

South Korea seeks to reform its semiconductor industry and establish new export destinations

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Exports of major countries and regions in Asia (excluding China) continue to recover in general, but South Korea's exports are comparatively slow to pick up (Chart 1 left). A breakdown of each country and region's exports by destination shows exports from Taiwan and South East Asia to China are robust and are providing support for total exports, and those to developed countries are recovering and have increased more than the previous year. Meanwhile, despite the recovery in exports from South Korea to developed countries, sluggish exports to China – which imports the largest share of South Korean exports – are putting downward pressure on the total. This is in contrast with Taiwan, which also sends the largest share of their exports to China.

According to the breakdown of exports from South Korea and Taiwan to China, a rise in exports of electronic products and parts has been a factor in boosting overall exports in both economies; however, while the extent of the rise is extremely large for Taiwan, it has remained small for South Korea. This is because exports of non-memory semiconductors – used in IoT and self-driving cars and a forte of Taiwan's – are strong, whereas exports of memory semiconductors – used in storage media, such as smart phones, and a flagship product of South Korea – are sluggish (Chart 1 right, Chart 2 upper).

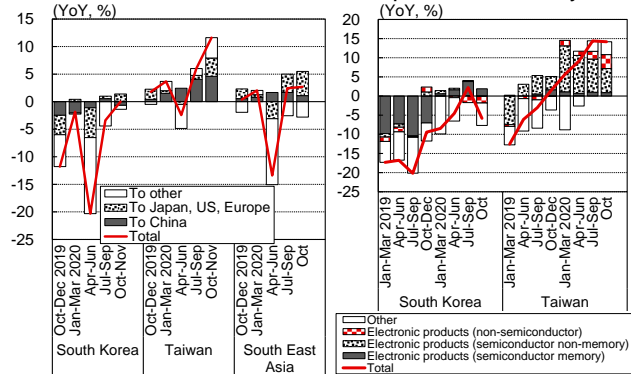
South Korea's exports to China grew thanks to momentum from China's economic growth and the FTA between the two countries that came into effect in 2015. In recent years, however, the share of China's total imports held by South Korea has been decreasing (Chart 2, lower). The slow recovery of memory semiconductor exports to China is a source of particular concern for South Korea, and, in light of China's drive to grow its domestic semiconductor industry* on the back of increased tension between itself and the US, it is possible these concerns will increase in the future.

In recent years, there have been a series of announcements by South Korea's large manufacturers that they plan to conduct research and development and to invest in the next generation of communications (6G), particularly non-memory semiconductors. In addition, although it was initially cautious about the matter, the South Korean government expressed a willingness to join the TPP11 on 8th December 2020 after it signed the RCEP in November. Looking ahead, it will be important to keep an eye on whether South Korea's economy can

maintain its growth, given the structural reforms to its semiconductor industry and the establishment of new destinations for its exports.

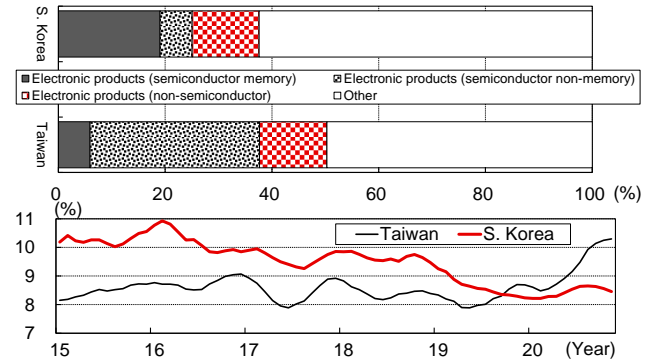
*Such as plans to increase its self-sufficiency rate for semiconductors. For more information please refer to "Economic Monthly – China" published in September 2020 by the Economic Research Office.

Chart 1: Exports of Major Asian Countries/Regions by Destination, S. Korea & Taiwan Exports to China by Item



Note: 1. Left chart - "South East Asia" is total of Thailand, Malaysia and Vietnam
 2. Right chart - semiconductors and semiconductors (memory) have been sorted by HS codes 8541 and 854232 respectively
 Source: National statistics of each country/region, MUFG Bank Economic Research Office

Chart 2: S. Korea and Taiwan's Exports to China by Share of Items (2019) and China's Imports from S. Korea and Taiwan as Share of Total



Note: Lower chart is 6-month moving average
 Source: Korea Customs Service, Taiwan Ministry of Finance, MUFG Bank Economic Research Office

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