
KOREA'S RECENT TRADE PERFORMANCE IN RESPONSE TO EXTERNAL DEVELOPMENT

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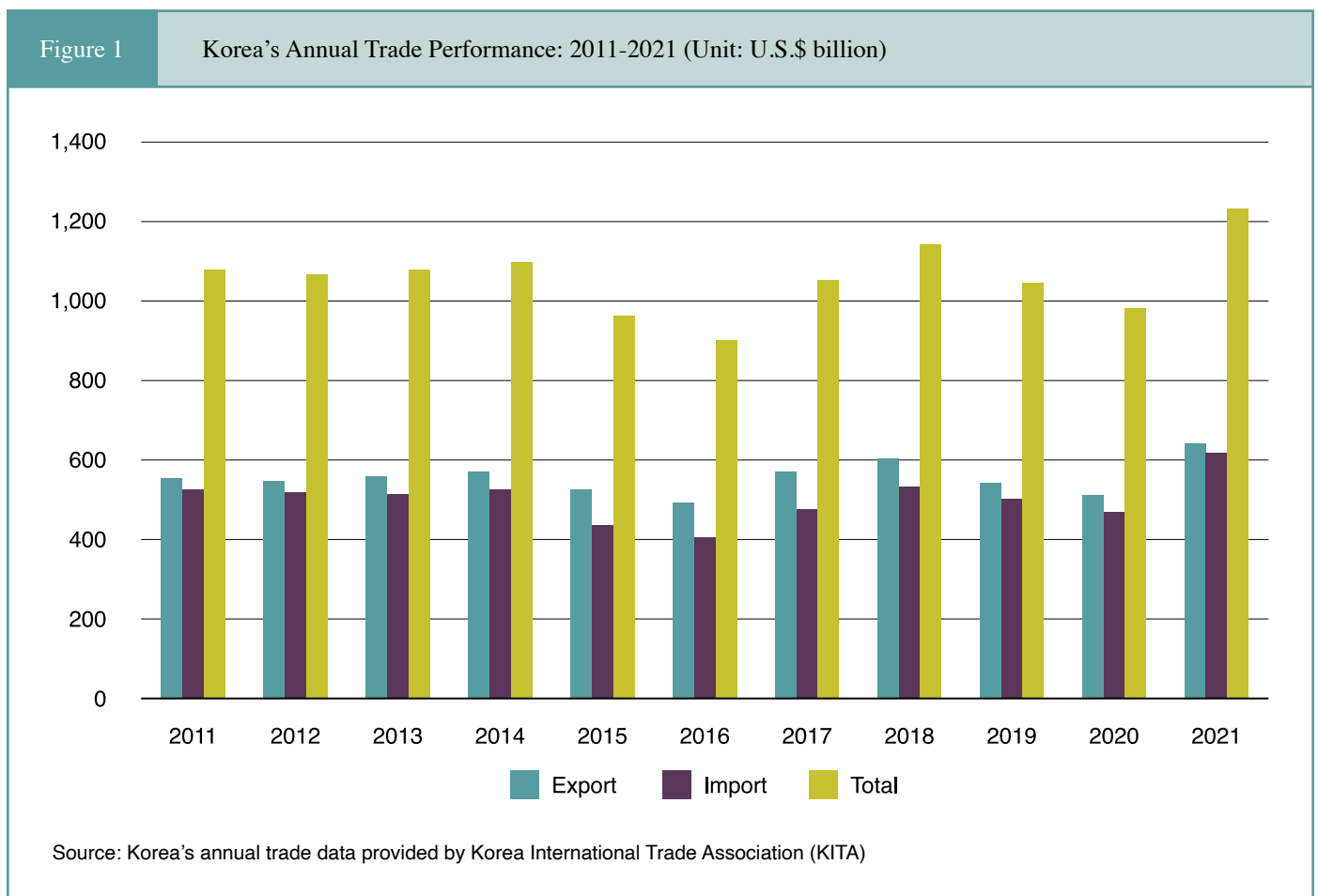
Abstract

During the past few years, Korea has faced several challenges, such as China's response to the deployment of the U.S. anti-missile defense system (THAAD) in Korea, U.S.-China trade disputes, U.S. restrictions on steel imports from Korea, amendment of the Korea-U.S. FTA, the Korea-Japan trade dispute, and the COVID-19 pandemic. The issues in which Korea was directly involved, such as the THAAD conflict, the U.S. restrictions on steel imports, and the Korea-Japan dispute, impacted Korea's trade. However, these impacts were limited to specific areas and diminished over time, with limited effect on Korea's overall trade performance. Although Korea is not directly involved, U.S.-China trade disputes affected Korea since China and the U.S. are Korea's first and second largest trading partners. While Korea's exports to China were reduced, U.S.-China trade disputes did not seem to have a serious influence on Korea's overall trade. Like many other nations, Korea has suffered considerable damages in trade from the COVID-19 pandemic. However, Korea has had less negative impact as the global demand for products like semiconductors and automobiles, in which Korea has comparative advantages, has rapidly recovered. Indeed, Korea's economic recovery beginning in the second half of 2020 was led by exports.

Introduction

Korea's total trade recorded \$1.08 trillion in 2011, the first time it surpassed \$1 trillion. Korea was the ninth nation with a total trade volume exceeding \$1 trillion. Korea was able to maintain the \$1 trillion trading nation status until 2014. However, as Figure 1 shows, both exports and imports declined in 2015 and Korea's total trade was reduced to less than \$1 trillion. Korea's trade performance in 2016 showed no sign of improvement, but it bounced back in 2017 and 2018 with the total trade again reaching over \$1 trillion. In 2019, as world economic growth slowed down, Korea's exports and imports also started to shrink. The prolonged COVID-19 pandemic has again reduced Korea's total trade below \$1 trillion in 2020. Total trade rebounded strongly in 2021, driven by a 25.7% rise in exports.

During the past few years, Korea has faced various challenges stemming from external developments, such as China's response to the deployment of the U.S. anti-missile defense system, called "Terminal High Altitude Area Defense" (THAAD), in Korea, U.S.-China trade disputes, U.S. restrictions on steel imports from Korea, amendment of the Korea-U.S. (KORUS) FTA, the Korea-Japan trade dispute, and the COVID-19 pandemic. This article will look at these developments and analyze possible impacts on Korea's trade performance. The article will also examine the steps taken by the business sector and the government, and consider whether there were significant changes in Korea's relations with its trading partners in response to these external developments.



External Developments and their Impacts on Korea's Trade Performance

1) THAAD Conflict between Korea and China

In July 2016, the U.S., under the 1953 Mutual Defense Treaty, decided to deploy the THAAD anti-missile defense system in Korea. This issue immediately alarmed China, which claimed that the THAAD's X-band radar has a "forward-base mode" feature of reaching up to 2,000 kilometers, covering the eastern half of Chinese territory. China's main concern with THAAD was that it could restrain Chinese power in the region. From China's perspective, the U.S. anti-missile defense system far exceeded its aim of protecting South Korea and threatened China's national security. Based on these arguments, the Chinese government officially expressed its objection to the deployment of this U.S. anti-missile defense system in Korea.

As the decision jointly made by Korea and the U.S. was not reversed, China took numerous anti-Korea actions. These actions were imposed against Korean artists, products, and specific companies, as well as business sectors, such as restaurants and cinemas. The Chinese government's official position was that these actions were voluntarily taken by Chinese society, companies and consumers independently of the government. However, some of the measures, such as the closing of most Lotte stores for safety violations and halting the approval process for Korean online video games, were regulatory actions taken by the Chinese government without any transparent explanations. This incident is an example of security conflicts spreading to the economic sphere.

Ever since the THAAD deployment was announced, Korean companies operating in China began to face difficulties in various business fields, especially entertainment and tourism. K-pop musicians and actors were prevented from appearing in the media. Airing Korean TV shows and soap operas was stopped. In March 2017, the government halted the approval process for Korean online video games. In other sectors, such as consumer products, similar restrictive actions were taken as well. In addition, Chinese private travel agencies announced that they would not sell package tours to Korea.

According to the Korea Tourism Organization (KTO), Chinese tourists contributed greatly to the tourism industry and duty-free business in Korea. Before the conflict occurred, Chinese tourists accounted for 70 percent of Korea's tourism revenue and 47 percent of duty-free sales.¹ However, after the THAAD conflict, Chinese group travel to Korea virtually stopped from March 2017. The number of Chinese visitors was reduced by over half, from 8.6 million in 2016 to 4.17 million in 2017. The number of Koreans visiting China also decreased by nearly 20 percent in 2017.² However, Chinese tourists visiting Korea increased again from July 2017. By 2019, the number surpassed 6.02 million, gradually recovering toward the pre-conflict level.

Restrictive actions were also imposed in the manufacturing sector. Rigid sanitary inspections of Korean cosmetic products made it difficult for Korean cosmetic manufacturers to supply products on time. Nevertheless, Korean exports of cosmetic products to China amounted to \$3.47 billion in 2017, a 30 percent increase from the previous year.³ If it were not for the above measures, exports of cosmetics to China would have increased even more, fueled by the Korean Wave and K-beauty culture. Korea's exports of cosmetics to China decreased to \$2.59 billion in 2018 due to the slowing Chinese economy, but recovered to \$3.04 billion in 2019.⁴ In addition, despite the COVID-19 pandemic, Korea's cosmetics exports to China reached \$3.81 billion in 2020, their highest record so far.⁵

The two Korean major carmakers in China, Hyundai and Kia Motors, also struggled from the THAAD-related tensions. Sales of Hyundai and Kia Motors in China decreased by 52 percent in 2017 compared to the previous year, partly due to the consumer boycott in March 2017.⁶ Hyundai and Kia Motors faced serious difficulties stemming from the THAAD conflict, which resulted in a deterioration of their local reputation, and the impact was exacerbated by the 2020 COVID-19 pandemic (see below). Furthermore, the Chinese government announced in December 2016 that subsidies to electric vehicles (EV) would be provided only if they used Chinese batteries. Therefore, Korean car manufacturers using batteries made by LG Chemicals and Samsung SDI faced additional difficulties in the market. Nonetheless, in January 2021, Hyundai Motor Group announced the plan to build its first offshore hydrogen fuel cell system plant in Guangzhou, China to work together with Chinese companies. The Group is also looking forward to joining the government's hydrogen-related project to secure its competitive advantage in China's hydrogen industry.

The Lotte Group, one of the conglomerates in Korea, had a deal in September 2016 to swap a golf course it owned for military-owned land to provide a site for the deployment of THAAD. After that, the Group faced many difficulties in China and lost a large amount of revenues as well as its customers. As a result, Lotte Mart, one of the Group's affiliates, said it suffered a decline of \$1.08 billion in sales in China, and it eventually decided to withdraw all of its businesses from China in September 2017.⁷ However, after two years of struggles in China, the Lotte Group was granted permission to resume its construction of a leisure complex project in China which had been previously suspended.

During the first couple of years of the THAAD conflicts, many Korean trade experts suggested that the Korean government file a complaint in the WTO. However, Korea did not bring the case to the WTO dispute settlement process, arguing that the retaliatory actions against Korean firms and products were not sufficiently linked to instructions by the Chinese government.

2) *The U.S.-China Trade Disputes*

Since China's accession to the WTO in 2001, the U.S. trade deficit with China has rapidly expanded at an annual average growth rate of 11.3 percent.⁸ In terms of macroeconomics, the bilateral trade imbalance may not be a big problem. However, as its scale continues to expand, the U.S. trade imbalance with China has emerged as a domestic political issue in the U.S. Moreover, China's objective to become self-sufficient in high-tech areas is viewed as a threat.

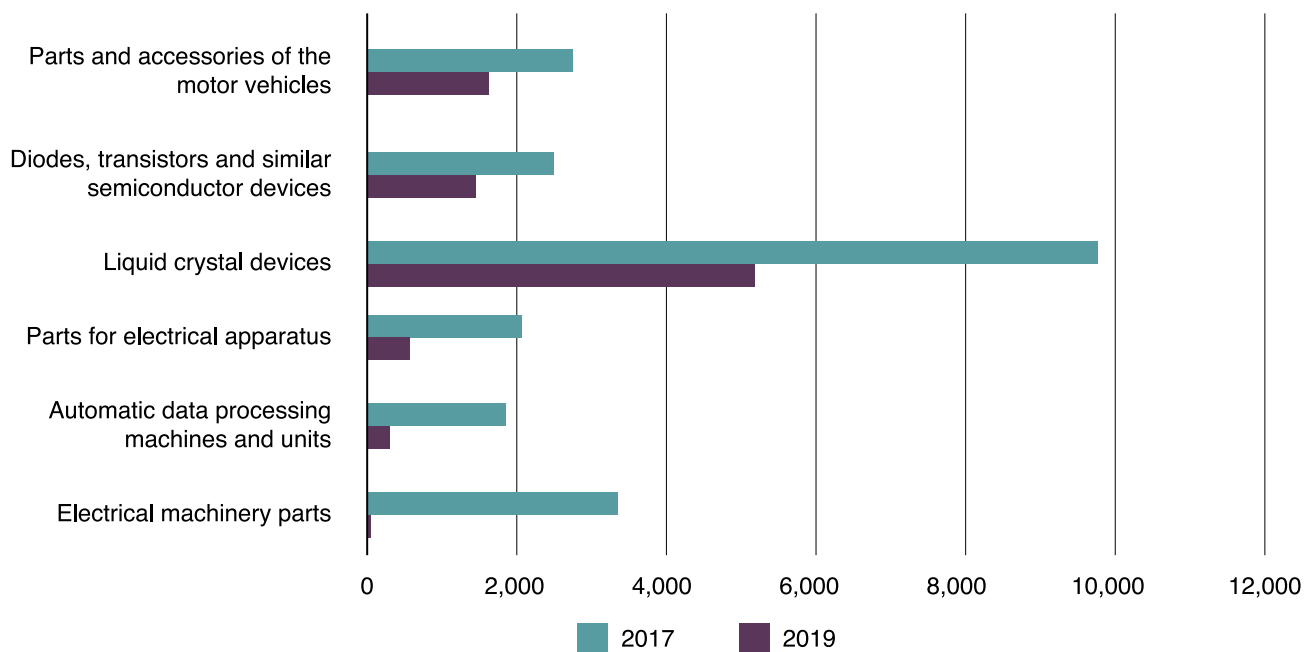
Right after its inauguration, the Trump administration initiated the Section 301 investigation on China's unfair trade practices such as government subsidies, state-owned enterprises, infringement of intellectual properties, and forced technology transfers. Based on the Section 301 investigation, the U.S. imposed additional tariffs ranging from 10 to 25 percent on certain products imported from China. During the period 2018-2019, additional tariffs were imposed on numerous products imported from China, worth about \$550 billion. In response, China also imposed retaliatory tariffs on U.S. products worth a total of \$233 billion.⁹ The U.S.-China Phase One agreement signed at the end of 2019 seemed to provide momentum to ease tension between the two countries. However, the bilateral conflicts worsened in early 2020 when the U.S. accused China of being responsible for the worldwide spread of COVID-19. The tension seems to continue even after President Biden entered office in January, 2021.

The U.S.-China tariff war led to a decline of 16.2 percent in U.S. imports from China in 2019, and a decline of 3.7 percent in 2020. Compared to 2017, the U.S. imports of manufacturing goods from China were significantly reduced in 2019. In particular, import declines were significant for electrical machinery (15 percent), machinery (16 percent), furniture (17 percent), vehicles (4 percent), and apparel (3 percent).¹⁰ U.S. imports accounted for 14.6 percent of its GDP in 2019, and China's share of the U.S. imports was 19.1 percent. Therefore, the decline in U.S. imports from China seemed to have raised the U.S. prices of imported goods from China, causing damage to American consumers and producers. In 2020, China's exports accounted for 17.7 percent of its GDP, and 17.4 percent of Chinese exports go to the U.S.¹¹ Hence, the decline in China's exports to the U.S. seemed to have hurt domestic as well as foreign firms in China that produce goods to export to the U.S. market.

Apart from the impact of the bilateral tariff war on the U.S. and China, the decline in China's exports to the U.S. may have created spillover effects on Korea's trade. When Korea-China diplomatic relations were fully established in 1992, many Korean companies invested in China to take advantage of cheap Chinese labor. Usually, these companies have imported intermediate goods from their parent companies in Korea, assembled them to produce the final goods and exported them to markets outside China. In other words, most Korean companies operating in China have been engaged in so-called 'processing trade.' As China's exports to the U.S. decreased, China's imports of intermediate goods from Korea also declined. In fact, Korea's overall exports to China decreased by 16 percent in 2019, and 81.8 percent of the export reduction came from intermediate goods such as parts and components.¹² Figure 2 shows the decrease in Korea's exports of certain intermediate goods to China between 2017 and 2019. For example, electrical machinery parts decreased by 99 percent during that period, the largest reduction among Korea's major export products to China. Other products, such as parts for electrical apparatus, decreased by 72 percent during the same period. Clearly, Korean companies exporting intermediate goods to China were seriously hurt by the U.S.-China tariff disputes.

Figure 2

Korea's Top 6 Exports to China (Unit: U.S.\$ million)



*Note: Export items are classified based on 4-digit HS code.

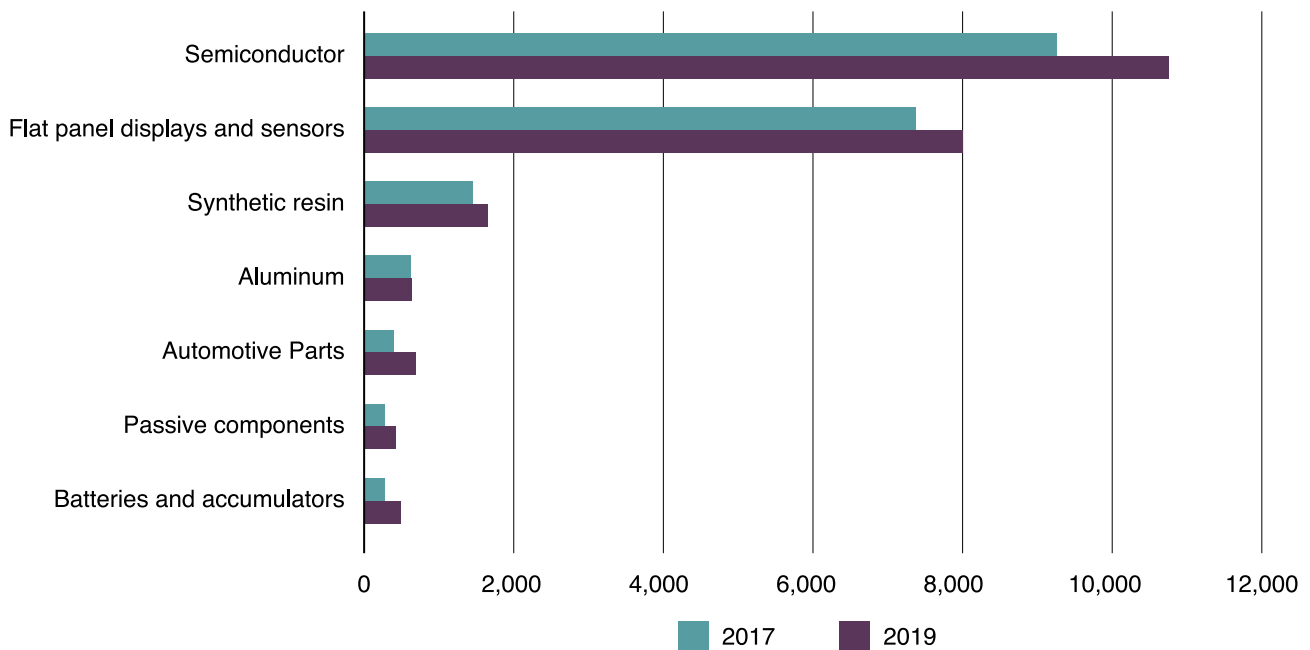
Source: Korea's annual trade data provided by Korea International Trade Association (KITA)

On the other hand, the bilateral trade disputes may have had positive impacts on third countries including Korea. This is because the reduction in China's exports of certain goods to the U.S. market may have been replaced by imports of similar goods from the third countries. Korea, Vietnam, and Taiwan were often mentioned as the beneficiary of such trade diversion resulting from the bilateral trade conflicts. In particular, Korean semiconductors and machinery may have been substituted for Chinese products subject to additional tariffs in the U.S. market. For example, it is estimated that the U.S. may have replaced \$2.31 billion worth of Chinese "printed circuit assembly" products with Korean products.¹³ In 2019, Korea's exports to the U.S. increased by 4.4 percent and the share of Korean goods in the U.S. import market showed a slight improvement from 2.9 percent to 3.1 percent. Particularly, during the period of 2017-2019, U.S. imports (2-digit HS code) from Korea of machinery, vehicles and furniture increased by 20 percent, 4 percent and 1 percent, respectively. Although Korean exports to the U.S. appear to have offset some portion of the decline in Korean exports to China, the net effect on Korea was negative.

Recently, wages of Chinese workers have been rapidly rising and many Korean companies in China have started to move their production facilities to the ASEAN countries such as Vietnam and Indonesia, and also to India, where wages are much cheaper. The U.S.-China trade disputes are likely to accelerate the diversification of Korean firms' overseas production sites. Vietnam, Korea's third-largest trading partner, has become the most attractive place for Korean firms to establish production facilities. Korea has increased exports of intermediate goods to Vietnam in order to produce goods to export to the rest of the world, including the U.S. Figure 3 shows that Korea's exports of intermediate goods to Vietnam have jumped between 2017 and 2019. In particular, Korea's exports of semiconductors and flat panel displays to Vietnam increased by 16 percent and 8 percent, respectively, during this period, while Korea's exports of these products to China decreased by 5 percent and 38 percent.¹⁴

Figure 3

Korea's Exports of Certain Goods to Vietnam (Unit: U.S.\$ million)



Source: Korea's annual trade data provided by Korea International Trade Association (KITA)

3) Section 232 of the Trade Expansion Act and the Amendment of the KORUS FTA

In March 2018, President Trump imposed special tariffs of 25 percent and 10 percent, respectively, on steel and aluminum imports. This action was based on Section 232 of the Trade Expansion Act of 1962, which states that the President can restrict imports if they are “being imported into the U.S. in such quantities or under such circumstances as to threaten to impair national security.”

In the case of steel, the Korean government agreed to accept a product-specific quota instead of tariffs. The quota requires Korea to reduce its steel exports to the U.S. by 30 percent from its annual average over the period of 2015-2017. Although the deal has cleared away the uncertainty surrounding Korea's steel exports to the U.S., Korean steelmakers face difficulties as the agreement does not allow any flexibility, such as product substitutions. Furthermore, their exports were already subject to the U.S. anti-dumping and/or countervailing duties of 50-60 percent.¹⁵ After the Section 232 quota implementation, Korea's steel exports to the U.S. fell by 25 percent in 2018 and plummeted below \$3 billion in 2019, the export quota.¹⁶ However, as the U.S. economy revived from the mid-2020, Korea's steel exports to the U.S. filled the quota.

However, the impact of Section 232 quota implementation went far beyond Korea. According to research by the Peterson Institute for International Economics (PIIE), additional tariffs imposed on steel imports in 2018 raised the price of steel products in the U.S. by 9 percent. This raised the profits of the U.S. steel firms by \$2.4 billion and created 8,700 jobs in the industry. However, this analysis reported that the U.S. firms using steel lost \$5.6 billion due to more expensive steel prices, which not only weakened the international competitiveness of their products, but also created opportunities for foreign producers, including those in Korea. However, the higher prices also decreased domestic demand for the products of U.S. firms using steel. Furthermore, this study estimated that job losses in the steel-using industries far exceeded the number of jobs created in the steel industry.¹⁷

Recently, U.S. industrial groups using steel demanded the abolition of the Section 232 tariffs. The Biden administration has committed to reviewing Section 232 of the Trade Expansion Act of 1962 for a possible revision. The U.S. government seems to be considering using anti-dumping as well as countervailing duties instead of the Section 232 measures that could violate WTO rules. Some Korean trade experts also pointed out that the steel quota agreement made between Korea and the U.S., which

limits Korea's steel exports to the U.S., violated the WTO rule banning any form of voluntary export restraints (VER). They also argued that President Biden should abolish the exports quota agreement with Korea as soon as possible.

The KORUS FTA revision negotiations begun in January 2018 were successfully concluded and took effect in January 2019. The most noticeable change was in the automobile sector. For instance, the maximum number of automobiles which can be imported from a U.S. carmaker without passing Korean safety regulations was doubled from 25,000 to 50,000 units. Another significant change is that 25 percent of the U.S. import tariffs on Korean trucks will be extended until 2041.¹⁸ Nonetheless, the KORUS FTA revision will have only minimal impact on both Korea and the U.S. This is because Korea has yet to export trucks to the U.S. and individual U.S. automakers' exports to Korea have been short of the increased amount of 50,000 units.

4) The Korea-Japan Trade Dispute

The Korean Supreme Court ruled in May 2012 that Japanese companies should compensate Koreans forced to work in Japan during the Japanese colonial period. In October 2018, the Supreme Court further approved the seizure of Nippon Steel's assets in Korea based on the previous ruling. Since then, political and diplomatic relations between Korea and Japan have entered a very difficult phase, and serious dialogue between the two governments has been stopped.

Japan changed its administration process of exporting technology-related strategic materials to Korea in July 2019. Japan announced that in order to export high purity hydrogen fluoride, a photoresist (PR) for extreme ultraviolet (EUV) and fluorine polyimide (PI), to Korea, Japanese exporting firms must get a separate permission for each product. Japanese vendors accounted for 90 percent of Korea's imports of PI and PR and 44 percent of Korea's imports of hydrogen fluoride in 2018.¹⁹ Since these three products are essential materials for producing semiconductors, there were many concerns in Korea that semiconductor firms in Korea will face serious problems if imports of these key materials from Japan are delayed.

In August 2019, Japan announced another decision to remove Korea from the "Whitelist" of 27 countries that were given a "fast-track customs procedure" under which exporting firms may apply for bulk licenses that are valid for multiple transactions over three years. Japan reclassified Korea as a Group B country. Without the fast-track customs procedure, Korean firms have to face the "catch-all" control, which requires Japanese firms that would like to export strategic products to Korea to obtain a separate permission for each of more than 1,100 products.

There was a general assumption that Korea would lose more from the dispute. In fact, Japan's monthly exports of hydrogen fluoride, which used to be 3,000 tons until the first quarter of 2019, fell sharply to 479 tons in July. In August, there was no Japanese export of hydrogen fluoride to Korea.²⁰ However, its overall impact on Korean firms seemed to be limited due to the efforts of the Korean industry to reduce its dependence of key materials from Japan. Korean semiconductor companies such as SK Hynix and Samsung Electronics made enormous efforts to diversify import sources and localize the production of key materials. For example, SK Hynix switched some of its supply sources of hydrogen fluoride from Japan to domestic companies. This change has resulted in a significant reduction of Korea's dependence on Japan for hydrogen fluoride.²¹ In the case of PR, Korean firms have shifted some of their imports to Belgium and Taiwan. Korea also attracted a global company, DuPont, to invest in building a PR production plant in Korea. As for fluorine polyimide, domestic firms such as Kolon, SK Chemicals, and SK Innovation have internalized relevant technologies to stabilize their supply chain. In sum, Japan's change in its policy related to exports of strategic materials to Korea seems to have little impact on Korean firms, while hurting Japanese firms. The Japanese policy change toward Korea has, ironically, provided significant momentum for Korea's tech companies to find ways to reduce their dependence on Japan for core materials.

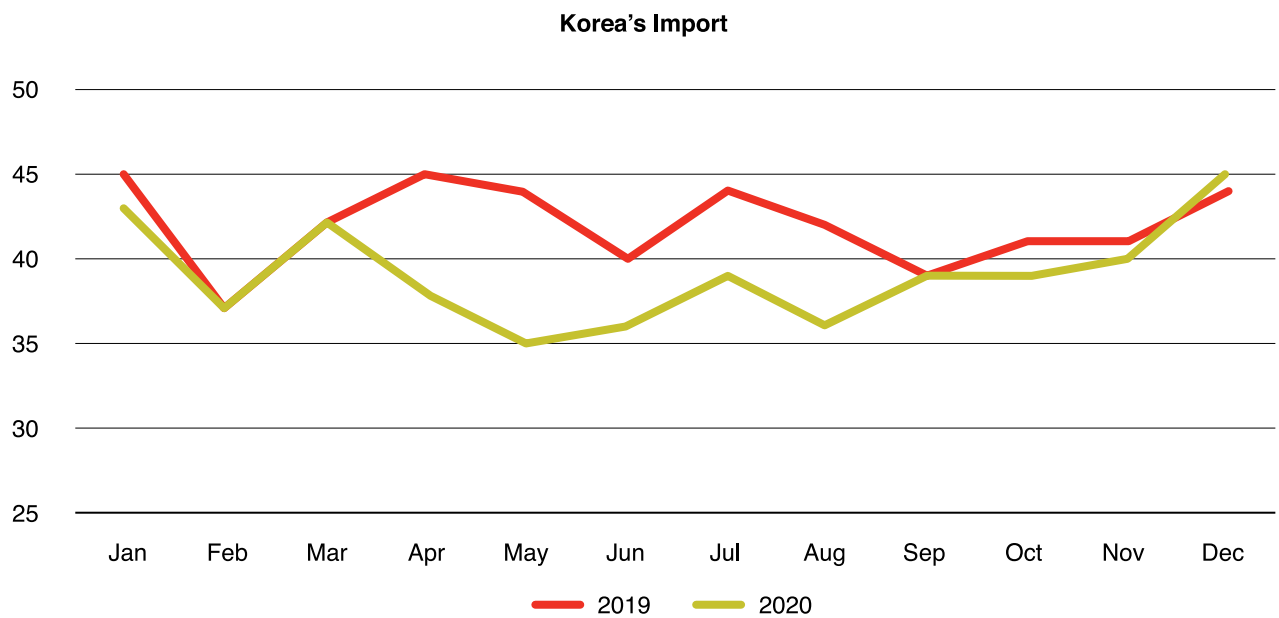
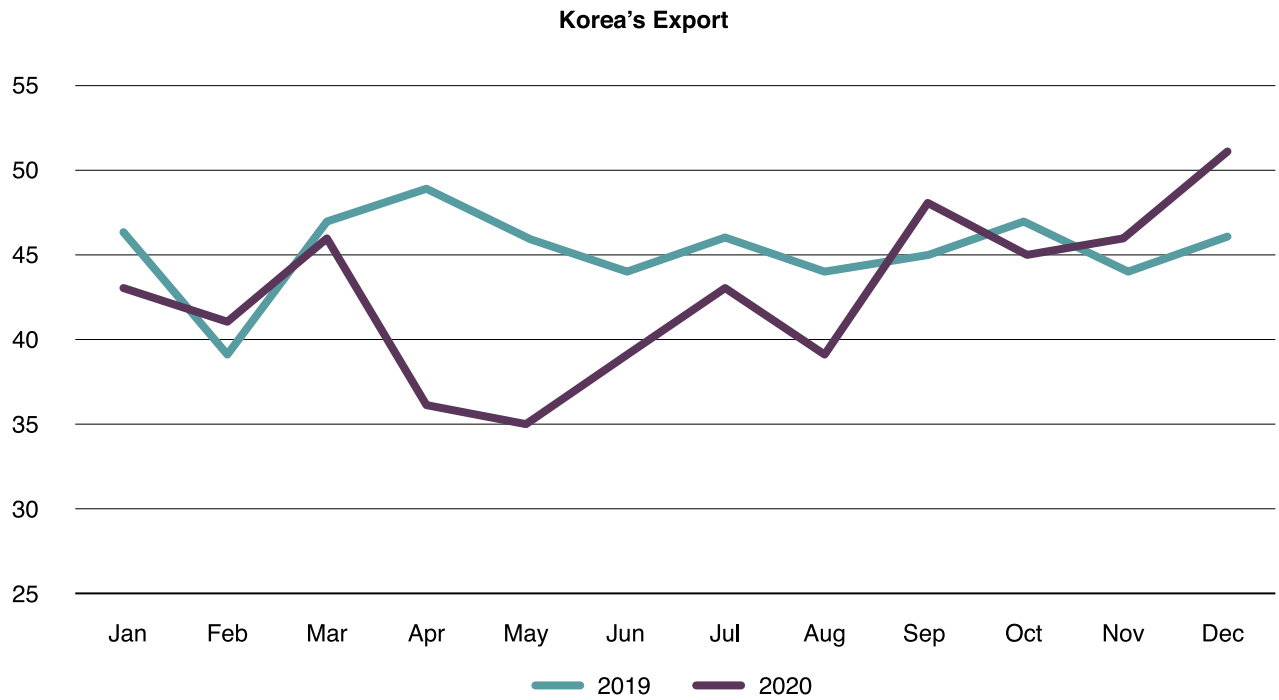
After the announcement of the Japanese government of its policy changes, the Korean government filed a complaint in the WTO in September 2019. The Korean government regarded Japan's change in its policy of exporting strategic materials to Korea as a de facto export restriction. In November 2019, the WTO dispute settlement process was temporarily suspended, but resumed in June 2020.

5) COVID-19

On March 11, 2020, The World Health Organization (WHO) declared the novel coronavirus (COVID-19) outbreak a global pandemic. This newly identified virus quickly spread around the world, leaving approximately 311 million confirmed cases and approximately 5.5 million reported deaths globally as of January 11, 2022.²² Most countries around the world implemented policies, including strong immigration controls and social distancing measures, to prevent the spread of COVID-19 in 2020. Korea was no exception.

Figure 4

Korea's Monthly Trade Performance: 2019-2020 (Unit: U.S.\$ billion)



Source: Korea's annual trade data provided by Korea International Trade Association (KITA)

According to the IMF, world trade decreased by 9.6 percent in 2020 compared to 2019.²³ Korea's total exports decreased by 5.5 percent while its total imports fell by 7.1 percent in 2020 (Figure 4). Amid a significant reduction in the world trade, Korean exports decreased less than other major countries such as Germany (9.3 percent), Japan (11.0 percent), and the U.S. (15.9%).

However, exports of some capital-intensive products were significantly affected by the contraction of global demand in 2020. In fact, Korean automobile exports decreased by 21.4 percent in 2020. In addition, Korean exports of petroleum products and petrochemical intermediate raw materials decreased by 40.6 percent and 38.3 percent, respectively.²⁴

The spread of COVID-19 revealed the structural weakness of the existing Global Value Chains (GVCs), particularly in the automobile industry. About 80 percent of the Korean companies in the automobile industry are linked to China through GVCs. These companies have a high degree of dependence of major auto parts on China. This was why procuring major parts and components from Chinese manufacturers was difficult during the outbreak of COVID-19. To be more specific, in the first half of 2020, Korean car manufacturers' production decreased by 19.8 percent, year-on-year.²⁵ Korean automobile production recovered in the latter half of 2020 due to its increase in exports.

The rapid transition to the digital economy accelerated the demand for semiconductors, which accounted for 17.9 percent of Korea's total exports. A 5.6 percent increase in semiconductor exports to \$99.2 billion in 2020 played an important role in boosting the nation's exports. This was the second largest export performance of semiconductors in Korean history. In particular, exports of logic chips reached a record high of \$30.3 billion, jumping to the fifth-largest export item in Korea.²⁷

As expected, the areas hit hardest by the spread of COVID-19 were service sectors such as tourism and transportation, with the impact largest for tourism. The number of foreign tourists visiting Korea in 2020 was only about 2.51 million, an 85 percent reduction compared to 2019.²⁸ The shipping industry has suffered from not only COVID-19-related measures in ports around the world, but also plummeting shipping demand. The impact of COVID-19 was also felt in the aviation industry, with a global loss of \$84.3 billion in 2020.²⁹ However, as seen in Figure 4, although both exports and imports deteriorated with the pandemic situation, trade slowly recovered as the country gradually adjusted to the situation.

Conclusion

Korea has faced a number of challenging external developments over the past five years. Events in which Korea was directly involved affected Korea's exports and imports. Conflicts such as the THAAD issue between Korea and China damaged Korea's exports in entertainment and tourism. The U.S. quantitative restriction on steel imports from Korea hurt Korea's steel exports to the U.S. During the early period in the Korea-Japan trade dispute, Korea's imports of hydrogen fluoride from Japan decreased. However, all these effects diminished over time and did not greatly affect the overall trade performance of Korea.

The U.S.-China trade disputes affected Korea, since China and the U.S. are Korea's first and second largest trading partners. The decrease in China's exports to the U.S. had an indirect dampening effect on Korea's exports of intermediate goods to China. However, Korean firms were able to increase exports to the U.S. and partially replace products imported from China in the U.S. market. This offset some of negative impact on Korea coming from the U.S.-China trade conflicts. In this regard, the U.S.-China disputes did not seem to have a serious influence on Korea's trade.

Korea's trade has suffered considerable damages from the COVID-19 pandemic. However, the impact was relatively small compared to other countries because global demand for products such as semiconductors and automobiles, in which Korea has comparative advantages, has rapidly recovered.

Recently, as COVID-19 vaccinations increase, people are beginning to have a cautious hope that the pandemic situation will stabilize in the not too distant future. Exports of goods and services remained robust in 2021Q1 (8.2 percent at a seasonally-adjusted annual rate). However, exports declined 7.6 percent in 2021Q2, as shortages of semiconductors reduced exports of cars and LCDs. Korea's strong import growth of around 12 percent in the first two quarters of 2021 are positive signs of economic recovery in Korea.

Nonetheless, uncertainties still remain in the world economy due to the unbalanced economic recoveries among countries and unbalanced recoveries of industries within the country, excessive liquidity problems in almost all nations, and the escalating disputes between the U.S. and China over trade, security and advanced technology. The future growth of trade remains a constant risk for countries highly dependent on international trade, such as Korea.

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