

South Korea's Narrowing Policy Space in International Economic Cooperation

By Lee II Houng | 10 October 2022

Key Issues

- South Korea, with a heavily skewed economy towards trade and manufacturing, is facing difficult policy choices as the tension between the US and China, its two most important trading partners, heightens.
- To retain the competitiveness of its manufacturing industry, South Korea's main long-term strategy goal should be to become a part of the group of countries with the most stable and advanced hightech ecosystem.
- Yet in light of the uncertainty surrounding the evolution of the US-China tension, the pace of South Korea's policy decisions should be monitored to avoid losing access to its existing markets and various supply chain linkages.

Trade deals have underpinned Korea's export-led growth

After joining the General Agreement on Tariffs and Trade (GATT) 1967. liberalization gained momentum with the start of bilateral and regional trade negotiations in the late 1990s. Currently, South Korea is deeply integrated in the global web of trade deals with 13 bilateral and 5 regional FTAs (comprising 58 countries) ratified and more than a dozen bilateral/regional and plurilateral FTAs at various stages of negotiation.

These trade deals, along with the successive government-led industrial policies, have been crucial in attaining the well documented success of Korea's export-led growth. Starting from light manufacturing in the 1960s, Korea soon moved into heavy and chemical

industry, to shipbuilding, and then in the 2000s into cars and electronics. By the mid-2010s, IT-related products took the centre stage in Korea's export with semiconductor, flat panel display, and wireless communication accounting for more than 30% of total merchandise exports. As measured by final destination, the US, the EU, and China are the three most important markets, accounting together for 44% of Korea's exports, i.e., US (15%), EU (12%) and China (17%) based on the 2016 World Input and Output Table.

Geopolitical tensions among its most important trading partners pose new challenges to Korea, along with a set of emerging new developments that will influence its strategic choices. Internally, growing public concern about environmental, social, and governance (ESG) issues and a

policy objects beyond market access in trade deals. trade, supply chains, climate, tax, and anticorruption. A <u>2021 survey</u> by the Korean Chamber of Commerce and Industry, for example, found that 70.5% of consumers had refused at some point to purchase a product on ESG concerns. Externally, recent global supply chain disruptions of critical minerals such as rare earth, energy, and food security concerns, along with the spillover from onshoring policies in many OECD countries in response to globalization fatigue and geopolitical risks, all require greater attention be given to political realities when expanding international economic cooperation.

Current policy options on the table

Against this background Korea has expressed interest in joining various plurilateral initiatives such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the CHIP 4 Alliance, the Indo-Pacific Economic Framework (IPEF), and the <u>Digital Economy Partnership</u> Agreement (DEPA). These plurilateral agreements are well beyond the traditional FTAs not only in terms of depth but also in scope, covering socioeconomic and even political dimensions.

While the combined GDP of CPTPP member countries is smaller than that of the Regional Comprehensive Economic Partnership (RCEP), the potential benefit to Korea is estimated at 0.35% of GDP per annum, exceeding by far the gains from the RCEP membership estimated at 0.007% per annum according to a report by the Ministry of Trade, Industry and Energy (MOTIE). This is because the CPTPP is more comprehensive in terms of market access and rulemaking obligations. These commitments are expected to enhance competition, building on level playing field in relation to subsidies (in various forms), adherence to labor standards, and environmental protection. According to Jeffrey Schott of the Peterson Institute of International Economics, joining the CPTPP would imply "upgrading and modernizing" Korea's existing trade agreements and "building on the robust foundation" of the Korea-US (KORUS) FTA.

Membership in the US-proposed IPEF, which is not an FTA and therefore without a market access

widening income disparity necessitates broadening deeper reforms under the IPEF's four pillars, i.e., While details have yet to be fleshed out, Inu Manak of the Council on Foreign Relations suggests that the commitments will likely match and perhaps be even more stringent than those found in the US-Mexico-Canada Agreement in areas of digital products and data transfers and in the environmental and labor chapters.

> The CHIPS and Science Act of 2022 is the centrepiece of the United States' envisioned robust supply chains among like-minded allies, i.e., the US along with Japan, Korea, and Taiwan. The four countries together account for 84 percent of the global semiconductor market, i.e., the US (47%), Korea (20%), Japan (10%), and Taiwan (7%). Membership in the CHIPS will provide Korea with a stable and self-sufficient semiconductor supply chain and improved prospects for advancement in this field. The US leads in most segments of the supply chain, while Japan leads in wafers and assembly, testing, and packaging (ATP) tools. Taiwan has the largest market share in foundries (independent manufactures of chips for third-party customers). With regards to technology, Samsung has recently started to mass-produce 3 nm chips—a key measure of semiconductor production capacity.

> Korea has expressed interest in joining the DEPA to be able to partake in the global effort to modernise the fragmented digital policy rules. The DEPA is an agreement among New Zealand, Chile, and Singapore set up to complement multilateral and regional trade negotiations on e-commerce. It aims to provide rules and practices for digital trade, building on the work of the APEC and the OECD. The scope of DEPA includes facilitating SME participation in the digital economy, data security, and digital inclusion and encouraging innovation in digital economy through open government data. DEPA members have agreed to commence negotiation with Korea in October 2021 and the first accession working group met in January 2022.

The narrowing policy space due to growing geopolitical tension

A study of the Korean Institute of Foreign Affairs and component, could amplify gains to Korea through National Security describes the recent US proposals, decoupling the US economy from China" the US is China, and Hong Kong. In terms of R&D, the EU27 "selectively seeking to isolate China from the global dual-use technology value chain and transform it into a US-led trade and value chain" consisting of US allies. This may be true in the short run. However, the number of dual-use products is expanding rapidly covering both industrial applications and consumer electronics. In light of the growing use of memory chips to process larger amount of data faster, artificial intelligence, the IoT, and machine learning, delineation of the extensive network of global supply chains into commercial and military uses will become increasingly challenging.

If the heightened geopolitical tension were to last, global supply chains of the digital industry could eventually decouple into US/EU- and China-centric groups. This assumes the US and the EU continue to strengthen their collaboration in digital industry

i.e., the CHIP 4 and the IPEF, as "instead of fully with the rest accounted for by Israel, Singapore, and the CHIP 4 countries together have spent on average \$1.3 trillion per year during 2016-19, which is almost three times that of China. In the 2018 Science Citation Index Expanded, as measured by the centrality of high-tech research, i.e., a measure of leadership obtained by comparing the influence of a research output on others, the US ranked first, but there was little gap between it and China in the third place,-a remarkable catch up from the seventh place in 2008. However, when joint research with the US is excluded, China falls to 10th place with the top nine places all accounted for by the US, North European countries, and Australia.

Considerations for an optimal policy choice

Finding an economic-security strategy best fitted for Korea will depend on the duration of the heightened

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including through the EU-US Trade and Technology US-China tension. If the tension were to last only Council (TTC). If so, US/EU and China groups will each have to develop their own industry starting from design (fabless), manufacturing (foundries), to assembling (Outsourced semiconductor assembly and test - OSAT), as common industry standards are needed for major components such as memory, logic, analog IC, and modul predictive control for compatibility. Under this scenario, both groups will underperform compared to the status quo to the extent that high-tech industry gains synergy from collaboration and tech clusters of all countries concerned.

China may face a daunting task of competing with the US/EU-centric group, especially if the latter sets up a high-tech ecosystem together with the CHIP 4 countries. According to the Global Innovation Index, which is a measure of such an ecosystem, 16 out of

over the medium term, then pursuing a dual track, i.e., aligning with the US/EU centric supply chains on selective high-tech areas while keeping an active trade dialogue with China, would be the natural choice. This sentiment is perhaps well captured in Deputy Prime Minister Kyung-ho Choo's statement at an August cabinet meeting where he noted that Korea will start negotiation on the IPEF while at the same time strengthening economic cooperation with China.

However, if the tensions turn out to be permanent, Korea's choice will become increasingly limited, as it will have to remain in the US/EU hightech ecosystem to ensure it retains an edge in high-tech industry, which is the backbone of its manufacturing-based economy. This is particularly important when considering that the life of any the top 20 countries are EU and CHIP 4 countries, new tech product becomes ever shorter and the

global supply chains are constantly remapping related fronts as well as digital transition, including in real time with the growth of digitalisation (i.e., a future EU-ROK Digital Partnership. In terms of the greater use of AI, information flow based on big data, and e-commerce) and modularisation (i.e., becoming an associated member of the research standardised and specialised stages of production). In this respect, close monitoring of the EU-US and EU-China relations will be important for Korea in assessing what policy position to take.

In terms of concrete steps, Korea would benefit rights, all overlap with the areas of growing public from joining all the initiatives currently on its table, i.e., the CPTPP, CHIPS4, EDPA, and the IPEF, while at the same time strengthening Korea-EU cooperation on the digital economy. Caution should be exercised, however, when assessing model-based estimates from joining the CPTPP or any other trade deals, as most models (e.g., the CGE model) are calibrated based on data predating the supply chain disruptions and do not consider the possible decoupling into US/EU and China. The timing of membership is also crucial to reduce uncertainties amidst Covid-19-related disruptions and heightened geopolitical tension. Already, a recent global survey by Ernst & Young reports that 62% of respondents as having "made significant changes in the supplier bases" in the last 24 months and 55% as "planning significant changes in the next 24 months."

The elements of the proposed IPEF seem consistent with the current Korean government's 2023-27 Science and Technology Roadmap. This plan aims to strengthen public-private partnership in innovation and enhance strategic collaboration on high tech with foreign partners while widening the scope of the plan to encompass zero-carbon, digitalisation, and provision of related services, which also includes expanding the health and welfare system to address issues related to population aging.

equal importance is Korea's enhanced cooperation with the EU on climate and energy

primordial issue of research, discussion of Korea framework programme, Horizon Europe 2021-27, gets traction. The TTC's 10 working groups that deal with a variety of matters on digital industry ranging from standardisation, supply chains, Al, green technology, climate change and workers' concern in Korea. An upgrade and modernisation of the EU-Korea FTA, including on e-commerce, would be a useful complementary step.

Maintaining an active dialogue with China should also be pursued. Korea's trade link with China via intermediate goods is still significant, of which a sizable share is accounted for by high tech products (foundries and OSAT). Moreover, China is a growing market with the potential for becoming the largest future consumer market. Nevertheless, a recent survey by the Korea Chamber of Commerce and Industry shows that on securing supply chains, 47% of firms considered the US as most important due to its high-tech and natural resources. They were more cautious, however, about the pace, noting their current economic ties with China.

In conclusion, the heightened geopolitical tension from the US-China strategic competition is rapidly changing the landscape of Korea's policy choices. Being in a standoff with North Korea amplifies the challenges of making the right economic security decisions for Korea. For now, seeking to be part of a secure and reliable high-tech ecosystem would be a priority to ensure Korea retains its competitiveness in manufacturing-the backbone of its economy. Yet, the pace and scope would need to be measured, reflecting its current trade, and more broadly, economic linkages.



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