the active development in offshore wind power, and an accelerating rate of investment growth in advanced process technologies in the semiconductor industry. As a consequence, domestic investment as a share of GNI moved upward by a small margin, from 21.73% in 2018 to 22.75% in 2019. Meanwhile, the national saving rate (the ratio of national saving to GNI measured at current prices) fell slightly from 34.96% in 2018 to 34.37% in 2019. Overall, the excess saving ratio, defined as the excess of gross national saving over gross domestic investment to GNI, slid from 13.23% in 2018 to 11.62% in 2019.

Box 1 Implications of US-China Trade Relations for Taiwan

1. Trade Diversion Effects Helped Temper the Impact of Soft External Demand

In 2019, most major Asian economies suffered negative export growth as the US-China trade conflict continued to flare and the global economy faltered. By contrast, Taiwan was able to benefit from companies' tariff mitigation strategies such as production relocations and order transfers, which cushioned the blow to external demand. As a result, Taiwan's exports, though contracting by 1.4% compared to 2018, did not decline as sharply as those in Singapore, South Korea, Japan, Malaysia, and Thailand.

Over the course of the trade war, new tariffs imposed by the Trump administration were added to an increasingly longer list of Chinese goods and drove up average import tariffs. One of the most drastic hikes took effect on May 10, 2019, raising the additional tariffs from 10% to 25% on approximately US\$200 billion worth Chinese goods that included information, communication, and audio-video products ranging from servers and routers, to memory modules. Given this escalation, Taiwanese information and communication product firms, who had manufactured 89.7% of their export orders in China and shipped more than 30% of them directly to the US, began to expedite production relocations to other countries.

In addition to the battle front of tariffs, the US and China also fought for technological supremacy and, around the world, information security was given greater priority. As a result, multinationals became keener on moving advanced technologies, products, and related supply chains out of China. This presented an opportunity for Taiwan, which boasts an integrated, comprehensive semiconductor industrial cluster with high-end product capabilities, to be the nexus of the reconfigured supply chains.

In 2019, the proportion of overseas production in total export orders increased modestly by 0.2 percentage points over the previous year. However, the fact that the share of information

and communication products manufactured overseas dropped 2.2 percentage points showed that domestic production was gaining ground. While Taiwan's total exports shrank by 1.4% in 2019, exports of information, communication, and audio-video products recorded a positive growth rate of 20.8%, with those bound for the US soaring by 59.5%, easing the shock from sluggish external demand.

2. Taiwanese Investment in China Fell and US Corporate Direct Investment in Taiwan Rose

In recent years, China's lure as a cost-effective production base has faded as its labor costs and tax burdens surged and environmental laws strengthened. Combined with the trade war effects, these considerations added to the catalysts for production relocation out of China. Investment in China by Taiwanese firms slid from US\$8.5 billion a year earlier to US\$4.17 billion in 2019, declining markedly by 50.9%. The manufacturing sector alone scaled down its China-bound investment by 59.7% year on year to US\$2.41 billion, with the largest cutback, of US\$1.22 billion, coming from the manufactures of electronic parts and components.

Meanwhile, multinationals, especially US-headquartered corporations, stepped up their investment in Taiwan for emerging technologies such as 5G network, artificial intelligence, Internet of Things, and cloud computing and data storage. In 2019, US businesses invested US\$0.36 billion in Taiwan, a new high since 2014. If investment through establishments in third countries (e.g., Micron, through its Dutch subsidiary, and Google, via fund flows from British Virgin Islands) is included, Taiwan-bound investment by the US high-tech industry would exceed US\$3.0 billion in 2019, bolstering Taiwan's further involvement in the integration of software and hardware supply chains.

3. Despite the US-China "Phase One" Trade Deal, COVID-19 Impact on Trade Should Be Closely Monitored

While US-China trade tensions continued to heighten uncertainties over global investment and trade in 2019 with adverse implications for Taiwan's economy and trade, they also spurred high-tech corporate investment flows into Taiwan. Increased development of high-end processes and production, if carrying on, would strengthen the inter-industry linkage effects in Taiwan, thereby promoting exports and consumption, creating jobs, and boosting economic growth.

After the US and China signed a "phase one" trade deal on January 15, 2020, which took effect on February 14, it removed some of the uncertainties over the global economy and trade. Before breathing a reprieve, the world took another hit with the coronavirus (COVID-19) pandemic breaking out in China in January and spreading to the world, wreaking havoc on economic growth where it struck. In this view, it would be crucial to remain watchful of China's follow-up efforts in keeping its trade deal promises and to monitor the potential implications for Taiwan.

Finally, it is worth noting that the trade war could add to the challenge of trade-related talks between Taiwan and the US. For one thing, Taiwan's current account surplus to GDP ratio exceeded the 2% threshold set by the US Treasury in determining currency manipulation of its trading partners, which was because of a chronically large excess of saving. For another, trade diversion as a result of the US-China trade spat also caused an increase in Taiwan's exports to the US. According to US Customs statistics, the US ran a trade deficit of US\$23.04 billion with Taiwan in 2019, also above the US Treasury's threshold of US\$20 billion. These developments alongside the trade war could in turn lead pressures to mount for Taiwan in its trade-related talks with the US.