogherini, "South Korea and European Union: Natural Partners for Multilateralism", in

region are 78 per cent and imports of 67 per cent of its total trade.¹⁵ The Indo-Pacific trade routes host a large amount of the sources countries of the EU's imports of raw materials and resources and enable the transport of substantial amounts of South Korea's energy imports. Being both major actors in the region, South Korea and the EU need to ensure that access to the Indo-Pacific trade routes and their strategic chokepoints remain open and safe. However, the economic relations between South Korea and the EU need a higher level of cooperation so that they can ensure that the Indo-Pacific trade routes are not jeopardised by Chinese assertiveness.

With this in mind, this research aims to explore the economic security challenges and opportunities for South Korea in the context of its trade relations with China and the EU in the Indo-Pacific region. South Korea is widely known for its so-called "Miracle of the Han River", based on its rapid economic development within a half-century period. As a war-torn country in the 1950s, South Korea was categorised as a fragile state with a lack of natural and financial resources. The gross national income (GNI) per capita was just 67 US dollars in 1953, but as the country achieved economic growth, it became almost 200 times higher in the fifty years.¹⁶ In the initial stage of its economic growth – which heavily relied on international trade from import substitutive industrialisation to the export-led heavy chemical industry – grant aid from international organisations and friendly countries played a critical role. These contributions were later replaced by concessional loans to boost further economic development. The ROK became the first state that turned from an international aid recipient country to an Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) donor in 2010. Given this, South Korea has utilised its experience of international aid in its trade and international relations, and its geopolitical position has become important for many of its international trade partners, including those in the EU. However, as one of the so-called "Asian Tigers" which demonstrated successful economic

Alexander Downer et al., *Challenges and Opportunities of Korea's Foreign Policy as a Developed Country*, Seoul, Korea Institute for International Economic Policy, September 2022, p. 148-161, https://www.kiep. go.kr/gallery.es?mid=a2030300000&bid=0001&tag=&b_list=10&act=view&list_no=10367.

¹⁵ South Korea Government, Strategy for a Free, Peaceful, and Prosperous Indo-Pacific Region, cit.

¹⁶ Sojin Lim, "The Evolution Story of South Korea from a Fragile State to an International Actor", in Sojin Lim and Niki J.P. Alsford (eds), *Routledge Handbook of Contemporary South Korea*, London/New York, Routledge, 2021, p. 118-135.

development, South Korea faces challenges in search of strategic trade partners, particularly in the context of the Indo-Pacific narratives, and also looking for opportunities with strategic partners like the EU.

2.1 Trade dependency on China as a challenge

Authoritarian countries like China tend to engage in economic coercion with implicit demands against, typically, democratic countries. In other words, the economic and public support costs for a democratic state targeted by implicit demands are larger than those faced by the authoritarian counterpart. Whereas democracies like South Korea need to consider public support due to elections, authoritarian states do not have such concerns.¹⁷ China, for instance, has not shied away from making use of economic statecraft to advance its political interests.¹⁸ It responded to the South Korean decision to deploy the Terminal High Altitude Area Defence (THAAD) weapon system in 2017 against the Democratic People's Republic of Korea (DPRK, North Korea), with informal economic coercion targeting sectors such as tourism and consumer goods.¹⁹

Accordingly, trade dependencies on China have become a concern due to the uncertain threat of economic coercion. Looking into the semiconductor industry, for example, Beijing is the largest actor in the world in semiconductor midstream manufacturing; however, it has a high dependency on South Korea, along with the two EU countries, the Netherlands and Germany, through companies like NXP and Infineon for upstream semiconductor equipment exports.²⁰ This situation demonstrates the asymmetry of trade dependencies

¹⁷ Charles Miller, "Explaining China's Strategy of Implicit Economic Coercion. Best Left Unsaid?", in *Australian Journal of International Affairs*, Vol. 76, No. 5 (2022), p. 507-521, DOI 10.1080/10357718.2022.2061418.

¹⁸ Saori N. Katada, Ji Hye Lim and Ming Wan, "Reshoring from China: Comparing the Economic Statecraft of Japan and South Korea", in *The Pacific Review*, Vol. 36, No. 5 (2023), p. 1005-1034, DOI 10.1080/09512748.2023.2200025; Christina Lai, "Acting One Way and Talking Another: China's Coercive Economic Diplomacy in East Asia and Beyond", in *The Pacific Review*, Vol. 31, No. 2 (2018), p. 169-187, DOI 10.1080/09512748.2017.1357652.

¹⁹ Charles Miller, "Explaining China's Strategy of Implicit Economic Coercion", cit.; Yukyung Yeo, "The Limits of Pressure: China's Bounded Economic Coercion in Response to South Korea's THAAD", in *Australian Journal of International Affairs*, Vol. 77, No. 3 (2023), p. 276-298, DOI 10.1080/10357718.2023.2216642.

²⁰ Yawen Ren et al., "Dynamic of the Global Semiconductor Trade and Its Dependencies", in Journal

between China and the EU, as well as South Korea. China relies heavily on machinery and high-tech equipment from South Korea and Europe.²¹ Seoul and Beijing's trade are interdependent, and both sides need the other one to operate their economy. This is why Chinese economic coercion has not targeted South Korea's semiconductor industry.²² This has driven Beijing to target industries that they can afford to damage domestically through the weaponisation of trade, enactment of export embargoes and encouragement of consumer boycotts.

Uncertainty surrounds threats by authoritarian countries like China as instigators do not always acknowledge that they are engaging in economic coercion and do not explicitly state their demands. Whereas this can mean that authoritarian countries can disengage from economic coercion or look for appeasement at any point, this uncertainty also translates into more public costs for democratic countries that must deal with economic struggles and little opportunity to negotiate.²³ Seoul eventually overcame Beijing's economic coercion concerning the THAAD deployment by upholding the 'three NOs' (no additional THAAD deployment, no participation in the US-led missile-defence network, and no involvement in a three-way alliance with the United States and Japan). This approach was sufficient to appease China even though the previous South Korean President Moon's Administration did not make any policy change explicit nor entered any formal agreement, as it was merely a formulation of Moon's stance towards the country.²⁴

However, the risk of economic coercion from China affects South Korea's economic stability by causing price volatility, impacting exports and imports, and the possibility of disrupting supply chains. Beyond the threat of depending

of Geographical Sciences, Vol. 33, No. 6 (2023), p. 1141-1160, DOI 10.1007/s11442-023-2123-9; Max J. Zenglein, "Mapping and Recalibrating Europe's Economic Interdependence with China", in *MERICS China Monitor*, 18 November 2020, https://merics.org/en/node/917.

²¹ Lingxiang Jian, Tiantian Ding and Wanyun Ma, "Research on China-EU Equipment Manufacturing Trade Dependence in Intra-Industry Specialization View", in *PLoS ONE*, Vol. 17, No. 11 (2022), Article e0278119, https://doi.org/10.1371/journal.pone.0278119; Max J. Zenglein, "Mapping and Recalibrating Europe's Economic Interdependence with China", cit.

²² Yukyung Yeo, "The Limits of Pressure", cit.

²³ Charles Miller, "Explaining China's Strategy of Implicit Economic Coercion", cit.

²⁴ Daniel Mitchum, "More Harm than Good: Why Chinese Sanctions over THAAD Have Backfired", in *Pacific Forum Issues & Insights*, Vol. 21, WP 15 (December 2021), https://pacforum.org/?p=7264; Yukyung Yeo, "The Limits of Pressure", cit.

on authoritarian countries, geopolitical and global crises, such as the Ukraine-Russia war and the Covid-19 pandemic, emphasise the need to secure supply chains to avoid economic shocks.²⁵ South Korea has established economic and political relations across the globe that offer ample opportunity to secure supply chains by engaging in defensive decoupling. Supply chain defensive decoupling is defined as the practice of exercising risk management strategies to circumvent economic volatility and disruptions.²⁶While decoupling is costly,²⁷ South Korea can benefit from decoupling rather than de-risking because it minimises risks for Seoul's economy. Decoupling is understood as severing ties with a country whereas de-risking refers to more complex strategies to reduce reliance and diversifying partners,²⁸ which would leave South Korea still under the threat of economic coercion on top of geopolitical crises.

In this regard, defensive decoupling would entail reshoring to continue manufacturing within South Korea or friend-shoring which would involve shifting processing to friendly countries. South Korea has close ties with both the United States and the EU. While both actors have attempted to create a united China policy, it has fizzled out.²⁹ This has opened the door for President Yoon to approach its allies, either bilaterally or trilaterally, and negotiate mutually beneficial measures to stop relying on Chinese trade. As mentioned later in this research, South Korean President Yoon Suk-yeol's recent Indo-Pacific strategy noted Seoul's desire to pursue cooperation with the EU and the United Kingdom.³⁰ Moreover, the current South Korean national strategy emphasises the security concerns posed by China, the need for international cooperation and the protection of supply chains because of it.³¹ Options to

²⁵ Maria-Grazia Attinasi, Lukas Boeckelmann and Baptiste Meunier, "The Economic Costs of Supply Chain Decoupling", in *ECB Working Papers*, No. 2839 (2023), https://doi.org/10.2139/ssrn.4532103.

²⁶ Mitsuyo Ando, Kazunobu Hayakawa and Fukunari Kimura, "Supply Chain Decoupling: Geopolitical Debates and Economic Dynamism in East Asia", in *Asian Economic Policy Review*, Vol. 19, No. 1 (January 2024), p. 62-79, https://doi.org/10.1111/aepr.12439; Sébastien Miroudot, "Comment on 'Supply Chain Decoupling: Geopolitical Debates and Economic Dynamism in East Asia", in *Asian Economic Policy Review*, Vol. 19, No. 1 (January 2024), p. 82-83, https://doi.org/10.1111/aepr.12442.

²⁷ Maria-Grazia Attinasi, Lukas Boeckelmann and Baptiste Meunier, "The Economic Costs of Supply Chain Decoupling", cit.

²⁸ Brad Glosserman, "De-Risking Is Not Enough: Tech Denial Toward China Is Needed", in *The Washington Quarterly*, Vol. 46, No. 4 (2023), p. 103-119, DOI 10.1080/0163660X.2023.2286134.

²⁹ Margot Schüller, "Disengagement from China: United States and European Union Policies Compared", in *GIGA Focus Asia*, No. 1 (January 2023), https://doi.org/10.57671/gfas-23012.

³⁰ South Korea Government, *Strategy for a Free, Peaceful, and Prosperous Indo-Pacific Region*, cit.

³¹ South Korea's Office of National Security, The Yoon Suk Yeol Administration's National Security Strategy,

protect economic security and supply chains with an international approach include friend-shoring, engaging with alternative supply chains, and fostering exchange to support domestic manufacturers. Domestically, South Korea proved with the 'U-turn law' that the country could reshore the private sector successfully through proactive industrial policies in 2013.³²

As seen, trade with authoritarian regimes can be problematic due to economic coercion and implicit demands that make it difficult to appease the instigator. This causes democratic countries like South Korea to face public discontent when the economy is suffering while there is little manoeuvring space for negotiations with the authoritarian counterpart.³³ Economic coercion – which usually takes the form of consumer boycotts, export embargoes, tariffs on imports and the weaponisation of trade – continues to be used by authoritarian regimes as part of their economic statecraft. South Korean Yoon Administration has vowed to back the semiconductor industry by providing tax benefits for domestic investors as well as cooperation deals with the Netherlands, who presently have a monopoly over extreme ultraviolet lithography technology.³⁴ As Seoul's national strategy plan seeks to expand cooperation with the EU – another crucial actor in the chip wars – both actors have opportunities to strengthen their semiconductor industry against authoritarian threats and reverse trade dependencies.

2.2 The ROK-EU economic relations as an opportunity

As such, President Yoon could pursue decoupling from China to improve Seoul's security and economic prospects, which could be done by securing supply chains that are disrupted during economic coercion. This could include

June 2023, https://www.mofa.go.kr/eng/brd/m_25772/view.do?seq=16.

³² Saori N. Katada, Ji Hye Lim and Ming Wan, "Reshoring from China", cit.

³³ Charles Miller, "Explaining China's Strategy of Implicit Economic Coercion", cit.

³⁴ Mehul Reuben Das, "The Semiconductor Monopoly: How One Dutch Company Has a Stranglehold Over the Global Chip Industry", in *Firstpost*, 23 January 2023, https://www.firstpost.com/world/asml-holdingsdutch-company-that-has-monopoly-over-global-semiconductor-industry-12030422.html; "South Korea's Yoon Pledges to Extend Tax Benefits for Chip Investments", in *Reuters*, 15 January 2024, https://www. reuters.com/technology/south-koreas-yoon-pledges-extend-tax-benefits-chip-investments-2024-01-15.

reshoring domestically or friend-shoring with allies from the EU as well as seeking alternative supply chains with international allies, fostering better trade relations with them with the intent to create a united China policy and stronger economic ties.

The recent visits of South Korean President Yoon to the Netherlands in 2023, which resulted in the Strategic Partnership Agreement between both countries, shows the increasing need for team-up from both sides. The Yoon Administration has presented the concept of 'Global Pivotal State' to explain South Korea's role in contemporary international politics. The concept was mentioned not only in his inaugural speech but also during the Summit between the ROK and the Association of Southeast Asian Nations (ASEAN) in November 2022. More details were then published in the national security strategy document: 'The Yoon Suk Yeol Administration's National Security Strategy: Global Pivotal State for Freedom, Peace, and Prosperity', in 2023.³⁵

According to this recent document, the ROK aims to become a catalyst for people's freedom, democracy and prosperity, considering the security environment at the global, Indo-Pacific, and Korean peninsula levels. The new strategy does not imply a sudden shift away from South Korea's trade relations. The ROK has been the only country to ever have concluded three bilateral agreements with the EU, respectively on political, trade, and security cooperation.³⁶ In the Indo-Pacific, both South Korea and the EU advocate for the respect of the rule of law, multilateralism, market economy, international cooperation and a rule-based global order with the United Nations system at its core.³⁷ They also do not align with the more explicitly confrontational views of China espoused by the member states of the Quadrilateral Security Dialogue of the Indo-Pacific (the so-called 'Quad'): Australia, India, Japan and the United States. Indeed, the EU has alternatively perceived China as a partner in cooperation, an economic competitor, and a systemic rival,³⁸ while South

³⁵ South Korea's Office of National Security, *The Yoon Suk Yeol Administration's National Security Strategy*, cit.

³⁶ Eric J. Ballbach, "South Korea's Evolving Indo-Pacific Strategy. Opportunities and Challenges for Cooperation with the EU", in *SWP Research Papers*, No. 2/2023 (March 2023), https://doi. org/10.18449/2023RP02; Federica Mogherini, "South Korea and European Union", cit.

³⁷ Federica Mogherini, "South Korea and European Union", cit.; South Korea Government, *Strategy for a Free, Peaceful, and Prosperous Indo-Pacific Region*, cit.

³⁸ Ulrich Jochheim and Rita Barbosa Lobo, "Geopolitics in the Indo-Pacific", cit.; Marianne Péron-Doise,

Korea, as a middle power, aims to 'tame rather than contain' Beijing.³⁹

In light of this, South Korea and the EU are in a position to advance their Indo-Pacific strategies jointly and more effectively, especially to address China's assertiveness in the region and prevent it from jeopardising trade routes. South Korea and the EU can consider safeguarding free access to key regional maritime trade points, among which the Malacca Strait, the Strait of Hormuz, the Suez Canal and the South and East China Seas.⁴⁰ These chokepoints secure a large amount of global energy flows, on which the EU, South Korea and China heavily rely. South Korea and the EU can consider promoting more active military engagement in key trade points that are closer to their territories. For instance, the EU could focus on securing access to the Bab El Mandeb and Hormuz Straits, while South Korea could act accordingly in the South China Sea, an area where it already undertakes constabulary activities. Securing access to the Malacca Strait would thus be of prime importance, as it is a major chokepoint to global energy flows. Guaranteed access to these key trade points entails strong partnerships with the three countries that claim it as part of their exclusive economic zones, respectively Indonesia, Malaysia, and Singapore.

Securing trade routes in the Indo-Pacific entails preventing Chinese expansionism by staying one step ahead of Beijing. As Wooley and co-authors argue, China may push forward to build naval bases in Cambodia, Equatorial Guinea, Pakistan or even Vanuatu in the next five years.⁴¹ Presenting themselves as strong alternative trade partners to China, South Korea and the EU could respond by establishing stronger partnerships with the abovementioned states. In this way, they could enhance trade cooperation with countries that

[&]quot;La stratégie indo-pacifique de l'Union européenne au risque de la compétition Chine/États-Unis", in *Diplomatie*, Vol. 112 (November/December 2021), p. 22-26, https://www.areion24.news/2022/02/14/la-strategie-indo-pacifique-de-lunion-europeenne-au-risque-de-la-competition-chine-etats-unis.

³⁹ Gabriele Abbondanza, "Whither the Indo-Pacific? Middle Power Strategies from Australia, South Korea and Indonesia", in *International Affairs*, Vol. 98, No. 2 (March 2022), p. 403-421, https://doi.org/10.1093/ ia/iiab231; Sung Chul Jung, Jaehyon Lee and Ji-Yong Lee, "The Indo-Pacific Strategy and US Alliance Network Expandability", cit.

⁴⁰ Benedetta Girardi, Paul van Hooft and Giovanni Cisco, *What the Indo-Pacific Means to Europe. Trade Value, Chokepoints, and Security Risks*, The Hague, The Hague Centre for Strategic Studies, November 2023, https://hcss.nl/?p=61206.

⁴¹ Alexander Wooley et al., *Harboring Global Ambitions. China's Ports Footprint and Implications for Future Overseas Naval Bases*, Williamsburg, AidData at William & Mary, July 2023, https://aiddata.org/publications/harboring-global-ambitions.

are highly dependent on Chinese goods, grants and investments, such as Sri Lanka, Cambodia and Laos. Investing in infrastructure projects and reinforcing already existing agreements could impede further Chinese expansion in the Indo-Pacific region.

3. Russia's Invasion of Ukraine, Global Polarisation and Yoon's Security Strategy

by Matteo Dian

3.1 Russia's war and global polarisation

Russia's invasion of Ukraine has accelerated the level of strategic and ideological polarisation between the West and an anti-Western bloc, mostly of authoritarian countries. This fuels the intensity of US-China competition.¹ This process has had significant consequences in East Asia. Despite earlier attempts to cast itself as a mediator between Russia and the West, China has increasingly provided Russia with economic and technological support. China has given diplomatic and political cover to Russian President Vladimir Putin, as attested to by the several meetings between Putin and China's President Xi Jinping since the invasion. While the EU and its member states have been supporting Ukraine, providing military and economic aid, the reactions in the wider Indo-Pacific region have ranged from economic and diplomatic support to much more pragmatic and neutralist positions. Several states have even supported Russia's war effort. Among the latter the most significant cases are, beside China, Vietnam² and North Korea. Pyongyang's cooperation with Moscow has amplified the political and security consequences of the war for the Korean peninsula and for Northeast Asia.

¹ Roberto S. Foa et al., *A World Divided. Russia, China and the West*, Cambridge, Centre for the Future of Democracy, October 2022, https://doi.org/10.17863/CAM.90281; Kai He and Huiyun Feng, "International Order Transition and US-China Strategic Competition in the Indo Pacific", in *The Pacific Review*, Vol. 36, No. 2 (2023), p. 234-260, DOI 10.1080/09512748.2022.2160789.

² Vietnam abstained on the four UN General Assembly's resolutions condemning Russia's invasion and voted against the expelling Moscow from the UN Human Rights Council. Furthermore, Hanoi has consolidated its ties with Russia in the field of defence industry and energy. See Ian Storey, "Vietnam and the Russia-Ukraine War: Hanoi's 'Bamboo Diplomacy' Pays Off but Challenges Remain", in *ISEAS Perspective*, No. 2024/13 (16 February 2024), https://www.iseas.edu.sg/?p=61829.

3.2 The military cooperation between Russia and North Korea

Russia's war against Ukraine has led Moscow to reach out to Pyongyang, asking for military and logistical support. The newfound partnership between Russia and North Korea, emerged after the September 2023 meeting between Putin and North Korea's leader Kim Jong-un at the Vostochny cosmodrome in the Russian Far East, has had several significant consequences. The Democratic People's Republic of Korea (DPRK), as the North is formally known, is now providing the Russian army with weapons and ammunition. North Korean equipment is generally interoperable with Soviet/Russian standards, enabling an immediate integration into the Russian arsenals. Despite being far from Western technological standards, North Korea can provide a volume of ammunition that is very hard to match for the European partners of Ukraine. Pyongyang has provided systems such as BM-21 Grad Multiple Rocket Launchers (MRL), KN-23, KN-24 and KN-25 short-range ballistic missiles,³ antitank missiles, portable anti-air missile and Soviet-era 122mm howitzer rounds.⁴ According to a statement of the South Korean National Intelligence Service (NIS), North Korea might have provided up to 1 million artillery shells to Russia in 2023 only.5

The purchase of North Korean military equipment violates several UN Security Council resolutions that forbid other states from purchasing weapons from North Korea. The newfound relationship between Moscow and Pyongyang should not be considered as a one-sided bargain, since North Korea has surely a lot to gain from the relationship. Russia can offer technology for North Korea's nuclear and ballistic programmes and more generally for the military. Secondly,

³ The KN-23 is similar to the Russian Iskander SRBM, the KN-24 is similar in function and range to the US- produced ATACTMS, the KN-25 is similar to the OTR-21, Tochka (SS-21).

⁴ James Byrne, Joseph Byrne and Gary Somerville, "The Orient Express: North Korea's Clandestine Supply Route to Russia", in *RUSI Commentaries*, 16 October 2023, https://rusi.org/explore-our-research/publications/commentary/report-orient-express-north-koreas-clandestine-supply-route-russia.

⁵ Samuel Ramani, "Russia and North Korea: A Growing Strategic Partnership", in *38 North*, 17 November 2023, https://www.38north.org/?p=29139; Josh Smith, "Explainer: Where Did Russia Get Its North Korean Missiles?", in *Reuters*, 5 January 2024, https://www.reuters.com/world/where-did-russia-get-its-north-korean-missiles-2024-01-05.

Russia can contribute to breaking the political and diplomatic isolation of the regime, diminishing the capacity of the United States, South Korea and their partners to put economic and political pressure on it. Finally, Russia could assist in other non-military areas such as Covid vaccines or food supplies.

3.3 South Korea's security strategy during the Yoon presidency

The election of Yoon Suk-yeol as president of the Republic of Korea (ROK), together with the increasing polarisation of the regional and global order, has led to a significant re-orientation of South Korea's foreign policy, compared with his predecessor Moon Jae-in.⁶ Yoon's approach is largely coherent with the country's conservative foreign policy tradition rooted in several key principles: an uncompromising stance towards the North, based on deterrence; the centrality of the US-ROK alliance; and a diminished emphasis on the history controversies with Japan to seek a common line on security challenges.⁷

As attested by Yoon's state visit to Washington in April 2023, the alliance with the United States has been consolidated and deepened. The Washington Declaration adopted at the summit aimed at reassuring Seoul and dispelling fears of abandonment from the South Korean side, a fear that was reflected in Yoon's proposals regarding a NATO-style nuclear sharing agreement or the return of US tactical nuclear weapons to the South. The declaration included forms on consultation on possible use of nuclear weapons in the peninsula and the intention to intensify the visibility of joint signalling in the realm of extended deterrence towards North Korea through joint exercises.⁸ Moreover, both Yoon and US President Joe Biden were very keen to showcase how the alliance should not be considered a mere tool to counter North Korean threat. On the contrary, they emphasised that it was a comprehensive global strategic

⁶ Moon Jae-in, coherently with the South Korean progressive foreign policy tradition, promoted a rapprochement with North Korea, a stable relationship with China and sought some space for autonomy in the US-ROK alliance.

⁷ Marco Milani, Antonio Fiori and Matteo Dian (eds), *The Korean Paradox. Domestic Political Divide and Foreign Policy in South Korea*, London/New York, Routledge, 2019.

⁸ White House, *Washington Declaration*, 26 April 2023, https://www.whitehouse.gov/briefing-room/ statements-releases/2023/04/26/washington-declaration-2.

alliance – as highlighted by the South Korean 2023 National Security Strategy.⁹ This means incorporating within the alliance issues such as technology and defence industry, economic security and cooperation on regional and global security problems.

These developments are coherent with Yoon's concept of South Korea as a "Global Pivotal State" (GPS), namely a "middle power" able to "shape international norms, collectively enforce global rules, and bridge ties between developed and developing nations".¹⁰ As Andrew Yeo has emphasised, the concept of GPS translates into three key elements that appear to be emphasised and embraced: liberal values, strategic relevance and global public goods. Overall, the GPS concept implies an active role for South Korea as a supporter of the liberal international order, beyond its immediate and more pressing security concerns related to North Korea. These developments have three main consequences. Firstly, seeking to improve the relationship between with Japan, it opens new possibilities for the development of the security triangle with Tokyo and Washington. Secondly, it leads to embrace a more active role in the Indo-Pacific. Thirdly, it envisages a potential global security role, with a special emphasis on industrial defence cooperation, as demonstrated in the aftermath of Russia's invasion of Ukraine.

3.4 The strategic US-ROK-Japan strategic triangle

The United States started to promote the idea of turning the alliances with South Korean and Japan into a strategic triangle in the 1990s, with the establishment of several trilateral dialogues and meetings, up to the vice-ministerial level, to respond to the emerging North Korean nuclear crisis and overcome the lack of communication and intelligence sharing over Pyongyang's capabilities.¹¹

⁹ South Korea Office of National Security, *The Yoon Suk Yeol Administration's National Security Strategy*, June 2023, https://www.president.go.kr/download/648bbeff9b00b.

¹⁰ Andrew Yeo, "South Korea as a Global Pivotal State", in *Brookings Articles*, 19 December 2023, https://www.brookings.edu/?p=1751944.

¹¹ John Hemmings, *Quasi-Alliances, Managing the Rise of China, and Domestic Politics: The US-Japan-Australia Trilateral 1991-2015, PhD thesis, London School of Economics and Political Science, 2017,* https://doi.org/10.21953/lse.aqjuqxrdf9w9.

These initial experiments did not develop into a more substantial diplomatic in the following years. The animosity between South Korea and Japan, due to unsettled historical disputes and wartime memories originating from Japan's colonial rule in the peninsula, completely foreclose the possibility of developing the US-Japan-triangle in the following years.¹² During the Bush and the Obama Administrations, the United States actively embraced the logic of minilateralism, achieving significant progress primarily with the strategic triangle between Japan and Australia. The US-Japan-South Korea trilateral continued to be the most difficult piece of the emerging networked security architecture, despite the efforts of both Administrations and the mounting threat presented by North Korea and China's growing capabilities. Bilateral disputes related to historical issues as well as difference perceptions of the role and the status of China in the region continued to adversely affect the relationship between Tokyo and Seoul.¹³

In 2010 the three countries signed a joint statement underlining the importance of trilateral cooperation to address the threat posed by North Korea and manage global economic and strategic challenges. The General Security of Military Information Agreement (GSOMIA) on military intelligence sharing, signed in 2011, was later scrapped by Seoul amid popular protests against any forms of security cooperation with Japan. In 2014 then US President Barack Obama pressed Japanese Prime Minister Abe Shinzo and ROK President Park Geun-hye into a trilateral meeting on the margins of the Nuclear Security Summit and inaugurate trilateral talks at the ministerial level and a bi-annual summit. These meetings later led the signing of a trilateral information sharing agreement in 2014.¹⁴ The Agreement on Comfort Women, signed in 2015 by the two government, aimed at closing the controversy over one of the most sensitive issues in bilateral relations, namely the forced prostitution of Korean

¹² Ji Young Kim, "Rethinking the Role of Identity Factors: The History Problem and the Japan–South Korea Security Relationship in the post-Cold War Period", in *International Relations of the Asia-Pacific*, Vol. 15, No. 3 (September 2015), p. 477-503, DOI 10.1093/irap/lcv007; Brad Glosserman and Scott A. Snyder, *The Japan–South Korea Identity Clash. East Asian Security and the United States*, New York, Columbia University Press, 2015.

¹³ Matteo Dian, "Japan, South Korea and the Rise of a Networked Security Architecture in East Asia", in *International Politics*, Vol. 57, No. 2 (2020), p. 185-207, DOI 10.1057/s41311-019-00194-8; Brad Glosserman and Scott A. Snyder, The Japan–South Korea Identity Clash, cit.

¹⁴ Yul Sohn, "Relocating Trilateralism in a Broader Regional Architecture: A South Korean Perspective", in Daniel Sneider, Yul Sohn and Yoshihide Soeya, *US-ROK-Japan Trilateralism: Building Bridges and Strengthening Cooperation*, NBR Special Report No. 59 (2016), p. 13-21.

women by the Japanese armed forces before and ruing World War II. This seemed to be conductive to a new era of trilateral cooperation, inaugurated by the eventual approval of the GSOMIA in 2016.¹⁵ However, the window of opportunity for trilateral cooperation closed with the resignation of Park and the elections of Moon Jae-in in South Korea and of Donald Trump in the United States. The Trump Administration did not make any effort to promote relations between the two US allies. The election of Yoon and Biden created another opportunity for reconciliation between Seoul and Tokyo and for significant progresses for the Washington-Seoul-Tokyo strategic triangle. In March 2023, Yoon visited Tokyo, marking the first official visit of a South Korean President in 12 years. This meeting opened the way to a new shuttle diplomacy and to a partial resolution of pending trade disputes.

The development of a more cohesive and cooperative security triangle has culminated with the Camp David Summit of 15 August 2023. The summit led to a joint statement titled "The Spirit of Camp David" as well as the approval of several practical agreements in the fields of economic security, cybersecurity, information sharing and supply chain resilience. Moreover, the three countries committed to schedule a yearly leadership summit as well as joint military exercises.¹⁶ Importantly, the joint statement includes commitments to consult and to align the three countries' Indo-Pacific strategies, to work to uphold the US-led rules based order, and to "oppose any unilateral attempts to change the status quo in the waters of the Indo-Pacific [...] regarding the dangerous and aggressive behavior supporting unlawful maritime claims that we have recently witnessed by the People's Republic of China (PRC) in the South China Sea".¹⁷ Despite the significance of the progress in bilateral and trilateral relations, possible further developments are closely dependent on domestic politics in each country. Japanese Prime Minister Kishida Fumio has recently faced a steep decline in popularity. Yoon faces a public that remains at best divided on

¹⁵ Daniel Sneider, "Advancing US-Japan-ROK Trilateral Cooperation: A US Perspective", in Daniel Sneider, Yul Sohn and Yoshihide Soeya, *US-ROK-Japan Trilateralism: Building Bridges and Strengthening Cooperation*, NBR Special Report No. 59 (2016), p. 1-7.

¹⁶ Daniel Sneider, "Japan–South Korea–US Relations Thawed, But Not Warm Enough", in *East Asia Forum*, 31 August 2023, https://eastasiaforum.org/?p=2100185.

¹⁷ Japan, Republic of Korea and United States, *The Spirit of Camp David: Joint Statement of Japan, the Republic of Korea, and the United States*, 18 August 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.

the process of reconciliation with Tokyo, due to the salience of issues related to historical memories of the Japanese colonisation and wartime exploitation. And, of course, Biden is facing again Trump in the US presidential election in November 2024.

3.5 Yoon's Indo-Pacific strategy

Before 2022, South Korea was reluctant to promote an active Indo-Pacific strategy. Here it is important to distinguish between strategic concepts and actual policies and practices. While several powers today have adopted an Indo-Pacific strategy, the political and normative content of those strategies vary widely.¹⁸ The concept of Indo-Pacific remains something of a difficult subject for the ROK. The idea of a Free and Open Indo-Pacific (FOIP) is the product of a long geopolitical and strategic elaboration of thinkers and leaders closely associated with Abe Shinzo and the Japanese conservative leadership. The idea of FOIP is the successor of previous concepts dear to the late Abe, such as "the confluence of the Two Seas" and the "Security Diamond".¹⁹ Only in 2018 was the concept adopted by the Trump Administration and it has since found substantial popularity in many capitals in the region and in the West. The Japanese origin of the concept probably induced some reluctance in the Korean foreign policy community towards the adoption of an Indo-Pacific Strategy. Ultimately, the official adoption of a South Korean Indo-Pacific strategy has happened contextually with the improvement of the relationship with Tokyo, promoted by Yoon Administration.

The second relevant element of the concept of Indo-Pacific is China's place in it. Both the Japanese and the American versions of FOIP design a model of regional order in which regional maritime democracies assume a role of strategic and

¹⁸ Thomas Wilkins and Jiye Kim, "Adoption, Accommodation or Opposition? Regional Powers Respond to American-led Indo-Pacific Strategy", in *The Pacific Review*, Vol. 35, No. 3 (2020), p. 415-445, DOI 10.1080/09512748.2020.1825516.

¹⁹ Yuichi Hosoya, "FOIP 2.0: The Evolution of Japan's Free and Open Indo-Pacific Strategy", in *Asia-Pacific Review*, Vol. 26, No. 1 (2019), p. 18-28, DOI 10.1080/13439006.2019.1622868; Shinichi Kitaoka, "Vision for a Free and Open Indo-Pacific", in *Asia-Pacific Review*, Vol. 26, No. 1 (2019), p. 7-17, DOI 10.1080/13439006.2019.1618592; Kei Koga, "Japan's 'Free and Open Indo-Pacific' Strategy: Tokyo's Tactical Hedging and the Implications for ASEAN", in *Contemporary Southeast Asia*, Vol. 41, No. 2 (August 2019), p. 286-313.

normative bastions, by virtue not only of their power and capabilities, but especially as a consequence to their commitment to universal liberal values. Therefore, FOIP relegates China to the role of rival great power, which is endowed with the capabilities but not the political features to taken on the role of legitimate order maker.²⁰ Up to the Moon Administration, South Korea perceived China's role differently. Since the early 1990s Beijing was seen as a legitimate great power, an essential partner and a necessary protagonist of any possible negotiated solution to the North Korea problem.²¹ Consistently with these premises, Seoul refrained from adopting an explicit Indo-Pacific strategy until 2022. The Moon Administration promoted the "New Southern Policy" (NSP), that sought to provide a framework for the country's relations with the Southeast Asia and India, emphasising economic cooperation, development, trade, infrastructures.²² The NSP maintained a low profile in the political and security spheres, with the aim at avoiding positions that could deteriorate relations with Beijing. For this reason, the security pillar was mostly about nontraditional challenges such as terrorism, eschewing strong alignment with the United States and other regional partners on maritime disputes and freedom of navigation. In this context, cooperation in defence industry with South East Asian countries represented a partial exception and a significant instrument to upgrade bilateral relations. Indonesia emerged as a key buyer of South Korean defence equipment (including 18 FA fighter jets and 3 Nagapasa attack submarines), followed by Thailand and the Philippines.²³

The South Korean Indo-Pacific strategy published by the Yoon Administration marks a clear policy change in this respect. It stresses the ROK's role as supporter of the rules based regional order and in particular of human rights, democracy and non-proliferation. The document seeks not to antagonise China, despite the emphasis on norms and values. The strategy states that China is a "key partner for achieving prosperity and peace in the Indo-Pacific" and that South

²⁰ Matteo Dian, "Free and Open Indo-Pacific, Features and Limits of a Model of Regional Order", in *Il Politico*, Vol. 257, No. 2 (2022), p. 43-58, https://doi.org/10.4081/ilpolitico.2022.765.

 ²¹ Matteo Dian, "Japan, South Korea and the Rise of a Networked Security Architecture in East Asia", cit.
²² Sera Yun and Jan Vincent Galas, "The Evolution of South Korea's New Southern Policy (NSP-K): The Moon and Yoon Administrations", in *Asian Affairs*, Vol. 54, No. 2 (2023), p. 250-263, DOI 10.1080/03068374.2023.2213113.

²³ Max Broad and Evan A. Laksmana, "South Korea's Defence Relations in Southeast Asia", in *IISS Online Analyses*, 29 September 2023, https://www.iiss.org/online-analysis/online-analysis/2023/09/south-koreas-defence-relations-in-southeast-asia.

Korea promotes an "inclusive initiative that neither targets nor excludes any particular country".²⁴ Moreover, the document states that Seoul promotes "an Indo-Pacific where nations that represent diverse political systems can move forward together peacefully through competition and cooperation based on rules".²⁵ The South Korean strategy nevertheless seeks to achieve a degree of strategic clarity on issues such as coercion in the South China Sea, freedom of navigation and trade dependency, and economic security. This represents a significant step away from the idea of *anmi kyŏng-jung* (security with the United States, economy with China).²⁶ Seoul has finally embraced a degree of coordination with the United States and its allies and partners, joining the Indo-Pacific Economic Framework (IPEF) and the Chip 4 Alliance. Nevertheless, a participation to groupings with a more evident security profile, such as the Quad, remain unlikely.

3.6 New avenues for cooperation between Europe and South Korea

The South Korean support to Ukraine and the newfound role as provider of weapons to EU countries such as Poland is perhaps the most innovative element of Yoon's security policy. South Korea finds itself in the position of being able to supply advanced weapons system, compatible with US and NATO standards. This is largely due to the efforts of previous administrations and particularly Moon's, which considered technological military autonomy (or at least reducing dependence) from the United States as a key policy objective for the country. In September 2022, South Korea and Poland signed an unprecedented arms deal, including K2 tanks (980), Thunder K9 howitzers (650), training and combat FA-50 fighter jets (48) and K239 Chunmoo rocket artillery systems (288). The deal is estimated to be worth around 13 billion US dollars. While the relationship with Warsaw is the most significant economically, the South Korean defence

²⁴ South Korea Government, *Strategy for a Free, Peaceful, and Prosperous Indo-Pacific Region*, December 2022, p. 14 and 12, https://overseas.mofa.go.kr/eng/brd/m_5676/view.do?seq=322133.

²⁵ Ibid., p. 10.

²⁶ Eric J. Ballbach, "South Korea's Evolving Indo-Pacific Strategy. Opportunities and Challenges for Cooperation with the EU", in *SWP Research Papers*, No. 2/2023 (March 2023), https://doi. org/10.18449/2023RP02.

industry has signed contracts also with Estonia (36 K-9 howitzers), Finland (up to 100 K-9 howitzers in different instalments) and Norway (K-9 howitzers and K-2 main battle tanks).²⁷

As stressed by Ramon Pacheco Pardo, the strategy of promoting the country's role as a key player in the defence industry is not only about economic gains. On the contrary, it serves many key interests. Firstly, it is a relevant pillar of the Global Pivotal State. South Korea realises its ambition "to be seen as an independent and reliable geopolitical partner that plays a key role in the political, security, and economic affairs of different regions of the world".²⁸ Cooperation in the realm of defence industry is considered also functional to promoting the country's global status and prestige as well as contributing to foster its level of technological self-reliance in the military realm, while maintaining a high degree of interoperability with the United States and its allies. South Korea has not provided weapons directly to Ukraine. However, the fact that South Korea is selling weapons to other EU member states, and in particular Poland, enables to them to transfer their own weapons to Ukraine. Yoon's government has given Kyiv full diplomatic backing, supporting all UN resolutions that have condemned Russia's invasion and participating in the US-led sanctions against Russia. This support was made even more visible with President Yoon's visit to Kyiv in July 2023.²⁹ Furthermore, the ROK has pledged 2 billion US dollars over the next years (300 million only for 2024) in assistance to the reconstruction. In the words of President Yoon: "This will demonstrate our responsible role as a global pivotal state in leading assistance for the restoration of peace in Ukraine and lay the foundation for our full-fledged participation in Ukraine's future reconstruction."30

²⁷ Eunwoo Lee, "President Moon's Legacy: Boosted Arms Exports for South Korea", in *The Diplomat*, 23 March 2022, https://thediplomat.com/2022/03/president-moons-legacy-boosted-arms-exports-forsouth-korea.

²⁸ Ramon Pacheco Pardo, "South Korea Is Sidestepping the Hub", in *Foreign Policy*, 12 August 2023, https://foreignpolicy.com/2023/08/03/south-korea-seoul-united-states-arms-weapons-sales-militaryalliance-diplomacy.

²⁹ Felipe Dana and Hyung-Jin Kim, "South Korean President Yoon Makes Surprise Visit to Ukraine, Pledges to Expand Support", in *PBS News Hour*, 15 July 2023, https://www.pbs.org/newshour/world/ south-korean-president-yoon-makes-surprise-visit-to-ukraine-pledges-to-expand-support.

³⁰ Asami Terajima, "South Korea Pledges \$2.3 Billion in Aid for Ukraine", in *The Kyiv Independent*, 10 September 2023, https://kyivindependent.com/south-korea-pledges-2-3-billion-in-aid-for-ukraine.

Yoon's attendance to the NATO summits in Madrid in 2022 and Vilnius in 2023 was another important element of this strategy.³¹ Firstly, Seoul further signalled its positioning on the Ukraine and linked it to a foreign and security policy orientated towards convergence with the West in the name of common security and values such as democracy, human rights, territorial integrity and democratic self-determination. This entails also that South Korea does not fear alienating China. After all, Beijing has been labelled as a systemic challenge by NATO and has supported economically and technologically Russia in its war against Ukraine. The 2023 NATO summit has provided the occasion to expand cooperation with NATO in the context of the "Individually Tailored Partnership Programme" (ITPP) that upgrades the level of cooperation in eleven sectors including non-proliferation, cybersecurity and emerging technologies.³² The ITPP is functional to creating regular channels of communication and increasing the level of interoperability of weapons system, which in turn is essential to Seoul's objective of consolidating its role in the European defence market.

South Korea has also joined NATO's Cooperative Cyber Defence Centre of Excellence and has started to participate in the large-scale cyber exercise Locked Shields.³³ Cooperation in the realm of cybersecurity is considered very important by Seoul, since North Korea resorts to cybertheft and cryptocurrency to fund its military spending. South Korea will also take part in the NATO Battlefield Information Collection and Exploitation System (BICES). The BICES will enable the South Korean armed forces to get access to intelligence shared by NATO member states on battlefield experience and exercises and open the possibility for South Korea to participate in a set of NATO-led exercises.³⁴ This cooperation has produced a formal condemnation by NATO members of North Korea's nuclear proliferation and missile tests. This is particularly significant in a moment in which the UN Security Council is deadlocked by the ongoing

³¹ NATO, Secretary General Welcomes NATO's Deepening Partnership with South Korea, 11 July 2013, https://www.nato.int/cps/en/natohq/news_217034.htm; Tunchinmang Langel, "Strengthening and Expansion of Japan and ROK Partnership with NATO", in *ICWA Issue Briefs*, 31 July 2023, https://www. icwa.in/show_content.php?lang=1&level=3&ls_id=9799&lid=6270.

³² South Korea Ministry of Foreign Affairs, '*Tailored Partnership' with NATO to Boost Security Cooperation*, 13 July 2023, https://overseas.mofa.go.kr/eng/brd/m_5674/view.do?seq=320840.

³³ South Korea Presidency, *President Yoon Pledges to Share More Military Intel with NATO*, 13 July 2023, https://eng.president.go.kr/briefing/TRFjL5Qx.

³⁴ Hae-Won Jun, "NATO and Its Indo-Pacific Partners Choose Practice over Rhetoric in 2023", in *RUSI Commentaries*, 5 December 2023, https://www.rusi.org/explore-our-research/publications/ commentary/nato-and-its-indo-pacific-partners-choose-practice-over-rhetoric-2023.

polarisation between the P5, with Russia and China refusing to condemn, if not supporting, Pyongyang's actions.³⁵

Conclusion

During the Yoon Administration South Korea seems clearly geared towards a more radical interpretation of its traditional foreign and security policy. Yoon has decided to "lean on one side", choosing the alliance with the United States, liberal values, and the primacy of deterrence over engagement with North Korea. Under the rubric of the "Global Pivotal State" the ROK has embraced a more active, even if not necessarily well-defined, role, as co-enforcer of the "Indo-Pacific" order. However, some key constraints remain. Firstly, Yoon's strategy does not have a wide consensus among the Korean public opinion, which does not appear as ready as the president to overlook historical grievances involving Japan. Secondly, a value-based Western-oriented strategy does not solve, and possibly makes even more intense, South Korea's key geopolitical dilemma: how to deal with China in the context of great power competition. South Korea faces, in a more acute way, the same dilemma of most EU member states. It needs to craft a China strategy aimed at avoiding both de-coupling and economic dependence. Third, global polarisation and great power competition has a significant impact on policies towards North Korea. On the one hand, the new relationship between Moscow and Pyongyang has helped North Korea break its isolation, evade sanctions and receive economic and technological support. On the other hand, the war in Ukraine, together with recent developments in the Middle East, captures the attention and the resources of the United States, generating fears of abandonment among Asia allies. All these factors, while complicating Seoul's security calculus, are favourable to a higher level of cooperation among the EU and its members and South Korea. The defence industrial sector seems to be the sector that can benefit more in the short term. The two sides, however, can coordinate policies to face common challenges such as cybersecurity, supply chain resilience and technological cooperation in key industries.

³⁵ Ellen Kim, "What Is Yoon's NATO Strategy?", in *CSIS Commentaries*, 19 July 2023, https://www.csis.org/ node/106410.

4. Supply Chain Risks in EU-South Korea Relations: Semiconductor Industries

by Sunkung Choi

The globalised world has enjoyed an extended period of economic stability, often referred to as the "Goldilocks economy".¹This era has been characterised by moderate economic growth and low inflation, which emerged in the aftermath of the collapse of the Soviet Union and China's accession to the World Trade Organisation between 1991 and 2001. Throughout this period, advancements in technology and transportation played a pivotal role in fostering robust global connectivity, facilitating the seamless movement of goods, services and information across borders.² This heightened interconnectedness led to a surge in international trade and brought about a marked increase in the complexity of global supply chains, as businesses strived to meet the demands of an increasingly interconnected global marketplace.³ This trend continued in the following years: it is worth noting that since 1990, trade has been instrumental in driving global economic growth, lifting incomes by 24 per cent globally and by an even more substantial 50 per cent for the poorest 40 per cent of the population. However, recent geopolitical tensions, such as Russia's war against Ukraine and the unprecedented disruption caused by the Covid-19 pandemic, have served as seismic shocks to the global economic system, disrupting supply chains and causing widespread economic upheaval.⁴

The 2020-21 Covid-19 pandemic, in particular, exposed vulnerabilities in global supply chains, disrupting the flow of goods, creating shortages and leading to

¹ Robert J. Gordon and James H. Stock, "Foundations of the Goldilocks Economy: Supply Shocks and the Time-Varying NAIRU", in *Brookings Papers on Economic Activity*, No. 2/1998, p. 297-346, https://www.brookings.edu/?p=180285; Sherle R. Schwenninger, "A Goldilocks World Economy?", in *World Policy Journal*, Vol. 23, No. 4 (Winter 2006/2007), p. 1-9, DOI 10.1162/wopj.2007.23.4.1.

² Jianyong Yue, China's Rise in the Age of Globalization. Myth or Reality?, Cham, Palgrave Macmillan, 2018.

³ Tolga Demiryol, "Political Economy of Connectivity: China's Belt and Road Initiative", in *RAIS Conference Proceedings*, 10-11 June 2019, p. 168-180, https://doi.org/10.5281/zenodo.3267662.

⁴ Thomas Barnebeck Andersen, "How Much Did China's WTO Accession Increase Economic Growth in Resource-Rich Countries?", in *China Economic Review*, Vol. 30 (2014), p. 16-26, 10.1016/j.chieco.2014.05.001; Yeling Tan, "How the WTO Changed China", in *Foreign Affairs*, Vol. 100, No. 2 (March/April 2021), p. 90-102.

prolonged delays. Lockdown measures and travel restrictions imposed to curb the spread of the virus resulted in factory closures, transportation bottlenecks and labour shortages.⁵ The supply of chips was no exception. It created more and more severe problems in industry and market as chips are not a final product for direct consumption but intermediate good for many modern goods. The production of chips itself also requires global supply chains of resources and technologies crossing borders of many countries. The shortage in chip supply alarmed governments and industries to realise that heavy reliance on global supply chain could cause severe trouble on daily life, economy, industry and overall growth of a country.⁶

This paper delves deeper into the underlying causes, discernible effects and far-reaching implications of this critical predicament, particularly within the context of the economic relations between the European Union and the Republic of Korea (ROK).

4.1 Chip supply chain risks: Causes and effects

4.1.1 Unexpected events vs. geopolitical intentions

It is important to explore the intricate dynamics of supply chain disruptions in detail before delving into chip supply chain risks in detail. Among various ways of identifying the supply chain risks, this paper identifies the causes of occurrence. One cause of occurrences is an unexpected event such as the Covid-19 pandemic, the most recent, impactful, yet unexpected event that

⁵ Jarrah F. Al-Mansour and Sanad A. Al-Ajmi, "Coronavirus 'COVID-19'–Supply Chain Disruption and Implications for Strategy, Economy, and Management", in *The Journal of Asian Finance, Economics and Business*, Vol. 7, No. 9 (2020), p. 659-672, https://doi.org/10.13106/jafeb.2020.vol7.no9.659; I. Nyoman Pujawan and Alpha Umaru Bah, "Supply Chains Under COVID-19 Disruptions: Literature Review and Research Agenda", in *Supply Chain Forum: An International Journal*, Vol. 23, No. 1 (2022), p. 81-95, DOI 10.1080/16258312.2021.1932568.

⁶ Kenechukwu Nwuka Ochonogor et al., "The COVID-19 Pandemic and Supply Chain Disruption: An Analysis of the Semiconductor Industry's Resilience", in *International Journal of Technical & Scientific Research Engineering*, Vol. 6, No. 1 (January-February 2023), p. 7-18, https://ijtsre.org/papers/2023/ ev6c1/IJT-44712257.pdf.

caused supply chain crisis. This crisis served as a stark reminder that even the most robust supply chains can falter in the face of unforeseen crises.⁷

The other cause is geopolitical competition between state actors. An example of geopolitical tensions impacting supply chains is the China-US trade war initiated by former President Donald Trump in 2018. Motivated by the desire to address the longstanding trade deficit and intellectual property protection against China, the United States imposed tariffs and trade barriers on Chinese goods.⁸ The resulting disruptions, reduced trade volumes and economic uncertainty underscored how geopolitical tensions can override the benefits of free trade. This type of disruption is not inevitable but purely caused with a certain intention. Those type of crisis encompasses the clash over technology protection and data governance. Usually countries impose restrictions on cross-border data flows, affecting tech companies and supply chains. This fragmentation has resulted in reduced efficiency and stifled innovation, highlighting the delicate balance between security concerns and open trade. Another case argues that economic security in more important than the economic benefit from free trade. In this case, economic security, defined as ensuring consistent access to resources for a stable standard of living, is crucial for economic well-being and national security.⁹ After experiencing the supply chain disruption related to the Covid-19 pandemic and witnessing the difficulties in economic security which is exposed to vulnerabilities, governments started to prioritise independence from the global supply chains.

⁷ Kristin Scholten, Mark Stevenson and Dirk Pieter van Donk, "Dealing with the Unpredictable: Supply Chain Resilience", in *International Journal of Operations & Production Management*, Vol. 40, No. 1 (2020), p. 1-10, https://doi.org/10.1108/IJOPM-01-2020-789.

⁸ Richard Baldwin and Rebecca Freeman, "Risks and Global Supply Chains: What We Know and What We Need to Know", in *Annual Review of Economics*, Vol. 14 (2022), p. 153-180, https://doi.org/10.1146/annurev-economics-051420-113737; Samuel Roscoe, "Redesigning Global Supply Chains During Compounding Geopolitical Disruptions: The Role of Supply Chain Logics", in *International Journal of Operations & Production Management*, Vol. 42, No. 9 (2022), p. 1407-1434, DOI 10.1108/IJOPM-12-2021-0777.

⁹ Cheng-Chwee Kuik, "The Twin Chessboards of US-China Rivalry: Impact on the Geostrategic Supply and Demand in Post-Pandemic Asia", in *Asian Perspective*, Vol. 45, No.1 (Winter 2021), p. 157-176, DOI 10.1353/apr.0.0010.

4.1.2 Structure vulnerability of supply chain risks and chips industry

In the previous section, two causes of supply chain crisis were mentioned, namely unexpected events and geopolitically intended disruptions. The shock of supply chain crises on both industry and society is related to lean manufacturing trends, so called "just-in-time" production, a model that relies heavily on accurate demand forecasting. Throughout the years, as transportation and technology have been adapted to the model, companies have become effective in selecting price-competitive locations for the procurement of components. However, during the recent supply chain crisis, the "just-in-time" production model proved unable to adapt to unexpected shifts in demand.

The rigidity of "just-in-time" supply chains hindered the supply of chips to the world.¹⁰ Due to the scarcity of chips essential for automobiles and electronics, the supply of overall goods and services faced delays. Consumers started to experience shortages in a range of products, from electronics and pharmaceuticals to household items (including infant formulas or tampons), leading to empty shelves, delayed deliveries and scarcity of everyday products – which in turn contributed to inflationary trends.

The chip industry is particularly vulnerable during supply chain crises due to several interconnected factors. The semiconductor manufacturing process involves a complex global supply chain with multiple stages, from raw materials to finished products. Components are sourced from various countries, making the industry susceptible to disruptions in any part of the chain. Moreover, the chip industry relies on specialised suppliers for critical components such as wafers, chemicals and equipment. These suppliers serve multiple industries, creating interdependencies. A disruption in one area can cascade through the entire supply chain.¹¹ Building semiconductor fabrication facilities, commonly

¹⁰ Shahana Althaf and Callie W. Babbitt, "Disruption Risks to Material Supply Chains in the Electronics Sector", in *Resources, Conservation and Recycling*, Vol. 167 (April 2021), Article 105248, DOI 10.1016/j. resconrec.2020.105248.

¹¹ Benjamin Frieske and Sylvia Stieler, "The 'Semiconductor Crisis' as a Result of the COVID-19 Pandemic and Impacts on the Automotive Industry and Its Supply Chains", in *World Electric Vehicle Journal*, Vol. 13,

known as "fabs" or expanding capacity takes years. Once established, lead times for production are long, ranging from months to years. These conditions make it difficult for the industry to adjust to sudden demand changes. At the same time, semiconductor manufacturing requires substantial capital investment, and companies hesitate to build excess capacity due to cost and market volatility. This lack of flexibility, in turn, exacerbates shortages during crises.

Geopolitical tensions impact trade relations and supply chains, leading to export restrictions, tariffs and sanctions that disrupt the flow of critical components. The chip industry is caught in the crossfire of global politics. As mentioned above, many companies adopt just-in-time inventory practices to minimise costs. While efficient, this approach leaves little buffer during supply disruptions, and a sudden surge in demand overwhelms existing stock. The increasing demand for chips from various sectors strains supply, while technological advancements require more advanced chips. Meeting these demands is challenging during crises.¹² Natural disasters such as earthquakes and floods disrupt production facilities, while the Covid-19 pandemic highlighted vulnerabilities in global supply chains, affecting production, logistics and workforce availability. Some critical components have limited suppliers, and if a major supplier faces disruptions such as fire or bankruptcy, the entire industry suffers. Furthermore, semiconductors are essential for defence, communication, transportation, healthcare and other critical sectors. Therefore, shortages impact economic growth, innovation and competitiveness. In short, the chip industry's vulnerability arises from its intricate supply chain, specialisation, long lead times, geopolitical complexities and high stakes for global economies and security.

No. 10 (2022), Article 189, https://doi.org/10.3390/wevj13100189; Vinay Ramani, Debabrata Ghosh and ManMohan S. Sodhi, "Understanding Systemic Disruption from the Covid-19-induced Semiconductor Shortage for the Auto Industry", in *Omega*, Vol. 113 (December 2022), Article 102720, DOI 10.1016/j. omega.2022.102720.

¹² Vinay Ramani, Debabrata Ghosh and ManMohan S. Sodhi, "Understanding Systemic Disruption", cit.

4.2 Connection toward the global supply chain: The EU and Korea cases

4.2.1 Economic cooperation between Korea-EU and supply chain issues

The EU and the ROK have developed strong economic ties over the years. Korea is the EU's 9th largest export destination for goods, while the EU is the ROK third largest export market. Since the entry into force of the EU-Korea free trade agreement on 1 July 2011, bilateral trade and investment have expanded remarkably. Total bilateral trade in goods amounted to 107.3 billion euros in 2021, representing a significant increase of 70.8 per cent since 2011. In 2020, EU-ROK trade in services was concentrated in specific sectors, including transport, royalties and license fees, and telecommunications, computer and information services. The ROK is one of the EU's ten strategic partners globally (and one of the four in Asia). Brussels sees Seoul as a partner with the political and economic influence to make a difference at the global and regional levels. The bilateral agreement,¹³ which has been in force since 2014, sets the overall framework for cooperation, covering areas such as non-proliferation, human rights, counterterrorism, climate change, energy security, and development assistance. In short, the EU and the ROK have a robust economic relationship, with significant trade volumes and cooperation across various sectors, and a deepening political partnership.

Recently, Seoul and Brussels have decided to strengthen their collaboration on supply chains, focusing on advanced industries. Firstly, they plan to strengthen on battery supply chains.¹⁴ The latter are critical for various applications,

¹³ On 10 May 2010 the two sides signed a Framework Agreement, which entered into force on 1 June 2014. It provides a basis for strengthened cooperation on major political and global issues such as human rights, non-proliferation of weapons of mass destruction, counterterrorism, climate change and energy security. European Union and South Korea, *Framework Agreement between the European Union and its Member States, on the one part, and the Republic of Korea, on the other part*, Brussels, 10 May 2020, https://eur-lex.europa.eu/legal-content/en/TXT/?uri=celex:22013A0123(01).

¹⁴ Sae Won Chung and Jae-Seung Lee, "Building the Pillars of the EU-South Korea Strategic Partnership", in *Asia Europe Journal*, Vol. 17, No. 3 (September 2019), p. 327-340, DOI 10.1007/s10308-019-00557-z;

including electric vehicles, renewable energy storage and portable electronics. Because of the two sides' shared emphasis on carbon neutrality, the supply of batteries has a significant importance in their economy and political agendas.¹⁵ Secondly, given the global shortage of semiconductors, enhancing cooperation in this area is crucial. Semiconductors are essential components in electronic devices, ranging from smartphones and computers to industrial machinery and automobiles. Both batteries and semiconductors are highly relevant to the automotive industry. The transition to eco-friendly vehicles, such as electric and hydrogen-powered cars, requires robust supply chains. After all, the ROK is a major player in the automotive industry, and collaboration with the EU can strengthen these supply networks. Seoul and Brussels also aim to increase cooperation in the renewable energy sector as well, given its potential positive impact on improving supply chains efficiency for components such as turbines, generators and transmission equipment.¹⁶

By addressing these specific supply chain issues, the ROK and the EU aim to improve resilience, sustainability and competitiveness in critical industries. Their collaboration reflects a shared commitment to navigating global uncertainties and promoting economic growth.

4.2.2 Impact of supply chain crisis on Korean economy

During the Covid-19 pandemic, Seoul's economy both encountered adversities and showed resilience, particularly in trade. Initially, the country experienced a rapid deterioration in exports as global demand dwindled amidst lockdowns and disruptions. Notably, in April 2020, exports plummeted by 24.3 per cent, marking the most substantial decline in a single month since the global financial crisis in 2009. However, South Korea's response to the pandemic

Gabriel Felbermayr et al., "Quantifying the EU-Japan Economic Partnership Agreement", in *Journal of the Japanese and International Economies*, Vol. 51 (2019), p. 110-128, DOI 10.1016/j.jjie.2018.12.007.

¹⁵ Frauke Bierau et al., "Opportunities for European SMEs in Global Electric Vehicle Supply Chains in Europe and Beyond", in Tim Schulze, Beate Müller and Gereon Meyer (eds), *Advanced Microsystems for Automotive Applications. Smart Systems for Green and Automated Driving*, Cham, Springer, 2016, p. 223-235; James Eddy, Alexander Pfeiffer and Jasper van de Staaij, "Recharging Economies: The EV-Battery Manufacturing Outlook for Europe", in *McKinsey Insights*, May 2019, https://www.mckinsey.com/industries/oil-and-gas/ our-insights/recharging-economies-the-ev-battery-manufacturing-outlook-for-europe.

¹⁶ Troy Stangarone, "South Korean Efforts to Transition to a Hydrogen Economy", in *Clean Technologies and Environmental Policy*, Vol. 23, No. 2 (March 2021), p. 509-516, https://doi.org/10.1007/s10098-020-01936-6.

was characterised by a highly effective containment strategy, which included aggressive testing, contact tracing, mask-wearing and preventive measures. Unlike many other nations, the ROK never imposed a full lockdown, enabling the control of Covid-19 spread while minimising disruptions to economic activities. Despite the initial setbacks, South Korea's economy demonstrated resilience, outperforming many major economies. Following a contraction of 0.85 per cent in 2020, the country's gross domestic product (GDP) swiftly rebounded. In 2021, GDP surged by 4 per cent, reaching an 11-year high. This robust recovery was driven by strong exports and private consumption. South Korea's export-oriented economy showcased resilience, particularly in sectors such as semiconductors, electronics and automobiles. These industries played a pivotal role in sustaining the economy amidst the pandemic. Moreover, the country's comprehensive crisis management strategies helped mitigate the adverse effects of the pandemic on trade. Therefore, it is possible to say that, even though South Korea encountered initial challenges due to the pandemic, its effective containment measures and robust export performance contributed to a relatively swift economic recovery.

Even though the economic damage during the pandemic was limited, the trade war between the United States and China, the Russia-Ukraine war and post-pandemic inflation have all caused multiple challenges. The ROK's chip manufacturing industry is currently facing the worst crisis in a decade, with expected negative impacts on the national economy. In August 2022, South Korea experienced a decline in monthly chip exports for the first time in 26 months. This reduction in exports has affected the overall trade balance and economic growth. Additionally, the entry of Chinese companies like Yangtze Memory Technologies into the memory chip business has increased competition, threatening Korean memory chip giants like Samsung Electronics and SK Hynix. This heightened competition could lead to market share erosion, impacting revenue and profitability. Moreover, oversupply of memory chips and subsequent price cuts create financial pressure for Korean chip manufacturers, leading to potential shrinkage in profit margins and affecting overall industry profitability. There are also concerns about the long-term outlook for the chip industry crisis, with some experts believing it will persist for at least the next years.¹⁷ A prolonged downturn could have severe consequences for the Korean economy. Intensifying global competition in the chip supply chain, coupled with the rapid growth of Chinese companies, leaves Korean chipmakers in a challenging time.

4.2.3 Impact of supply chain crisis in the EU: A focus with German economy

The supply chain crisis has left a profound impact on the EU, reverberating across various sectors and shaking economic stability. Disruptions in global supply chains have translated into shortages of critical components and raw materials, causing production delays and cost escalations particularly in industries such as automotive, electronics and pharmaceuticals. Consequently, reduced trade flows have cast a shadow on economic growth and competitiveness. A significant factor exacerbating the crisis is the EU's heavy reliance on imports for intermediate goods and components. Disruptions in countries like China and India have dealt a blow to EU manufacturers, exposing the vulnerability stemming from dependency on a limited number of suppliers. This dependency has intensified the EU's vulnerability to supply chain disruptions. Moreover, shortages have fuelled price volatility, triggering inflation as the costs of raw materials and transportation soar. Consumers have borne the brunt of these impacts, facing higher prices for goods and services across the board.

A case in point is Germany, a country that before the war was heavily reliant on energy imports from Russia, in particular natural gas from the Nord Stream 1 pipeline. After the outbreak of the war, Germany swiftly reduced its dependence on Russian energy, diversifying sources and securing alternative supplies. However, the energy crisis has not been without its consequences. BASF, a prominent German chemicals company, announced up to 2,600 job cuts worldwide due to cost pressures. Most of these job losses will be in Germany, where energy-intensive production lines are being shut down. According to

¹⁷ KPMG's survey highlighted that while there is optimism about revenue growth, executives are cautious about workforce growth, R&D spending, and capital expenditures. KPMG and Global Semiconductor Alliance, *Semiconductor Outlook Buoyed by Al and Automotive. Global Semiconductor Industry Outlook for* 2024, 2024, https://kpmg.com/us/en/articles/2024/global-semiconductor-industry-outlook.html.

a paper published in 2020, Germany's central bank, Bundesbank, has indeed warned of the risk of recession in the country if the war escalates and the embargo on Russian coal, oil and gas restricts power providers and industries. A projected 2 per cent shrinkage in the German economy underscores the severity of the potential economic impact.¹⁸ Indeed, Germany experienced -3.8 per cent of GDP growth in 2020 and -0.3 per cent in 2023.

The complex relationship between Germany's market dependency on China and the recent supply chain crisis also shows an example of dynamics of global trade and economic interdependence. In recent decades, China has emerged as Germany's most significant trading partner for goods, accounting for a substantial 9.5 per cent of the European country's total trade in goods in 2021. This rapid rise underscores the deepening economic ties between the two nations.

An analysis of value-added linkages along the supply chain further reveals in fact the critical role that China plays in Germany's economy. While China is not the sole dominant supplier or destination market for Germany, its significance cannot be overstated. The recent supply chain crisis has served as a stark reminder of the vulnerabilities inherent in global trade. Disruptions, shortages, and delays have prompted Germany to re-evaluate its reliance on specific partners and to seek ways to mitigate risks.¹⁹ The recent reduction in export volume from Germany to China has raised concerns, particularly for a nation historically known for its robust export-oriented economy. Several factors have contributed to this decline, including tensions in international politics, supply chain disruptions and shifting economic dynamics.

Among the industries most affected by this reduction are machinery and automotive sectors, which have traditionally been key pillars of Germany's export prowess. Challenges faced by these industries include supply chain

¹⁸ John Kampfner, "Russia and China in Germany", in *RUSI Occasional Papers*, July 2020, https://rusi.org/ explore-our-research/publications/occasional-papers/russia-and-china-germany; Klaus C. Engelen, "Germany in Crisis", in *The International Economy*, Vol. 36, No. 4 (Fall 2022), p. 10-13, http://www. international-economy.com/TIE_F22_EngelenLetter.pdf.

¹⁹ Sebastian Biba, "Germany's Relations with the United States and China from a Strategic Triangle Perspective", in *International Affairs*, Vol. 97, No. 6 (November 2021), p. 1905-1924, DOI 10.1093/ia/ iiab170; Max J. Zenglein, "Mapping and Recalibrating Europe's Economic Interdependence with China", in *MERICS China Monitor*, 18 November 2020, https://merics.org/en/node/917.

disruptions and reduced demand in the Chinese market. German machinery exports to China, for instance, have encountered obstacles due to disruptions in the supply chain, leading to diminished export volumes. Similarly, the automotive sector, heavily reliant on China as a significant market, has felt the impact of the decline in export volume. Furthermore, the chemicals and pharmaceutical sectors have also experienced decreased exports to China. These industries, which play a crucial role in Germany's export portfolio, have faced challenges in maintaining export levels amid changing market dynamics and supply chain disruptions.²⁰

In response to these challenges, the EU has embarked on a strategic re-evaluation of its relationship with China, with efforts to reshore critical industries gaining momentum. Investments in domestic production and diversification have emerged as essential strategies to bolster resilience against future disruptions. The EU has also emphasised technological sovereignty, channelling investments into digital infrastructure, 5G networks, and semiconductor manufacturing to reduce dependency on non-EU suppliers.

4.3 Prospects for the future

4.3.1 Prospects for the EU

The EU has embarked on a comprehensive and strategic endeavour to tackle the semiconductor shortage crisis and fortify its resilience in the sector. At the forefront of these efforts is the European Chips Act, a landmark initiative unveiled in early 2022. This legislation is designed to bolster the EU's competitiveness and self-reliance in the semiconductor industry, which has emerged as a cornerstone of modern technological advancement. The European Chips Act encompasses a multifaceted approach aimed at addressing various facets of the semiconductor ecosystem. One of its primary objectives is to ramp up production capacity within the EU by incentivising domestic semiconductor manufacturing. By fostering an environment conducive to investment and

²⁰ Christine Arriola, Przemysław Kowalski and Frank van Tongeren, "The Impact of COVID-19 on Directions and Structure of International Trade", in *OECD Trade Policy Papers*, No. 252 (September 2021), https://doi.org/10.1787/0b8eaafe-en.

innovation, the EU aims to cultivate a robust and self-sustaining semiconductor industry capable of meeting the continent's growing demand for chips.²¹

In addition to expanding production capacity, the Chips Act places a strong emphasis on research and development (R&D) to drive technological innovation across the semiconductor value chain. Through strategic investments in chip design, manufacturing processes and packaging techniques, the EU seeks to enhance the competitiveness of European semiconductor firms on the global stage. By harnessing the power of cutting-edge technologies such as artificial intelligence, quantum computing and advanced materials, the EU aims to position itself at the forefront of semiconductor innovation. Furthermore, the Chips Act seeks to foster collaboration and cooperation among public and private entities within the semiconductor ecosystem. By forging strategic partnerships and facilitating knowledge-sharing initiatives, the EU aims to create a vibrant and interconnected semiconductor community capable of driving collective progress and innovation. This collaborative approach is essential for maximising the impact of EU investments in semiconductor research, development and manufacturing.

In parallel to legislative and policy measures, the EU has established the Chips Joint Undertaking – a dedicated investment platform aimed at supporting the growth of the semiconductor sector. This initiative serves as a vital catalyst for promoting EU leadership in semiconductor technology over the medium to long term. By providing financial support for research projects, infrastructure development, and talent acquisition, the Chips Joint Undertaking aims at nurturing a thriving semiconductor ecosystem that fosters innovation, competitiveness, and sustainability. Moreover, the EU is keenly aware of the critical role that skilled talent plays in driving semiconductor innovation and growth. Efforts are underway to address the skills shortage in the semiconductor field by attracting new talent, fostering a culture of lifelong learning, and providing targeted training and education programs. By investing in the development of a highly skilled workforce, Brussels wants to

²¹ Kathleen R. McNamara, "Transforming Europe? The EU's Industrial Policy and Geopolitical Turn", in *Journal of European Public Policy*, 6 July 2023, https://doi.org/10.1080/13501763.2023.2230247; Rajeswari Pillai Rajagopalan, "The U.S. Escalates Chips War with China", in *ORF Occasional Papers*, No. 397 (April 2023), https://www.orfonline.org/research/the-us-escalates-chips-war-with-china; Bernhard Dachs, "The European Chips Act", in *FIW Policy Briefs*, No. 58 (February 2023), https://www.fiw.ac.at/?p=2444.

ensure that the union remains at the forefront of semiconductor innovation and manufacturing.

Additionally, the EU is actively engaging with industry stakeholders, research institutions, and member states to create a strategic framework for semiconductor development. Through collaborative partnerships and collective action, the EU seeks to leverage the collective expertise and resources of its member states to strengthen Europe's position in chip manufacturing and technology. By aligning policy objectives, coordinating research efforts, and sharing best practices, the EU aims to create an enabling environment for semiconductor innovation and growth. Importantly, the EU's efforts extend beyond immediate crisis management, encompassing a longterm vision for semiconductor development and competitiveness. By fostering a culture of innovation, investing in research and development, and promoting collaboration and cooperation, the EU aims to maintain its technological leadership and ensure the security of semiconductor supply chains in the years to come. In summary, the EU's political and industrial efforts are essential for strengthening semiconductor production, fostering innovation, and ensuring long-term competitiveness, thereby shaping Europe's digital future and economic resilience.

As one of the world's major chip producers, the ROK has been actively responding to the global supply chain crisis in the semiconductor industry. The South Korean government and private companies have indeed made notable efforts to address the challenges posed by the shortage of critical components.

4.3.2 Prospects for the ROK

The ROK and the United States have elevated their cooperation in major industries, including semiconductors and lithium-ion batteries, to re-establish global supply chains. The goal is to mitigate challenges posed by China and potential shortages of critical components. The US-ROK techno-political alignment aims to strengthen and upgrade security cooperation, with semiconductors playing a central role. US President Joe Biden has emphasised the significance of semiconductors for national security and advocated for "friend-shoring," bringing production back to the United States and its allies. On the domestic front, Seoul has renewed its commitment to supporting the advanced semiconductor industry. Former ROK President Moon Jae-in initiated the formation of a "semiconductor belt" across Gyeonggi and Chungcheong provinces to enhance supply chain resilience, while the National Advanced Strategic Industry Act has enacted regulation of semiconductor exports to foreign companies. Following up, the current ROK President Yoon Suk-yeol has stated that his government aims to make the country a "semiconductor superpower" by expanding engineering education and training more specialists.²²

ROK companies continue to invest in research, development, and innovation within the semiconductor sector. These efforts focus on enhancing production capabilities, improving chip designs, and staying at the forefront of technological advancements. Furthermore, ROK semiconductor manufacturers collaborate with global partners, including US companies, to strengthen supply chains and share expertise. Strategic partnerships help mitigate disruptions and ensure a stable flow of critical components.

During his recent state visit to the Netherlands, President Yoon engaged in significant diplomatic and economic activities aimed at strengthening bilateral relations and exploring mutual interests. This historic visit marked the first state visit by a South Korean president since the establishment of diplomatic ties between the two countries in 1961. President Yoon met with King Willem-Alexander, emphasising the importance of diplomatic ties and strategic collaboration. A significant highlight of President Yoon's visit was his tour of the headquarters of ASML, a Dutch semiconductor equipment manufacturer and global leader in lithography technology – a technology crucial for chips production. The visit aimed to strengthen cooperation and explore opportunities for investment and technological collaboration, given the common interests shared by the ROK and the Netherlands in the semiconductor sector.

²² YangPaeng Kim, "Chips in Flux: The Outlook for the Global Semiconductor Market and Implications for the Korean Economy", in *KIET Monthly Industrial Economy*, 29 August 2023, https://www.kiet.re.kr/ en/pub/economyDetailView?detail_no=2852; Chan-Yuan Wong and Christopher J. Russell, "A Search Dilemma for Market Niches: Korea and Taiwan in a Time of US-China High-Tech Decoupling", in *Global Policy*, Vol. 15, No. 2 (May 2024), p. 475-486, DOI 10.1111/1758-5899.13346.

Both countries, indeed, recognise the strategic importance of semiconductors for their economies and national security, underscoring the commitment to fostering a strong semiconductor alliance. In 2022, the ROK and the Netherlands signed a strategic partnership treaty in Seoul, emphasising coordination between government and private sectors to protect and promote critical and emerging technologies, including semiconductors. ASML's role in the semiconductor supply chain is pivotal, with South Korea being its secondlargest market by sales after Taiwan. President Yoon's visit, thus, aimed to ensure stability in semiconductor sales and explore avenues for collaboration, further reinforcing the strategic partnership between the two nations.

4.3.3 EU-ROK collaboration

Addressing the supply chain crisis requires strategic cooperation between the EU and the ROK. Here are some possible strategies for both parties.

First, they should diversify sources of critical components and raw materials. Identifying common sources of risk is crucial and both should work together to find alternative suppliers, especially for natural resources.

Second, they should invest in R&D. Joint investment in R&D for advanced technologies, including semiconductors, batteries and other critical industries will help both parties to address the current supply chain risks. Foster innovation and develop cutting-edge solutions will help them reducing the dependency on external suppliers.

Third, they should promote technological cooperation.²³ The EU and the ROK should facilitate knowledge exchange and collaboration in areas such as semiconductor manufacturing, lithography technology, and digital transformation.

²³ Shawn Donnelly, "Semiconductor and ICT Industrial Policy in the US and EU: Geopolitical Threat Responses", in *Politics and Governance*, Vol. 11, No. 4 (2023), p. 129-139, https://doi.org/10.17645/ pag.v11i4.7031; Heekwon Kyung and Jun Lee, "Changes in Geopolitics of Semiconductors and Directions for Korea", in *KIET Monthly Industrial Economy*, 29 July 2022, https://www.kiet.re.kr/en/pub/ economyDetailView?detail_no=2715.

Fourth, strategic alliances with like-minded countries, or supranational institutions such as the EU, are important to mitigate the supply chain crisis. Both Brussels and Seoul share similar values such as liberal democracy, peace, and human rights. Shared values, in turn, can contribute to strengthen cooperation with other like-minded countries to collectively address supply chain challenges and protect common interests.²⁴ Eventually, those collaboration can facilitate the policy coordination and common crisis response.

Finally, the EU and the ROK should establish mechanisms for real-time information sharing during supply chain disruptions. This would enable the joint crisis response plans to mitigate the impact of future shocks. In short, Seoul and Brussels should work closely together, leveraging their technological expertise, shared values, and strategic interests to navigate the supply chain crisis effectively and ensure economic stability.

²⁴ Rajiv Kumar, "The US-China Chip War and Prospects for South Korea-India Semiconductor Cooperation", in *Journal of Indian and Asian Studies*, Vol. 4, No. 2 (July 2023), Article 2340004, https://doi. org/10.1142/S2717541323400041.

Conclusion

The four papers collected in this volume provide a comprehensive view of the new convergence in economic security relations between the EU and the ROK. The papers by Nicolas and Lim show how shared challenges in economic security can provide the strategic rationale for closer cooperation between Brussels (and its member states) on one side, and Seoul on the other. Fleshing out the complexity of current international politics, Nicolas, from an EU-centric perspective rooted in the context of the debate over "strategic autonomy", argues in favor of enhanced cooperation between the two sides as a guardrail against the dangers of US-China great power competition. Lim, from a ROK-centric perspective, argues for a muscular alignment between liberal democracies in the face of Chinese assertiveness at a global level. The other two papers by Dian and Choi provide concrete examples of how shared challenges can turn into fertile ground for cooperation. Dian's paper explains how Russia's aggression against Ukraine has created an opportunity to strengthen cooperation in the Défense industrial sector between the ROK and the EU member states. The parallel deepening of the bilateral relation between Russia and the Democratic People's Republic of Korea (DPRK) throughout 2024 and its specific implications for Seoul – a development that occurred after the time of writing – in fact confirms the degree to which security in the Euro-Atlantic theatre and on the Korean peninsula are intertwined. Similarly, Choi shows how the crisis in chipmaking that occurred between 2020 and 2023, and the consequent rearticulation of the semiconductor supply chain, has opened new avenues for bilateral ROK-EU cooperation.

Multiple dynamics threaten to upset the trajectory of this convergence in the near future. Within the EU, continuing tensions between the European Commission and individual member states over the union's foreign policy and broader geostrategic approach risk affecting attempts to deepen the bilateral relationship between Seoul and Brussels. Within the ROK, domestic polarization and the politicization of foreign policy threaten the long-term viability of the Yoon administration's push for closer relations with Western liberal democracies. At an international level, a potential second Trump presidency may further accelerate a Brussels-Seoul middle-power alignment in light of an increasingly isolationist US foreign policy. However, the high degree of uncertainty and wide-ranging implications that would emerge from a second Trump administration may nonetheless hamper such projects, especially in areas such as the defence industrial sector and the semiconductor industry. Future research on EU-ROK economic security relations must keep track of these developments to assess whether they can derail the current convergence.

New Convergences in EU-ROK Economic Security Relations

Both the Republic of Korea (ROK) and the European Union (EU), along with its member states, are confronting a complex, challenging, and increasingly insecure global security environment shaped by the aftermath of the Covid-19 pandemic, Russia's invasion of Ukraine, and great power competition between China and the United States. To withstand the pressure from significant economic and geopolitical shifts, liberal democratic middle powers have intensified their commitment to multilateralism and international cooperation with like-minded countries. It is at this historic juncture that the ROK and the EU have a crucial opportunity to enhance their security cooperation to counteract disruptive tendencies that threaten their economic stability and security. The four papers in this volume offer new insights on the strategic rationales for a ROK-EU alignment, as well as detailed assessment of the prospects for cooperation between the two sides in the defence industrial sector and in the semiconductor industry.

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