

TAIWAN'S ECONOMY AMID COVID-19 CHALLENGES

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Executive Summary

1. Taiwan's economy slowed down to 1.54% (year-on-year or YOY) in the first quarter of 2020, from 2.71% in 2019, due to the global coronavirus outbreak. Despite the growth deceleration, Taiwan's economy had performed relatively well vis-a-vis major economies such as the EU (-2.7%), USA (-4.8%) and China (-6.8%).
2. Taiwan's quick response and effective countermeasures to COVID-19 have prevented the economy from a sharp downturn. As of 1 June 2020, Taiwan reported 443 cases and seven deaths, lower than most countries in the world.
3. Taiwan's manufacturing strength in information and communications technology goods has counterbalanced the impact of COVID-19 on private consumption. Total exports grew by 2.4% with electronic components registering the highest growth rate of 21% among all export items in 2020 (Jan-April) (YOY).
4. When several Chinese cities were in lockdown, local producers in Taiwan had filled orders diverted from China as indicated by the declining overseas production ratio to 46.7% in the first three months of 2020, from 52% in 2019.
5. The tourism industry has been harshly hit, however. Total visitor arrivals declined significantly by 57% (YOY) during the first three months of 2020, leading to a decline in total tourism revenue by NT\$57 billion (US\$1.9 billion).
6. The number of employed dropped by 23,000 during the January-March period. Sectors deeply affected were accommodation and food services (down by 6,000 in the first quarter of 2020).
7. The Taiwanese government seeks to boost short-term domestic consumption through a stimulus package of NT\$1.05 trillion (US\$35 billion), which constituted about 5.4% of its current gross domestic product.

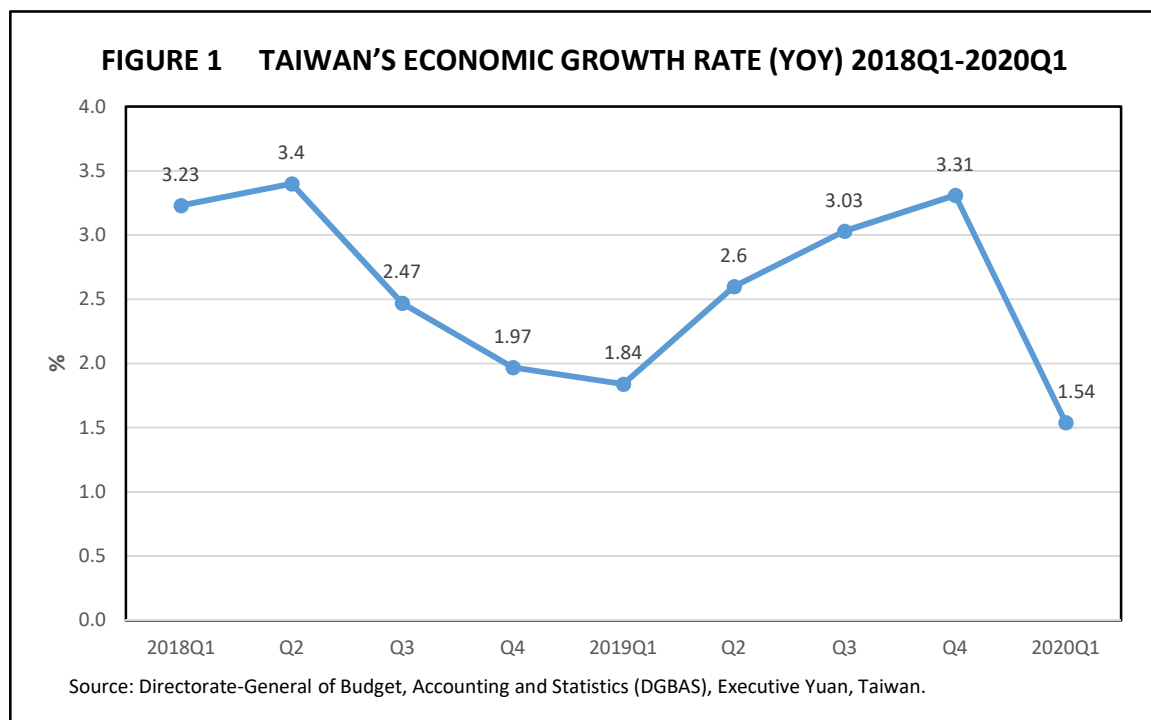
8. In the long term, the growing inward investment may be more helpful to buffer the impact of COVID-19 on the economy. Investment repartition reached NT\$1,000 billion (US\$33 billion) as of April 2020. Foreign direct investment also grew by 136% in the first quarter to US\$2.4 billion.
9. Although China remains an important overseas manufacturing production site for Taiwanese firms, Taiwanese investment in China had clearly declined from US\$14.6 billion in 2010 to US\$4 billion in 2019.
10. Taiwan's economic prospect largely depends on the economic recovery of the USA, Europe and China. Nevertheless, the absence of a widely available vaccine and medication for COVID-19 suggests that a global economic rebound may remain elusive in the foreseeable future.

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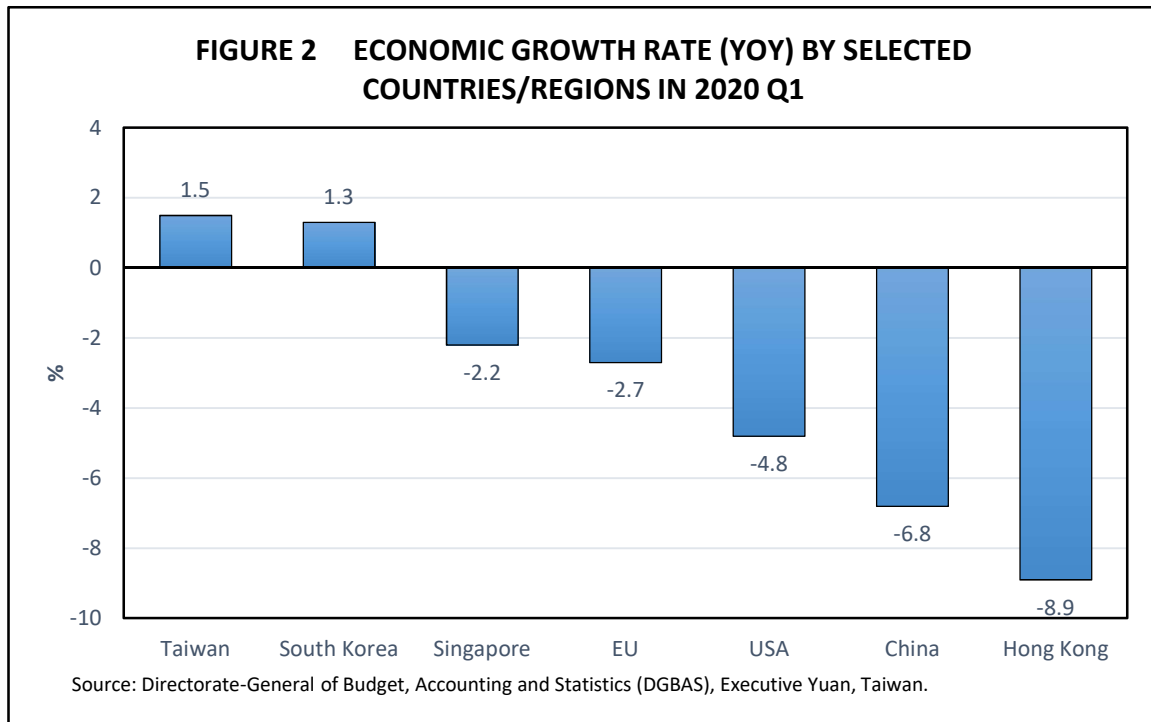
CHIANG Min-Hua*

Relatively Steady First Quarter Growth

- 1.1 Taiwan's economy slowed down to 1.54% in the first quarter of 2020 (Figure 1) due to the global COVID-19 outbreak. Despite the growth deceleration, the well-controlled virus spread allowed Taiwan's economy to remain relatively resilient compared to that of other countries/regions (Figure 2).
- 1.2 Taiwan's economy could have suffered even more due to its proximity to and close commercial ties with China, the first country hit by the COVID-19 outbreak. China is Taiwan's largest overseas manufacturing production site. China and Hong Kong accounted for nearly 40% of Taiwan's exports and over one-fifth of Taiwan's imports.



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- 1.3 The number of people travelling across the Strait is also significant. During the 2016-2018 period, there was an annual 9-10 million travellers between the two sides, comprising largely Taiwanese travellers to China.¹
- 1.4 Taiwan's effective countermeasures, thanks to the hard lessons drawn from the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003, contributed to its success in controlling the spread of COVID-19. As of 1 June 2020, Taiwan reported 443 cases and seven deaths, lower than that of most countries in the world.
- 1.5 China's cutback in Chinese tourists might be a factor in the lower COVID-19 cases in Taiwan. After Taiwanese President Tsai Ing-wen took office in 2016, Chinese visitors to Taiwan declined from four million in 2015 to 2.7 million in 2019.²
- 1.6 The surging global demand for information and communications technology (ICT) products explained Taiwan's moderate growth in exports despite the COVID-19

¹ The figure includes travellers via the "three mini link". Taiwanese travellers accounted for over 60%-70% of total travellers across the Strait whereas the Chinese accounted for less than 40%. Data source: Cross-Strait Economic Monthly, Mainland Affairs Council (Taiwan).

² Data source: CEIC.

outbreak. Taiwan's exports grew by 2.4% in 2020 (Jan-April) with the electronic components topping the growth rates.

- 1.7 The steady external demand for ICT goods is also reflected in China's official figures. Both of its imports from and exports to Taiwan (and Vietnam as well) reported steady growth despite the drop in its overall external trade in the first quarter of 2020.³ Taiwan and Vietnam are China's important trade partners in the ICT industry.
- 1.8 When several Chinese cities were in lockdown, Taiwanese producers had filled the orders meant for China. As such, the overseas production ratio for all sectors dived to 46.7% in the first three months of 2020, from the peak of 55.1% in 2015.⁴
- 1.9 Despite the stable growth in the export of ICT goods, the service sectors have suffered greatly. The unemployed also rose to 445,000 in March, up by 9,000 from January.⁵
- 1.10 The Legislative Yuan passed NT\$1 trillion (US\$35 billion) of stimulus package on 21 April 2020 to assist unemployed workers and companies in trouble due to COVID-19.
- 1.11 Taiwan's central bank also slashed its benchmark rate by 25 basis points to a record low of 1.125% on 19 March 2020. The last cut in rate was in 2016 to 1.375%.⁶ The current rate is still relatively high compared to most major economies in the world.⁷

³ Data source: General administration of customs, PR China, 14 April 2020 <<http://www.customs.gov.cn/customs/302249/302274/302275/2966195/index.html>> (accessed 29 April 2020).

⁴ Data: Ministry of Economic Affairs, Taiwan.

⁵ Data source: Directorate-General of Budget, Accounting and Statistics (DGBAS), Executive Yuan, Taiwan.

⁶ Yimou Lee, Liang-sa Loh and Kim Coghill, "Taiwan c.bank cuts policy rate for first time since 2016 to new low", Reuters, 19 March 2020 <<https://www.reuters.com/article/health-coronavirus-taiwan-rates/taiwan-cbank-cuts-policy-rate-for-first-time-since-2016-to-new-low-idUST8N27602A>> (accessed 22 April 2020).

⁷ For example, the benchmark rate of Taiwan's Central Bank is still higher than the United States' 0.25%, EU's -0.75% and South Korea's 0.75%; however it is lower than China's 3.85% as of April 2020.

- 1.12 As a COVID-19 vaccine and medication still seems like a distant prospect, the global economy is likely to remain sluggish in the foreseeable future. Taiwan may adjust its economic stimulus policy as the global outbreak evolves.

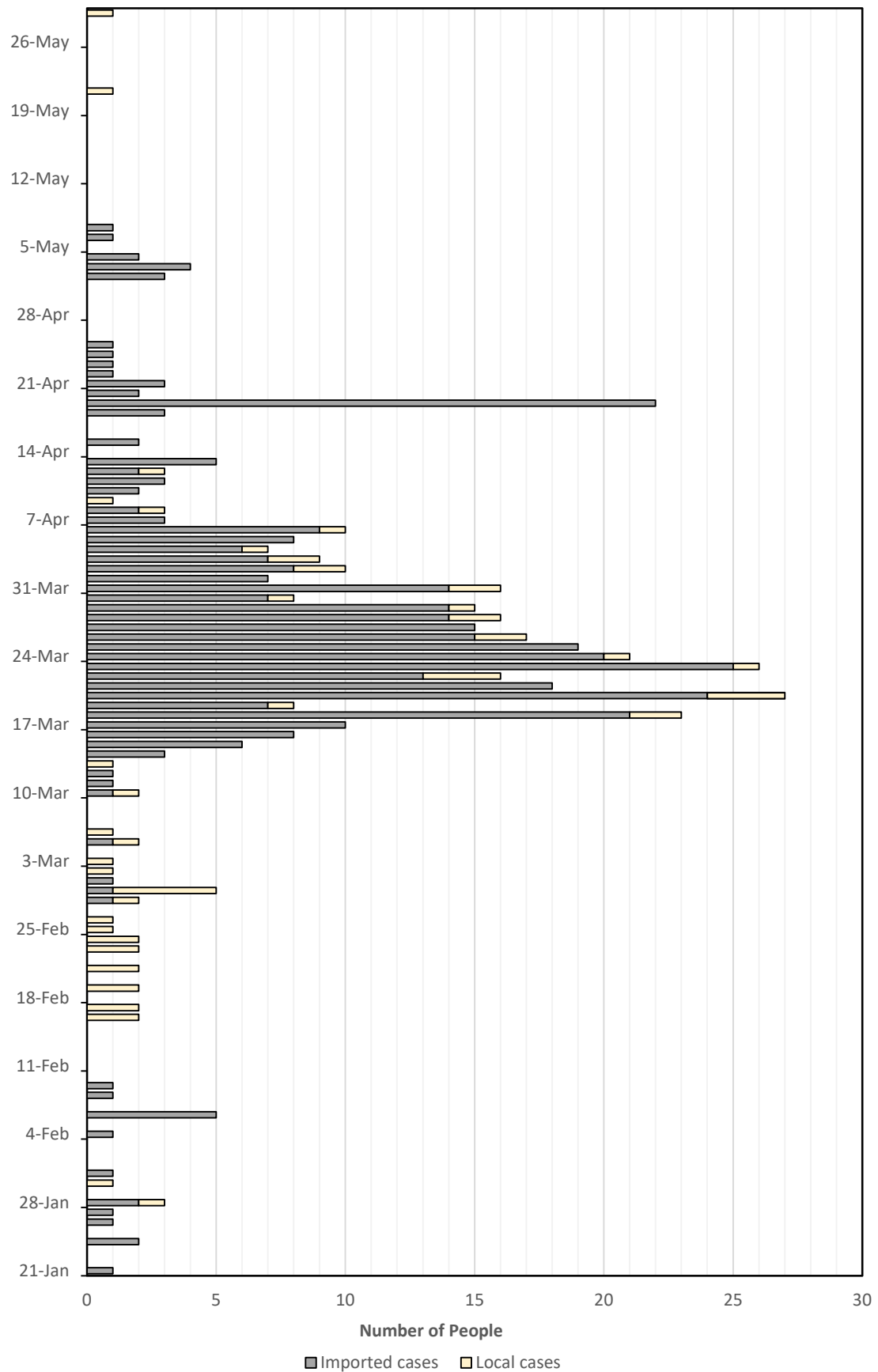
Effective Countermeasures Prevent an Economic Crash

- 2.1 Part of Taiwan's economic resiliency in the first quarter was attributed to its swift response and effective countermeasures to the virus transmission. Not only did it refrain from resorting to any lockdown measures, but also maintain most of its domestic economic activities.
- 2.2 Among the 443 confirmed cases as of 1 June 2020, 87% were imported whereas 13% were local cases. Over two-thirds of imported cases were from the United States and Europe (Figures 3 and 4).
- 2.3 Recovery rate for Taiwan's COVID-19 patients is 83%, higher than the global average of 34%, while the death rate of COVID-19 in Taiwan is about 0.3 per million population, against a global average of 36 per million population.⁸
- 2.4 The hard lessons learned from SARS in 2003⁹ explain Taiwan's swift and effective response to COVID-19 in 2020. Taiwan's exclusion from the World Health Organisation (WHO) further increased the government's and individuals' mental preparedness for fighting a pandemic independently.

⁸ Lee I-Chia, "Zero local COVID-19 cases for 28th days", *Taipei Times*, 11 May 2020, <<https://www.taipeitimes.com/News/front/archives/2020/05/11/2003736180>> (accessed 11 May 2020).

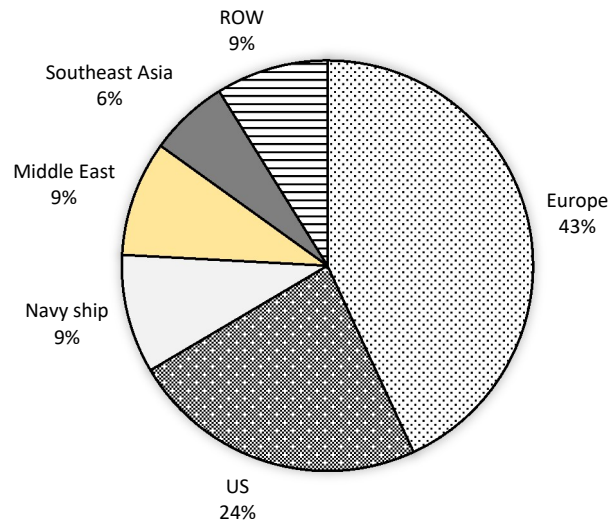
⁹ A total of 346 people contracted SARS in Taiwan, the third highest in the world, after China (5,327) and Hong Kong (1,755). Seventy-three people died from SARS in Taiwan in 2003.

FIGURE 3 NUMBER OF CONFIRMED COVID-19 CASES IN TAIWAN IN 2020



Source: Taiwan Centres for Disease Control.

FIGURE 4 IMPORTED COVID-19 CASES BY COUNTRY/REGION
(As % of total imported cases as of 1 June 2020)



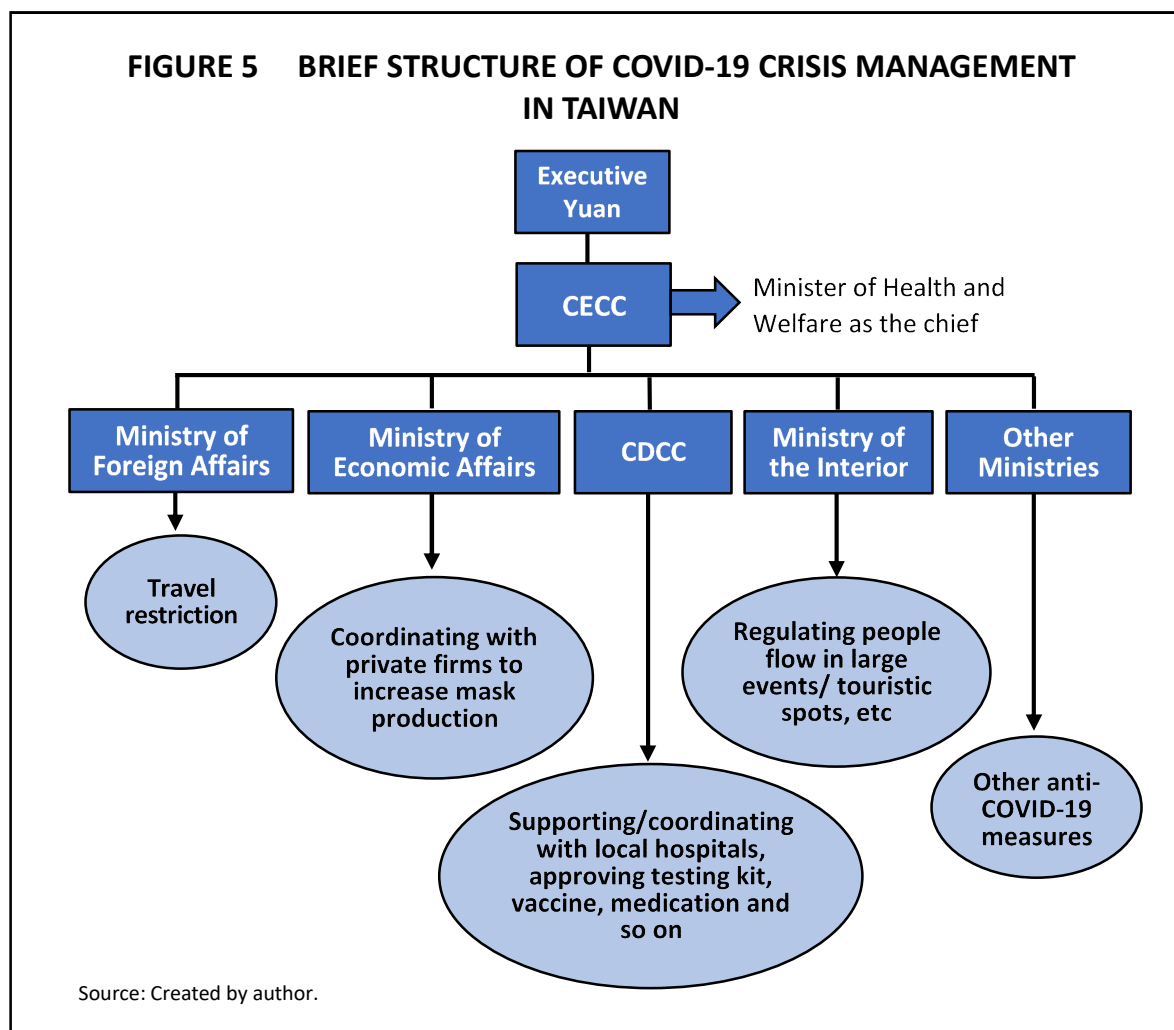
Source: Taiwan Centres for Disease Control.

- 2.5 Taiwan's Centres for Disease Control (TCDC) has reformed its hospital infection control strategy after SARS. Major reform measures include revising the surveillance system and improving the educational and support systems.¹⁰
- 2.6 In order to better prepare for the next pandemic, the government has strengthened its risk communication systems and established a National Health Command Centre in TCDC as a flexible response mechanism for communication and coordination in the post-SARS era.¹¹
- 2.7 As early as on 31 December 2020, Taiwan queried the WHO about the possible virus transmission in China but did not receive a reply. On the same day, TCDC started to screen passengers on board flights from Wuhan city, China where the virus was first reported.

¹⁰ The TCDC deploys the principles of Incident Management System and Six Sigma to enhance its efforts in the key spheres of Traffic Control Bundling, Communicable Disease Control Networks and Crisis Management. Taiwan's Infection Disease Law was also revised to strengthen TCDC's power at the time of the pandemic. Public education also became a critical aspect of the government's efforts to control SARS. M-Y Yen et al, "From SARS in 2003 to H1N1 in 2009: lessons learned from Taiwan in preparation for the next pandemic", *Journal of Hospital Infection*, 87, 2014, pp. 185-193. Yu-Chen Hsu, "Risk and outbreak communication: Lessons from Taiwan's experiences in the post-SARS era", *Health Security*, Vol. 15, Number 2, 2017, pp. 165-169.

¹¹ C Jason Wang et al, "Response to COVID-19 in Taiwan: Big data analytics, new technology and proactive testing", *Journal of the American Medical Association*, 3 March 2020 <<https://jamanetwork.com/journals/jama/fullarticle/2762689>> (accessed 15 April 2020).

2.8 On 15 January 2020, TCDC classified the novel coronavirus as a class-V communicable disease and instituted legal measures, including mandated reporting and quarantine.¹² On 20 January, the Central Epidemic Command Centre (CECC) was activated as a level 3 government entity (Figure 5).¹³ This was a day before the discovery of the first infected case in Taiwan.¹⁴



¹² Under class-V, health-care providers are required by law to report suspected cases to TCDC within 24 hours, and the government can isolate, or quarantine at designated sites persons who are confirmed or suspected to be infected. Lin C, Braund WE, Auerbach J, Chou J-H, Teng J-H, Tu P, et al, “Policy decision and use of information technology to fight 2019 novel coronavirus disease, Taiwan”, *Policy Review*, Vol. 26, Number 7, July 2020.

¹³ The CECC was upgraded to level 2 on 23 January and level 1 on 27 February. The higher level refers to greater government agencies involved in anti-COVID-19 policy initiatives under CECC. It would enable CECC to effectively integrate resources from various ministries in the containment of the epidemic.

¹⁴ The CECC has rapidly produced and implemented a list of at least 124 action items, including border control, case identification, quarantine of suspicious cases, proactive case finding, resource allocation, reassurance and education of the public while fighting misinformation, negotiation with other countries and regions, formulation of policies towards schools and childcare, and relief to businesses. C Jason Wang et al, “Response to COVID-19 in Taiwan: Big data analytics, new technology and proactive testing”, *JAMA Network*, 3 March 2020, <<https://jamanetwork.com/journals/jama/fullarticle/2762689>> (accessed 15 April 2020).

- 2.9 Taiwan started to ban travellers from Wuhan city, China on 25 January 2020. With the worsening pandemic crisis in China, the inbound tourism ban was expanded to all foreign nationals with travel history to mainland China, Hong Kong and Macao in the past 14 days since 7 February 2020¹⁵ (Annex 1).
- 2.10 Since 19 March, Taiwan has banned all foreign nationals to transit or enter Taiwan. Two days thereafter, the government announced level 3 “warning” travel advisories on all countries, advising Taiwanese to deter or cancel all nonessential travels¹⁶ (Annex 1).
- 2.11 To meet massive demand, Taiwan has suspended mask export since the end of January. At the same time, the government had sought local mask producers to increase domestic mask production from 1.8 million per day in early February to 17 million per day in April.¹⁷
- 2.12 To better distribute the masks to the population, Taiwan implemented “Mask-Real Name” system, which sets price limits on masks and rations them. With the increasing domestic supply of masks, the number of masks for an individual has increased from three masks per week in early February to nine masks per 14 days since 9 April.¹⁸
- 2.13 Part of Taiwan’s success is attributed to its wide use of information technology in detecting and controlling mask supplies, case-tracing, location-tracking for self-

¹⁵ The ban on foreign travellers’ entry also included mandatory self-quarantine for Taiwanese who had travelled to affected parts of the world. Self-isolation was imposed for those who had come into contact with potentially exposed individuals.

¹⁶ Taiwanese who insist on travelling abroad will not be able to apply for daily home quarantine subsidy on their return.

¹⁷ China is the largest mask producer in the world and 90% of Taiwan’s masks were imported from China. However, with dozens of cities in China on lockdown and the surge in the demand in the country, there were shortages of masks worldwide. With over 15 million masks produced per day, Taiwan has become the second largest mask producer in the world.

¹⁸ A resident’s National Health Identity card, which is linked to thousands of pharmacies and hundreds of local health centres nationwide, is his or her identification for obtaining masks in the neighbourhood.

isolation and providing real-time information.¹⁹ Taiwan has used big data analytics and detailed mapping to trace the infected and the spreader.²⁰

- 2.14 The development of biotechnology and biomedical industry over the past decade also played a role. In 2003, Taiwan only had three P3 laboratories. In November 2019, the number increased to 21 P3 and one P4 laboratories according to official statistics.²¹ Unlike 17 years ago, Taiwan today has the capacity to invent and manufacture testing kit, vaccine and medication for the new virus.²²
- 2.15 In sum, the experience of SARS has been instrumental to Taiwan's disease control, and improved the public's health behaviour and hygiene practices. A robust health response mechanism and nationwide health-care insurance supported the surge of medical care during the pandemic.

Robust Exports as a Main Contributor to Mild Growth

- 3.1 Robust exports (0.86%) are the main contributor to the modest economic growth. In comparison, private consumption was severely hit (-0.53%), while capital formation and government consumption contributed a respective 0.48% and 0.73% to economic growth in the first quarter of 2020 (Table 1).

¹⁹ Through its daily public briefings and simple health messaging, the government was able to reassure the public by delivering timely, accurate and transparent information about the evolving epidemic. CDCC can trace people's travel history through an individual's National Health Identity card.

²⁰ Dominykas Broga, "How Taiwan used tech to fight COVID-19", *techUK*, 31 March 2020 <<https://www.techuk.org/insights/news/item/17187-how-taiwan-used-tech-to-fight-covid-19>> (accessed 16 April 2020).

²¹ TCDC's statistics on the number of biotechnology related laboratories. <<https://www.cdc.gov.tw/Category/MPage/69LVnbzVzxrMsdUjd4a8WQ>> (accessed 14 May 2020).

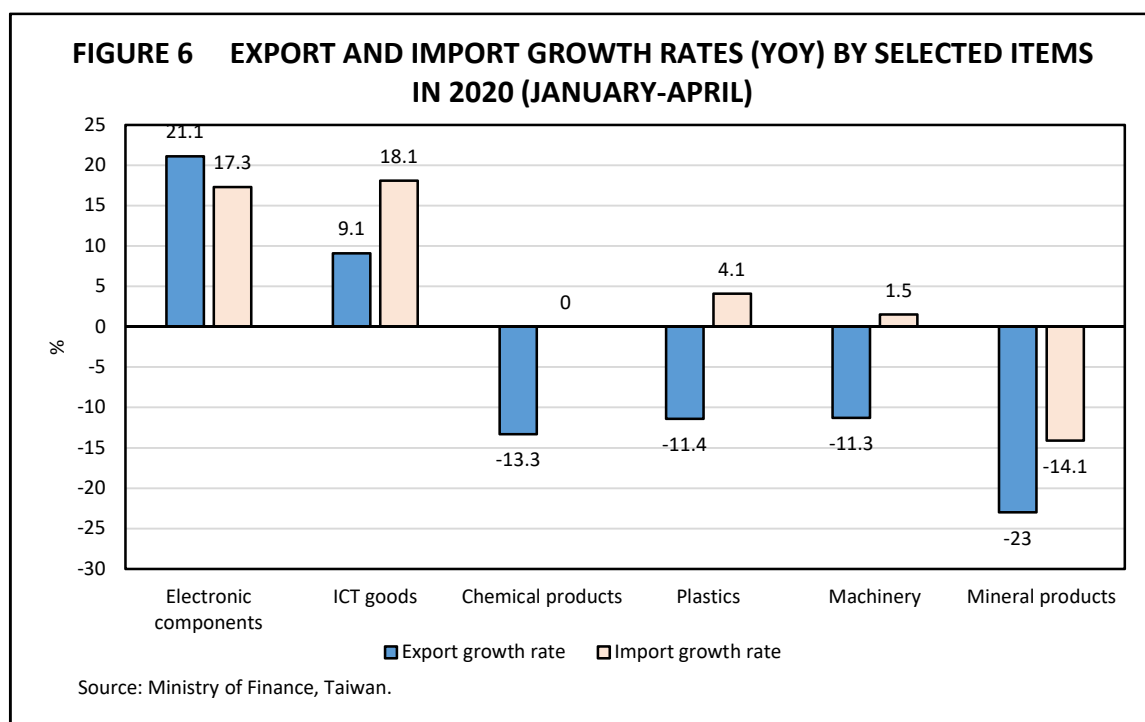
²² On 16 April, Taiwan's Industrial Technology Research Institute invented a testing kit with 90% of accuracy. Keoni Everington, "Taiwan invents 1 hr coronavirus test kit with 90% accuracy", *Taiwan News*, 16 April 2020 <<https://www.taiwannews.com.tw/en/news/3917201>> (accessed 17 April 2020). "Taiwan vaccine manufacturer in Coronavirus testing phase", *The News Lens*, 16 April 2020 <<https://international.thenewslens.com/article/133938>> (accessed 16 April 2020).

TABLE 1 CONTRIBUTION TO TAIWAN'S ECONOMIC GROWTH RATE (YOY) BY EXPENDITURE

	2019	2020				
		Q1	Q2	Q3	Q4	Q1
GDP	2.71	1.84	2.60	3.03	3.31	1.54
1.Domestic demand	2.33	1.86	1.82	1.63	3.90	0.68
1.1Private consumption	1.12	1.00	0.86	1.29	1.30	-0.53
1.2Government consumption	0.02	-0.43	-0.37	0.51	0.31	0.48
1.3Capital formation	1.19	1.29	1.33	-0.18	2.30	0.73
2.Net exports	0.39	-0.01	0.78	1.40	-0.60	0.86

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), Executive Yuan, Taiwan.

- 3.2 The mounting external demand for ICT goods explained Taiwan's steady growth in exports. The exports of electronic components registered especially high growth (21%) whereas the export growth of other manufacturing products has deteriorated (Figure 6).
- 3.3 Rising imports of ICT final goods (grew by 18.1%) could be attributed to the growing demand for long-distance communication after the COVID-19 outbreak (Figure 6).



- 3.4 With the booming global demand for ICT goods, Taiwan's export-oriented economy is increasingly leaning towards integrated circuit. In 2020 (Jan-Mar), integrated circuit accounted for 34% Taiwan's total exports, rising from 21% in 2013.²³
- 3.5 Taiwan Semiconductor Manufacturing Company (TSMC) is the largest producer of integrated circuit, accounting for over half of the global market share in 2019, ahead of Samsung's 18% and Global Foundry's 8%.²⁴
- 3.6 To meet the growing external demand for integrated circuit, Taiwanese firms have continuously increased investment in the semiconductor industry over the last two decades. The semiconductor industry has been the main contributor to capital formation as a result.
- 3.7 In 2019, semiconductor equipment accounted for 56% of all capital equipment imports. Japan (27%), the United States (19%) and the Netherlands (20%) were the main sources of Taiwan's capital equipment imports.²⁵
- 3.8 Although overall private consumption dwindled in the first quarter of 2020, the impact varied among the service sectors. The impact of COVID-19 on domestic service business is the most significant on food services. The sales revenue of food services declined by 6.6% in the first quarter of 2020, from 4% in 2019 Q4 (Table 2).
- 3.9 The impact of COVID-19 on wholesale and retail business is limited as Taiwan did not lock down any city. The official figure showed that the sales revenue of wholesale business increased by 2% while that for retailing business deteriorated slightly by 0.6% (Table 2).

²³ Data source: Ministry of Finance, Taiwan.

²⁴ "TSMC has widened its market share with Samsung", *Tech News*, 11 December 2020 <<https://finance.technews.tw/2019/12/11/2019q4-tsmc-vs-samsung/>> (accessed 1 May 2020, in Chinese).

²⁵ Data source: Taiwan Association of Machinery Industry.

TABLE 2 SALES REVENUE GROWTH RATE (YOY) BY SELECTED SERVICE SECTORS

Unit: %

	Wholesale	Retail	Food services
2019	-2.1	3.1	4.4
Q1	-3.1	-0.5	5.8
Q2	-3.6	3.9	4.0
Q3	-2.4	4.7	3.7
Q4	0.5	4.2	4.0
2020			
Q1	2.0	-0.6	-6.6

Source: Ministry of Economic Affairs, Taiwan.

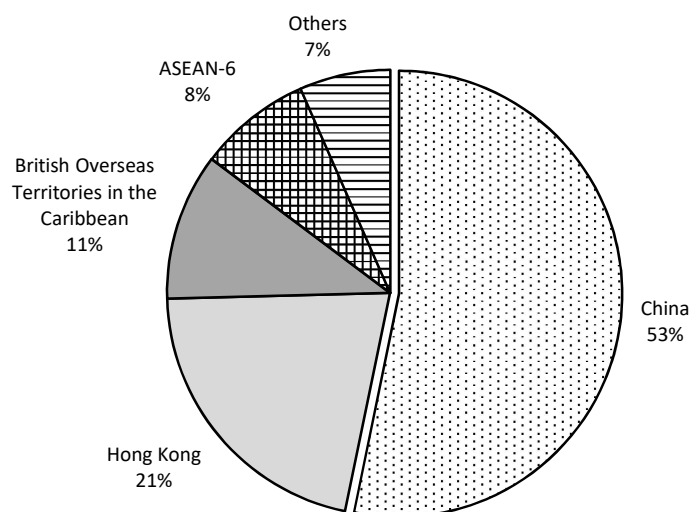
- 3.10 While other governments discouraged their citizens from panic buying, the Taiwan government did the reverse and encouraged people to buy as much as possible. This might have helped restrain the impact of COVID-19 on private consumption.²⁶
- 3.11 Government consumption is expected to rise further. Apart from the cash payment to the people and companies hit by COVID-19, the government plans to invest NT\$4 billion (US\$134 million) to build an epidemic prevention centre by 2027.
- 3.12 Nonetheless, Taiwan's export-oriented economy still relies on consumption market demand of the United States and Europe. Taiwan's economic outlook could remain subdued if the global pandemic continues.

Supply Chain Network Restructuring in Progress

- 4.1 Taiwan's economy benefitted from being a subcontractor of US multinational corporations (MNCs) through China as a final assembly place and export platform. President Trump has advocated cutting China off from the production network.
- 4.2 Nevertheless, Taiwan's ODI (outward direct investment) in China continued to grow steadily. In 2020 (Jan-Mar), Taiwan invested US\$3,774 million worldwide, of which 53% went to China, followed by 21% to Hong Kong, 11% to British Overseas Territories in the Caribbean and 8% to ASEAN (Figure 7).

²⁶ "Buy as much as possible: Taiwan sees boon to coronavirus panic buying", *The Straits Times*, 20 March 2020 <<https://www.straitstimes.com/asia/east-asia/buy-as-much-as-possible-taiwan-sees-boon-to-panic-buying>> (accessed 1 May 2020).

FIGURE 7 TAIWAN'S ODI BY COUNTRY/REGION IN 2020 (JANUARY-MARCH)



Source: Investment Commission, Taiwan.

4.3 Most of Taiwan's ODI in China is still concentrated in the manufacturing industry with electronic parts and components manufacturing accounting for the largest portion (36.8%), followed by wholesale and retail (22.3%) and computer, electronic and optical instrument (11%) (Table 3).

4.4 In comparison, most of Taiwan's ODI in other countries is mainly in the service sectors, with a significant portion in finance and insurance (Table 3).

TABLE 3 TAIWAN'S ODI BY SECTOR IN 2020 (JANUARY-MARCH)

Taiwan's ODI in China by sector		
	Amounts (US\$ million)	As % of ODI in China
● Electronic parts and components manufacturing	740	36.8
● Wholesale and retail	448	22.3
● Computer, electronic and optical instrument	221	11.0
● Chemical products	171	8.5
● Finance and insurance	95	4.7
● Others	334	16.7
Taiwan's ODI (excluding China) by sector		
	Amounts (US\$ million)	As % of total ODI
● Finance and insurance	1,035	58.7
● Computer, electronic and optical instrument	126	7.0
● Supporting services	100	5.7
● Wholesale and retail	93	5.3
● Others	411	23.3

Source: Investment Commission, Taiwan.

- 4.5 Taiwan's official statistics may have underestimated the real ODI in ASEAN countries. For example, Taiwan's investment in Vietnam was US\$706 million during the first three months of 2020 according to Vietnam's statistics whereas Taiwan's official figures only recorded US\$104 million during the same period.²⁷
- 4.6 An important reason for Taiwan's still relatively substantial investment in China is the reluctance of Apple (Taiwan ICT manufacturers' largest client), to withdraw most of the production lines out of China.
- 4.7 China has abundant skilled and unskilled workers. Apple's direct and indirect workforce in China exceeds 100 million. Such massive employment of workers allows Apple to hold strong bargaining power with the Chinese government for better access to China's consumption market.
- 4.8 For China, producing Apple's devices helped to optimise employment numbers and offer a source to advance its technology. Taiwanese subcontractors expanded their business through counting on the Chinese government to access the vast flexible labour force and acquire land to construct factories.²⁸
- 4.9 Although China remains as Taiwan's largest investment destination, investment was on a gradual decline from US\$14.6 billion in 2010 to US\$4 billion in 2019. Investment relocation away from China has thus begun even before President Trump took office.
- 4.10 India is another alternative investment destination apart from Vietnam. Apple is reportedly planning to shift 20% of its production line to India in the following five years. Taiwan's Wistron has been making Apple's devices in India since 2017.²⁹

²⁷ Data source: CEIC.

²⁸ Tripp Mickle and Yoko, Kubota, "Tim Cook and Apple bet everything on China. Then Coronavirus hit", *The Wall Street Journal*, 3 March 2020.

²⁹ Jhinuk Sen, "Apple considering possibilities of shifting a part of its production to India", *Hindustan Times*, 11 May 2020 <<https://www.hindustantimes.com/tech/apple-considering-possibilities-of-shifting-a-part-of-its-production-to-india/story-qIWQ7xMu5OrDnOpk04iiAI.html>> (accessed 12 May 2020). "Apple plans to shift 2/5 of its production to India", *The Liberty Times*, 12 May 2020 <<https://ec.ltn.com.tw/article/paper/1372143>> (accessed 12 May 2020, in Chinese).

- 4.11 Taiwan is also becoming an ideal investment destination for Taiwanese firms. The investment repartition amounted to nearly NT\$1,000 billion (US\$33 billion) as of April 2020, from NT\$840 billion (US\$28 billion) in December 2019.³⁰
- 4.12 In comparison, FDI in China had deteriorated by -13% to US\$31 billion in the first quarter of 2020.³¹ Although some China market-oriented firms may continue to stay, the US market-oriented investments in China, in particular for industries such as ICT, pharmaceutical and medical equipment, are now considered essential to be produced in the United States or in countries friendly to the United States.

Economic Stimulus Package to Boost Domestic Demand

- 5.1 Despite the resilient ICT exports, the COVID-19 has impacted other domestic market-oriented industries, in particular tourism-related ones. Visitor arrivals witnessed a clear decrease to 1.2 million during the first three months of 2020, from 2.9 million during the same period in 2019.³²
- 5.2 Total revenue in the tourism industry dropped by NT\$57 billion (US\$1.9 billion) in the first quarter.³³ The two large aviation companies, China Airline and Eva Air, suffered NT\$300 billion in debt (US\$10 billion) as air travel stalled during the outbreak. As of April 2020, 13 local hotels announced closure due to the low occupancy.
- 5.3 Employment statistics showed a lay-off of 23,000 during the January-March period. Employment in agriculture, industry and services declined by a respective 2,000,

³⁰ The computer server, telecommunication equipment, bicycle, vehicle components and automotive electronics are the main investment by Taiwanese firms. The government expected investment repartition to create 80,000 new employment “Taiwanese firms’ investment in Taiwan, heading towards NT\$1,000 billion”, Radio Taiwan International, 24 April 2020 <<https://www.rti.org.tw/news/view/id/2061319>> (accessed 27 April 2020, in Chinese).

³¹ Data source: CEIC.

³² Data source: CEIC.

³³ “Visitor arrivals declined sharply to 1.65 million in the first quarter”, CNA News, 29 April 2020 <<https://www.cna.com.tw/news/firstnews/202004290259.aspx>> (accessed 9 May 2020, in Chinese).

7,000 and 12,000 workers. Accommodation and food services accounted for half of the falling employment in services.³⁴

- 5.4 Official figures also showed that as of 1 May, 18,840 workers were under “non-paid leave”. Over 20% of these workers were in accommodation and food services.
- 5.5 As early as on 15 January, the “Special Act on COVID-19 prevention, relief and restoration” (hereafter Special Act) was enacted to provide a legal basis to support people and companies hit by COVID-19, through low interest rate financial loans, subsidies and utilities discount.³⁵
- 5.6 With the evolving pandemic crisis, the Special Act was revised on 21 April 2020 to include more sectors and people affected by COVID-19. The updated stimulus package comprises a NT\$210 billion special budget (US\$7 billion), NT\$140 billion emergency budget (US\$4.7 billion) and NT\$700 billion financial loan (US\$23.3 billion) with low interest rate³⁶ (Table 4).
- 5.7 A good 65.9% of special budget will be dedicated to “economic development” while 34.1% will be used in enhancing “social welfare” (Table 5).
- 5.8 Of the NT\$1.05 trillion (US\$35 billion) stimulus package, 33% will be sourced from government’s budget and funds, with 67% in financial loans from government-owned banks and financial institutions.³⁷
- 5.9 Immediately after the enactment of the revised Special Act, the government gave out NT\$103.5 billion (US\$3.5 billion) to people suffering from the loss of the jobs due to COVID-19 for three months (April-June).

³⁴ Accommodation and food services experienced the sharpest decline of 6,000 workers among all subsectors. Data source: DGBAS, Taiwan.

³⁵ Ministry of Economic Affairs, Taiwan <<https://www.moea.gov.tw/MNS/covid-19/content/SubMenu.aspx?menuid=33448>> (accessed 21 April 2020).

³⁶ Taiwan’s Central Bank has also granted an additional NT\$200 billion (US\$6.6 billion) loans to banks to help troubled SMEs.

³⁷ “Taiwan passes NT\$1.05 trillion economic relief package”, *Taiwan News*, 2 April 2020 <<https://www.taiwannews.com.tw/en/news/3909127>> (accessed 16 April 2020).

TABLE 4 STRUCTURE OF TAIWAN'S ANTI-COVID-19 STIMULUS PACKAGE

	Amount and shares in total
Targeted financial loan to help the badly affected	US\$ 23.3 billion
For SMEs	81.5%
Large firms in aviation and sea transportation	11.4%
Labour	7.1
Special budget	US\$4.6 billion
Ministry of Economic Affairs	37.1%
Ministry of Labour	23.7%
Ministry of Transportation and Communication	18.0%
Ministry of Health and Welfare	13.9%
Council of Agriculture	2.8%
Ministry of education	2.0%
Ministry of Culture	1.7%
Others*	0.8%
Emergency budget	US\$7.0 billion
Additional fund for ministries	37.6%
SME credit guarantee fund	28.6%
Emergency fund	11.0%
Public infrastructure	8.6%
National development fund for start-up companies	7.1%
Special fund	7.1%
Overall	US\$ 35 billion

Note: "Others" includes Ministry of Science and Technology, Ministry of the Interior, Council of the Indigenous People and National Communication Commission.

Source: Executive Yuan, Taiwan.

TABLE 5 SPECIAL BUDGET BY ITEMS

	NT\$ million	US\$ million	%
Economic Development	138,400	4,600	65.9
• Agriculture	5,500	183	2.6
• Other economic services	132,900	4,417	63.3
Social Welfare	71,600	2,380	34.1
• Social assistance	4,500	150	2.1
• Welfare services	31,000	1,030	14.8
• Health care	36,100	1,200	17.2
Total	210,000	6,980	100

Source: "Fiscal stimulus package NT\$210 billion contributes 0.9% of economic growth", CNA News, 23 April 2020, <https://www.cna.com.tw/news/firstnews/202004230174.aspx?utm_source=%E6%97%A9%E5%AE%89%E4%B8%96%E7%95%8C&utm_campaign=2be2e6ca08-EMAIL_CAMPAIGN_2020_04_23_11_36&utm_medium=email&utm_term=0_3a8cd69d5d-2be2e6ca08-83797097> (accessed 24 April 2020).

5.10 A total of 800,000 employees would receive 40% of their monthly salary from the government cap at not more than NT\$20,000 (US\$664) for three months. The 1.12 million self-employed will receive NT\$10,000 consecutively (US\$333) for three months.

- 5.11 The Ministry of Economic Affairs (MOEA) also plans to introduce “stimulus coupons” that give discounts for shopping in 140,000 restaurants, 280,000 businesses in shopping centres, 10,000 night markets and 1,700 arts and cultural spots in Taiwan.
- 5.12 The total stimulus packages accounts for 5.4% of Taiwan’s GDP in 2020. This is lower than Japan’s 20%, Malaysia’s 17%, Hong Kong’s 13%, Singapore’s 12% and the United States’ 11% but higher than South Korea’s 5% and China’s 2.5%.³⁸
- 5.13 Taiwan can afford greater fiscal stimulus given its relatively low government debt to GDP ratio (35% in 2018).³⁹ Its high savings rate (35% in 2018) suggests its greater capacity to invest at home during the economic downturn.⁴⁰

Opportunities and Challenges in post-COVID-19

- 6.1 As of 1 June, Taiwan had 50 days of zero local transmissions. With the improving pandemic situation, the government is considering further relaxing some measures to boost private consumption.
- 6.2 Nevertheless, Taiwan’s economy may be affected by the worsening economic situation in the West. The United States reported an unemployment figure of over 20 million in April and nearly 59 million jobs in Europe were at risk of permanent cutbacks.⁴¹

³⁸ “Value of COVID-19 fiscal stimulus packages in G20 countries as of April 2020, as a share of GDP”, *Statista* <<https://www.statista.com/statistics/1107572/covid-19-value-g20-stimulus-packages-share-gdp/>> (accessed 22 April 2020). Louis Kuijs and Priyanka Kishore, “APAC outlook: Recovering from the coronavirus”, Oxford Economics, 22 April 2020 (webinar).

³⁹ Data source: World Economic Outlook database, October 2019, International Monetary Fund.

⁴⁰ Taiwan’s saving rate is higher than 19% in USA, 28% in Japan, 29% in Germany and 25% of world average. Data source: Taiwan’s DGBAS and World Bank <<https://data.worldbank.org/indicator/NY.GNS.ICTR.ZS>> (accessed 7 May 2020).

⁴¹ Marine Strauss, “McKinsey predicts near doubling of unemployment in Europe”, Reuters, 20 April 2020 <<https://www.reuters.com/article/us-health-coronavirus-eu-jobs/mckinsey-predicts-near-doubling-of-unemployment-in-europe-idUSKBN2210UZ>> (accessed 7 May 2020).

- 6.3 The gradual resumption of China's manufacturing production and lift of lockdown measure may provide mild demand support for Taiwan's exports. However, China's private consumption has yet to bounce back to the pre-crisis level despite the slowdown of the confirmed cases.⁴²
- 6.4 The fiscal stimulus policy does not seem to be a sustainable solution if the global pandemic crisis prolongs. The Taiwan government is already burdened by its considerable national health-care expenditure. The ageing population suggests that the financial commitment to the elderly's health care will increase even more in the foreseeable future.
- 6.5 The growing investment at home may help to ensure steady growth of tax revenue for the government. Apart from the mounting investment repatriation from Taiwanese firms with overseas business operation, FDI in Taiwan grew by 136% in the first quarter to US\$2.4 billion.⁴³
- 6.6 The COVID-19 outbreak is likely to encourage the development of artificial intelligence and 5G technology. Taiwan's manufacturing strength in high technology industry is advantageous to attract more inward investment.
- 6.7 Beyond the steady export in ICT goods, Taiwan's success in controlling the virus spread offers good prospect for its exports of masks and other medical gears. The export of machinery for producing the medical goods is likely to swell as well.
- 6.8 The COVID-19 outbreak has accelerated the US-China rivalry. After Trump's advocacy to shift factories out of China, the Chinese government set a new guideline that may affect leading US high technology firms' (such as Apple, Qualcomm, Microsoft and so on) business in China from 1 June 2020.⁴⁴

⁴² Louis Kuijs and Priyanka Kishore, "APAC outlook: recovering from the coronavirus", Oxford Economics, Webinar, 22 April 2020.

⁴³ Data source: Investment Commission, Taiwan.

⁴⁴ The Chinese government's new guidelines from 1 June 2020 will require Chinese firms to carry out a cybersecurity review process for any procurements that could have implications for the company's national security. The procurement includes core network equipment, servers, cloud computing services, database software and network security equipment. Foreign firms may not be able to sell their products and services if they cannot pass the review process. Simone McCarthy, "China's new cyber security rules could hit foreign

- 6.9 The US-China confrontation is likely to aggravate with a Trump win in the November 2020 election, which would most likely also result in a gradual economic de-coupling between the United States and China.
- 6.10 Unlike the emphasis on “economic efficiency” (through investment in China) in the past, the consideration for “economic resiliency” (through investment diversification to minimise supply disruption due to a sudden incident) is likely to emerge after the COVID-19 outbreak.
- 6.11 On 15 May 2020, Taiwan’s TSMC had announced the building of a US\$12 billion factory in Arizona. This is considered as TSMC’s near-term response to the US request to restrict chips supply to Huawei. As of 18 May 2020, TSMC had yet to confirm if it would cease chips supply to Huawei.⁴⁵
- 6.12 As an important subcontractor and key component supplier of global MNCs, Taiwan’s economic outlook will chiefly depend on whether it can grasp emerging opportunities in the new production alliance with global leading firms (either Huawei or Apple) in the post-COVID-19 era.

service providers”, *South China Morning Post*, 28 April 2020 <<https://www.scmp.com/news/china/politics/article/3081908/chinas-new-cybersecurity-rules-could-hit-foreign-service>> (accessed 11 May 2020).

⁴⁵ “Taiwan’s TSMC to build Arizona chip plant as US-China tech rivalry escalates”, CNA News, 15 May 2020 <<https://www.channelnewsasia.com/news/business/taiwan-s-tsmc-to-build-arizona-chip-plant-as-us-china-tech-rivalry-escalates-12736504>> (accessed 16 May 2020).

**ANNEX 1 TAIWAN'S MAIN POLICY MEASURES DURING THE COVID-19
PANDEMIC IN 2020**

		Travel restrictions		Mask policy	Social norms	Diplomacy	Economic stimulus
		Foreign nationals	Taiwan nationals				
January	15						Enactment of the “Special Act on COVID-19 prevention, relief and restoration”
	24			Ban mask export			
	25	Entry ban for PRC nationals from Hubei province					
	31			Ration of two masks per person per week			
February	2	Entry ban for PRC national from Guangdong province	Home quarantine for 14 days with travel history to Guangdong province				
			Self-health management with transit history in China, Hong Kong and Macao				
	3	Entry ban for PRC national from Wenzhou city	Home quarantine for 14 days with travel history to Wenzhou				
	7	Entry ban for all foreign nationals with travel history to mainland China, Hong Kong and Macao in the last 14 days	Home quarantine for 14 days with travel history to mainland China, Hong Kong and Macao in the past 14 days				

	27	Home quarantine for 14 days with travel history to Italy					
March	5			Ration of three masks per person per week			
	12			Allow online mask purchasing (real-name mask policy 2.0)			
	13						NT\$60 billion (US\$2 billion) fiscal stimulus budget was approved by the Legislative Yuan
	14	Home quarantine for 14 days with travel history to 27 European countries and Dubei					
	19	Entry ban for all foreign nationals	Home quarantine for 14 days				Central Bank lowered interest rate to 1.1125%, from 1.375%
	21		Travel advisory to avoid any unnecessary overseas trips				
	22			Allow purchasing mask in convenience stores (real-name mask policy 3.0)			
April	1				Implementation of “social distancing”	Announced donation of seven million masks to Europe, two million to USA and 100 million to other countries with	

					diplomatic relations	
	4		Fine up to NT\$15,000 (US\$500) if not wearing masks on public transportation			
	9		Ration of nine masks per person in every 14 days	Ban on the business operation of night entertainment services (eg. night clubs, dance club, KTV and so on)	Announced donation of six million masks to New Southbound Policy countries and Latin America	
	10			Regulating the number of tourists in tourist spots		
	16				two million mask donation to Japan	
	21					Enactment of the revised “Special Act on COVID-19 prevention, relief and restoration” with the increase of fiscal stimulus to NT\$1.05 trillion (US\$35 billion)
	24					900,000 people received subsidies
June	1		Relax on mask exportation ban			

Source: Ministry of Foreign Affairs, Taiwan <<https://www.boca.gov.tw/cp-56-5078-41ac3-1.html>> (accessed 29 May 2020); various online news.