

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
ADMIRAL MAKAROV NATIONAL UNIVERSITY OF SHIPBUILDING  
FACULTY OF MARITIME ECONOMICS  
DEPARTMENT OF ECONOMIC POLICY AND SECURITY



"Allow for diploma defense"  
Head of the Departments  
Doctor of Economics, Professor  
Ganna IEFIMOVA

(scientific degree, academic title, full name)

\_\_\_\_\_ " " \_\_\_\_\_ 2022

(signed by the head of the department)

## QUALIFYING WORK

for obtaining a master's degree in higher education

on the topic: **STIMULATING CHINA'S FOREIGN TRADE IN THE  
POST-PANDEMIC PERIOD**

Applicant: VI grade student, group 6451m

Specialty 051 Economics

EP International Economics

(cipher and name of the specialty)

Lou Rongyue

(surname and initials)

Mykolaiv – 2022

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
Admiral Makarov National University of Shipbuilding**

Educational Scientific Institute (Faculty) Faculty of Maritime Economics  
Department of Economic Policy and Security  
Specialty 051 Economics  
Educational program International Economics

"APPROVE"

Guarantor of the educational  
program

\_\_\_\_\_ Ganna EFIMOVA

" \_\_\_\_ " \_\_\_\_ 2022

***TASK***  
***FOR QUALIFYING WORK***  
**for the degree of higher education "Master"**

Student \_\_\_\_\_ Lou Rongyue

(Last name, first name, patronymic)

1. Theme of work: Stimulating China's foreign trade in the post-pandemic period  
Head of work, \_\_\_\_\_ Doctor of Economics, Professor Efimova G.V.  
Approved by the order of the rector No \_\_\_\_\_ from " \_\_\_\_ " \_\_\_\_
2. Deadline for submission of work: 20 November 2022
3. Initial data on the work: The cases (1000) and recovery/death rates (%) of the COVID-19 pandemic in China; the monthly value and year-on-year growth rate of China's imports/exports/from the United States, 2019-21; China's GDP growth
4. List of issues related to the development (name of sections)  
Theoretical foundations and Scientific Trends of Foreign Trade During the Pandemic; Analysis of the state and trends in the development of foreign trade; Proposals for improving international economic relations
5. List of presentation materials 1. Purpose and objectives, object and subject of study; 2. Impact of COVID-19 on international trade & China's foreign trade; 3. political actions for economic recovery in the post-pandemic period; 4. trade and economic cooperation between Ukraine and China in the conditions of the COVID-19 pandemic and in the post-pandemic period; 5. Analysis of the impact of COVID-19 on China's foreign trade enterprises and countermeasures.; 6. Impact of RCEP after its entry into force; 7. Waiting on the Silk Road of Health after the Pandemic; 8. Characteristics and the impact of the Digital Silk Road.

## CALENDAR PLAN

№	Name of the stages of work	Deadline for the stages of work	Note
1.	Definition of the supervisor of the work	01.09.2022 – 10.09.2022	
2.	The choice of the topic of work and its coordination with the supervisor	11.09.2022 – 20.09.2022	
3.	Study of printed and electronic sources, economic realities, methodological and scientific publications on the topic of work	21.09.2022 – 30.09.2022	
4.	Drawing up a preliminary work plan, coordinating it with the supervisor	01.10.2022 – 10.10.2022	
5.	Collection of statistical information at the basic enterprise (institution, organization)	In terms of practice	
6.	Development of a theoretical section	01.10.2022	
7.	Development of an analytical section	15.10.2022	
8.	Development of the project section	25.10.2022	
9.	Development of an introduction, conclusions, list of references and applications	10.11.2022	
10.	Editing the manuscript of the master's work and familiarizing the supervisor with it	15.11.2022	
11.	Elimination of comments of the supervisor and completion of work	20.11.2022	
12.	Submission of the manuscript of the qualification work to the library of NUOS for verification of uniqueness	20.11.2022	
13.	Submission of the manuscript of the qualification work for preliminary defense	20.11.2022	
14.	Elimination of comments of the departmental defense and the results of the check for the detection of matches / identity / similarity of work	20.11.2022 – 25.11.2022	
15.	Development of a demonstration material and report	26.11.2022 – 29.11.2022	
16.	Submitting the work to the reviewer and receiving a review	26.11.2022	
17.	Defense of work before the certifying commission	01.12.2022	

Student

Lou Rongyue

First and last name

signature

Supervisor

Ganna IEFIMOVA

First and last name

signature

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## REVIEW

In more than 200 countries and regions around the world, the Corona Virus Disease 2019 (COVID-19) had infected more than 451 million people and caused 6 million deaths by 10 March 2022. Half of the global infected cases were found in the United States, Brazil, India, the UK, Russia and France. COVID-19 was first diagnosed in Wuhan, China, at the end of 2019. The number of infected cases rose rapidly towards the end of January 2020, in Wuhan and the rest of China, but it became stable by the end of February 2020. The virus was found all over the world in early March 2020. By 26 January 2021, the number of infected cases worldwide exceeded 100 million, and by 4 August 2021, this number rose to 200 million. In the first quarter of 2022, the global pandemic was still evolving uncontrollably in many countries outside China after twenty-five months of the outbreak and some countries were suffering from the second, the third and further waves of serious contagion. The hardest-hit countries were shifting from Iran, Italy, to Spain, France, the UK, and then to the United States, Brazil and India.

China began to promote the resumption of work and production orderly after the pandemic was effectively contained in late February 2020. In May 2020, the resumption of work and production in China progressed in an orderly manner. In sharp contrast, COVID-19 broke out in countries in the Americas and Europe without being timely controlled. Cross-border air transportation and the global supply chains were then severely impacted or even interrupted.

With trade protectionism, geopolitical conflicts and de-globalisation, the world economy and the international trade system have been under severe pressure and

threat. The impact of the pandemic on trade has received attention. Baldwin (2020) pointed out that the pandemic might lead to a more severe trade recession than the outbreak of the global financial crisis in 2008–2009, as the pandemic is both a demand shock and a supply shock while the 2008–2009 recession was driven mostly by a demand shock. A similar and provocative study is by Liu et al. (2021), also using the data on monthly year-over-year growth of China's trade. Liu et al. (2021) find that the lockdown restrictions had affected imports more severely than the direct health and behavioural effects of the pandemic itself. This paper focuses on analyzing and capturing changes in China's trade and then presents some policy recommendations for China's trade development.

## INTRODUCTION

China has been one of the world's largest trading economies for many years in a row. As one of the "troika" driving China's economic growth, foreign trade has provided a strong driving force for steady growth. According to the Ministry of Commerce, in 2019, China's net export of goods and services contributed 11% to its GDP growth. Nearly half a million foreign trade enterprises have created about 200 million direct and indirect jobs, accounting for 25 percent of the total employment. The tax revenue of the import link contributed 11.6% of the total tax revenue of the country. The trade surplus in goods was US \$421.5 billion, up by about 20%. It was an important source of current account surplus and strongly safeguarded the international balance of payments.

However, the sudden outbreak of COVID-19 at the end of 2019 posed severe challenges to China and the world economy. While the epidemic has been effectively contained at home, it is spreading rapidly overseas. According to the World Health Organization, as of the end of May 2020, the number of confirmed cases abroad reached 3 million, and the worst-hit European and American countries are China's major trading partners. Due to the need of epidemic prevention and control, European and American countries have been forced to declare a state of emergency, implement personnel quarantine, border blockade and port closure, and take strict quarantine measures on ships and cargo from China to slow the spread of the virus. China's foreign trade enterprises have been hit by the double impact of domestic work stoppage and the current international spread of the epidemic. According to the statistics of the Ministry of Commerce, affected by the epidemic, in the first quarter

of 2020, China's total import and export volume was 6.57 trillion yuan, down by 6.4% year on year, among which the export volume decreased by 11.4%, the import volume decreased by 0.7%, and the trade surplus decreased by 806% year on year. Among them, exports to traditional markets such as the United States, the European Union and Japan decreased by 23.6%, 14.2% and 14.1%, respectively.

The diploma work is devoted to the study of the the impact of COVID – 19 pandemic on China’s foreign economic and trade cooperation , and to explore effective corresponding countermeasures.

The **topicality** of this work is to analyze the foreign trade of the world and China under the relevant pneumonia epidemic, compare the experience with the previous SARS epidemic, and summarize the latest key points of promoting foreign trade in the post-epidemic era. In order to do this, we must understand the methods and measures to mitigate or stop the related pneumonia outbreaks, and the policy measures that the government has done without economic recovery. The foreign trade cooperation between China and Ukraine during and after the COVID-19 era is also an important aspect of our research.

The **goals and objectives** of the diploma is to devoted to analyze the impact of the epidemic on China's foreign trade (economy) and how China should stimulate foreign trade in the post-epidemic period.

The **object** of the research is to focus on the impact of the pneumonia on China's foreign trade. The **subject** of my diploma work is specific measures to stimulate foreign trade in the post-pandemic period (political actions for economic recovery in the post-pandemic period )



Survey method、 Data collection、 Information research Methods、 Information research method, observation method are used in this research.

The **scientific novelty** of my research focuses on the analysis of the development trend of China's foreign trade under the background of the novel coronavirus pneumonia. The countermeasures to promote China's foreign trade in the post-epidemic era are introduced. At the same time, it can be concluded that under the background of RCEP, Healthy Silk Road and Digital Silk Road, the development of China's foreign trade has made greater progress

In terms of the **practical value**, the government, enterprises and financial institutions should respond quickly and work together to help foreign trade enterprises to resume production and tide over the difficulties smoothly.

The **structure** of the diploma work is as follows: Introduction, Chapter 1 "Theoretical foundations and scientific trends of foreign trade during the pandemic", Chapter 2 " Analysis of the state and trends in the development of foreign trade ", Chapter 3 " Proposals for improving international economic relations", Conclusions, List of cited literature.

Among the **published research results**, the article titled "PREREQUISITES FOR THE STUDY STIMULATING CHINA'S FOREIGN TRADE IN THE POST-PANDEMIC PERIOD" mainly tells about the severe impact of the global novel coronavirus epidemic on China's foreign trade, aims to analyze how to stimulate China's foreign trade in the post-epidemic period, and summarizes the measures to promote foreign trade in the post-epidemic period. The article titled "Changes in Imports and Exports During the COVID-19 in China" told us that the

impact on imports and exports was large at the beginning of the pandemic, as it was difficult to ensure that domestic output in the region remained stable. But the economy recovered quickly in the middle of the year and export production picked up. From the historical data, there is an objective phenomenon that China's import scale and export scale change in the same direction.

# CHAPTER 1

## THEORETICAL FOUNDATIONS AND SCIENTIFIC TRENDS OF FOREIGN TRADE DURING THE PANDEMIC

### 1.1. Impact of COVID-19 on International Trade

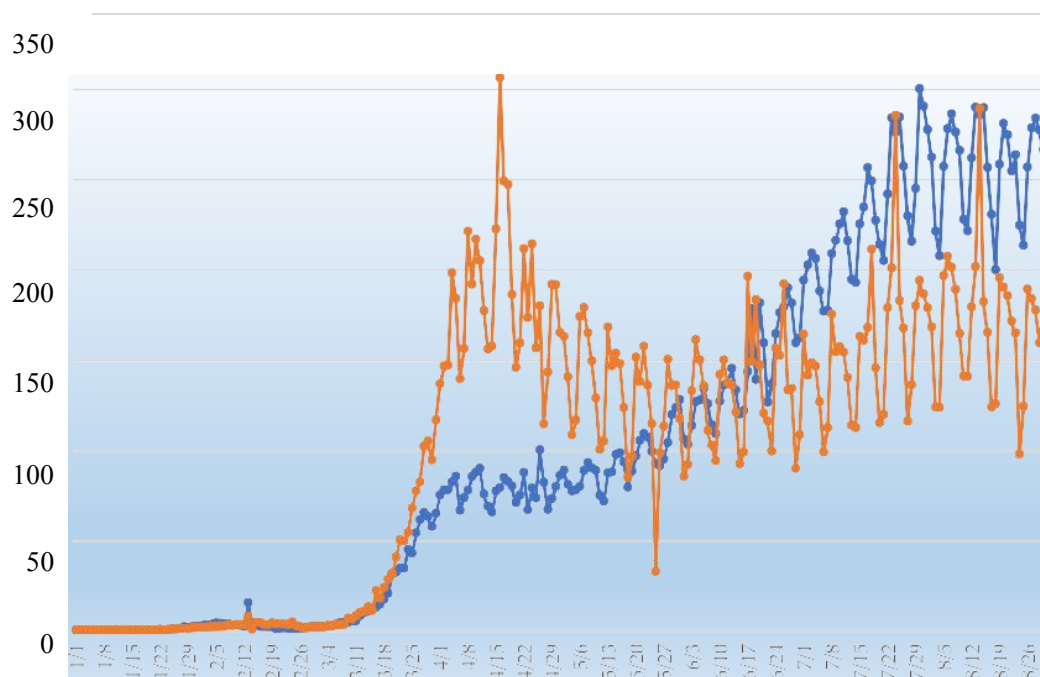
In this section, we discuss the theoretical background on how COVID-19 affects trade between countries. First of all, COVID-19 damages decrease trade by increasing trade costs between countries.<sup>3</sup> For instance, COVID-19 cases/deaths reduce on-site presence of workers, such as truck drivers and port workers, in the transport and shipping sectors. Lockdown policies and port restrictions reduce air flights and marine transportation between countries. For instance, Heiland and Ulltveit-Moe (2020) have reported that the decrease in container ships' departure was 29% compared to 2019 in the first week of April 2020. These disruptions in transport sectors delay transportation and increase freight charges. Besides that, the spread of infectious diseases in a country affects both the demand side and the supply side of the economy. Hereafter, we summarize the possible effects of the COVID-19 damages in exporting and importing countries separately.

#### 1.1.1 The trade effects of COVID-19 in exporting countries

Firstly, we start with the impact of COVID-19 in exporting countries. The spread of COVID-19 led to social distancing and lockdown measures. These measures decrease people's mobility with regards to workplaces. School closures force some workers to be away from their work to look after their children. Death and prolonged illness directly reduce the workforce. These changes reduce the supply of

goods and make them less elastic in price, shifting the country's supply curve upward and making it steeper. The COVID-19 damage and the subsequent lockdown orders also disrupt transportation sectors in exporting countries, increasing the cost of exporting by raising the port and terminal handling costs.

In sum, it is natural that the COVID-19 damage in an exporting country decreases the scale of production, thereby reducing the export supply in that country. There will be industrial heterogeneity in terms of the degree of supply shocks. For instance, the supply shocks will be smaller in industries providing essential products, such as food and medical products, than non-essential products, such as automobiles and machines. This is because countries are trying to maintain the supply of essential products, and lockdown orders such as factory closure are usually not applied to the manufacturers of these products.



**Fig 1.1.** Daily Numbers of COVID-19 Cases and Deaths in the World (persons).

Nevertheless, the negative effect may decrease over time thanks to the introduction of remote work/operation. The development of tele-communication and information technology (IT) will facilitate remote works/operation and reduce supply shocks in the manufacturing sectors. Many countries have tried to maintain their economic activities by introducing telecommuting systems. These systems contribute to mitigating the adverse effects of COVID-19 on trade. Furthermore, such systems may even improve productivity or efficiency. In this case, exports increase. There will also be industrial heterogeneity of how remote work/operation replaces the on-site production activities. The exports are likely to keep decreasing in these industries where remote works/operation is less feasible, despite the development of IT. For example, such operations are difficult to conduct in labor-intensive industries such as textile, footwear, and leather products. Even in capitalintensive sectors such as machinery and transport equipment, the production scale decreases more greatly if remote work/operation is less feasible and an in-person presence is more critical in the production process. Dingel and Neiman (2020) calculated only 22% of jobs could be performed at home for manufacturing.

#### **1.1.2. The trade effects of COVID-19 in importing countries**

Regarding COVID-19 damages for an importing country, the trade effect will mainly come from the decrease in aggregate demand in that country, accompanied by an increase in the port and terminal handling costs. A citywide/nationwide lockdown reduces people's earnings from work and leads to a drop in aggregate demand unless the government provides sufficient benefits to cover the loss of earnings. Even if

people maintain their incomes, however, the fear of infections decreases their visits to retail outlets and supermarkets, resulting in shrinking demand.

As for the supply shocks, the degree of the negative demand shocks will differ across industries. As indicated in a study by Eaton et al. (2016), which investigated the trade effect of the global recession during the period 2008–2009, negative demand shocks may reduce spending on durable products more than on non-durable products. The reason is that the former products are “postpone-able” (Baldwin and Tomiura, 2020). Therefore, the negative demand shock can be higher in industries providing durable goods. Examples of these industries include plastics and rubber, leather products, wood products, textiles, footwear, plastic/glass products, precious/base metals, machinery, and transport equipment.

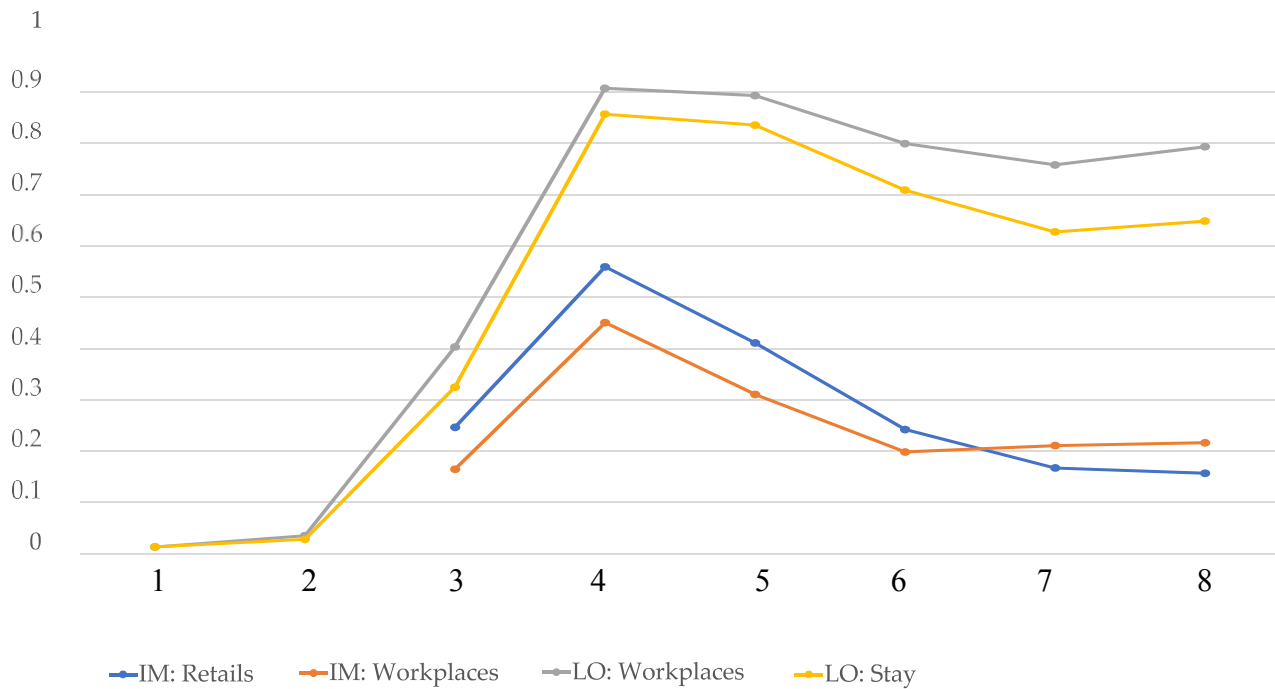
In contrast, uncertainty about the future or “panic purchase” may increase the demand for essential products, such as vegetables and food products. Besides, the import demand for sanitation products, such as face masks and hand sanitizer, may increase due to the increased need to avoid infection by COVID-19. Thus, the adverse demand shocks will be smaller, or may even be positive for vegetable, food, and chemical products. Since textile face masks or protective garments for surgical/medical use are categorized as textile products, the negative shocks may also be smaller in that industry, despite the durable nature of the textile products.

Supply shocks also have a knock-on effect resulting in demand shocks of COVID-19 in importing countries through their supply chains. If COVID-19 damages decrease production of a downstream product, they subsequently decrease the import demands of upstream products used for the downstream products. We

expect to observe this supplychain effects in industries where international production networks are well-developed, such as machinery products and transport equipment. The demand shocks discussed in this paper include these supplyinduced decreases in demands.

Online shopping plays a key role in mitigating the negative effects on demand caused by less mobility for visiting retail outlets. The negative impact of COVID-19 on trade will be smaller in goods that consumers can buy via the e-commerce (EC) market. Furthermore, even after COVID-19 infections/deaths decrease or stop and lockdown measures are lifted, this swift shift from offline shopping to online shopping is expected to persist, at least to some degree.

As Watanabe and Omori (2020) suggest, consumers need to make upfront investments to switch to online purchasing. These investments include the cost of purchasing personal computers or smartphones, the costs of connecting to the Internet, purchasing software, and the cost of learning how to use EC platforms. Once these investments are made, people become reluctant to return to the status quo, and this new style of consumption will continue. In other words, the negative effects are likely to persist on the imports of goods that are difficult to purchase online. Furthermore, the rapid increase in online shopping and teleworking enhances the import demands for IT-related machinery products, such as PC, smartphones, microphones, and cameras.



**Fig 1.2.** The World Average of Immobility and the World Average Shares of Lockdown Dates by Months.

*Journal of The Japanese and International Economies 60 (2021) 101135*

Notes: “IM: Retail” and “IM: Workplaces” indicate the world averages of immobility to retail locations and workplaces, respectively. “LO: Workplaces” and “LO: Stay” represent the world average shares of dates with workplace-closing orders and stay-at-home orders, respectively.

Sources: COVID-19 Community Mobility Reports by Google and the OxCGRT



We begin with an overview of the changes in trade. Table 1 shows the monthly exports from 34 countries in 2020 relative to those in 2019 by industry defined at a section in a harmonized system.

**Table 1.1.**

Exports in 2020 relative to exports in 2019 by Month and Industries.

	1&2	3	4	5	6	7	8
Live animals	1.1	1.1	0.9	0.9	1.0	1.0	1.0
Vegetable products	1.0	1.1	1.0	1.0	1.2	1.1	1.0
Animal/vegetable fats	1.1	1.1	1.2	1.1	1.1	1.1	1.2
Food product	1.0	1.0	0.9	0.9	1.0	1.0	1.0
Mineral products	1.0	0.8	0.6	0.5	0.6	0.6	0.7
Chemical products	1.0	1.0	1.0	0.9	1.1	0.9	1.0
Plastics and rubber	0.9	0.9	0.8	0.8	0.9	0.9	1.0
Leather products	0.9	0.8	0.5	0.5	0.7	0.7	0.8
Wood products	0.9	0.9	0.8	0.8	1.0	1.0	1.0
Paper products	0.9	0.9	0.8	0.8	0.9	0.9	0.9
Textiles	0.9	0.9	0.9	0.9	0.7	0.7	1.0
Footwear	1.0	0.8	0.7	0.6	1.0	1.0	0.9
Plastic/glass products	1.0	0.9	0.8	0.7	0.9	0.9	0.9
Precious metals	1.1	1.2	1.2	1.3	1.1	1.0	1.1
Base metal	0.9	1.9	0.7	0.7	0.9	0.9	0.9
Machinery	1.0	1.0	0.9	0.8	1.0	1.0	1.0
Transport equipment	0.9	0.8	0.4	0.4	0.7	0.8	0.9
Precision machinery	1.0	1.0	0.8	0.8	1.0	0.9	1.0
Miscellaneous	0.9	0.9	0.7	0.7	0.9	0.9	1.0
Total	1.0	0.9	0.8	0.7	0.9	0.9	0.9

**Notes:** This table represents import statistics.

**Source:** Authors' compilation.

**Table 1.2.****Exports in 2020 relative to exports in 2019 by months and continent-pairs**

*Notes: This table represents export statistics. The smallest values are shaded with darker colors.*

*Source: Authors' compilation.*

<b>Exporter</b>	<b>Importers</b>	<b>1&amp;2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
Africa	Africa	1.1	0.8	0.6	0.6	0.5	0.7	0.8
Africa	America	1.0	0.8	0.8	0.6	0.6	0.8	0.8
Africa	Asia	0.9	1.0	0.6	0.5	0.7	0.7	0.8
Africa	Europe	1.0	0.9	0.6	0.5	0.7	0.8	0.8
Africa	Pacific	0.8	0.7	0.8	0.8	1.0	0.6	1.5
America	Africa	1.0	0.9	0.7	0.6	0.8	0.7	0.6
America	America	1.0	0.9	0.6	0.5	0.8	0.8	0.9
America	Asia	1.0	1.0	0.9	0.8	1.0	0.9	0.9
America	Europe	1.0	1.0	0.8	0.7	0.8	0.8	0.9
America	Pacific	1.0	1.1	0.9	0.7	0.9	1.2	0.9
Asia	Africa	0.9	0.8	0.7	0.7	0.7	0.7	0.8
Asia	America	0.9	0.9	0.9	0.8	0.9	0.9	0.9
Asia	Asia	1.0	1.0	0.9	0.8	0.9	0.9	0.9
Asia	Europe	1.0	0.9	0.8	0.9	1.0	0.9	1.0
Asia	Pacific	0.9	0.8	0.9	0.8	1.0	1.0	1.0
Europe	Africa	0.9	0.9	0.7	0.6	0.6	0.7	0.8
Europe	America	1.0	1.1	0.9	0.8	0.9	0.9	0.9
Europe	Asia	1.0	1.0	0.8	0.8	1.0	0.9	0.9
Europe	Europe	0.9	0.9	0.7	0.7	0.9	0.9	1.0
Europe	Pacific	0.9	0.8	0.8	0.8	0.9	0.9	1.1
Pacific	Africa	0.8	0.7	0.5	0.6	0.7	1.1	0.6
Pacific	America	1.0	1.1	1.7	1.2	1.0	1.4	1.0
Pacific	Asia	1.0	1.0	0.9	0.8	0.9	0.8	0.7
Pacific	Europe	0.8	1.4	0.6	0.7	1.3	1.1	0.6
Pacific	Pacific	1.0	0.9	0.8	0.6	0.9	0.9	0.8

Specifically, the findings can be summarized as follows: First, regardless of which measure is applied to estimate the severity of COVID-19, we found significantly negative effects of COVID-19 on the international trade of both exporting and importing countries. Second, those effects, especially the effects of COVID-19 in importing countries, tended to become insignificant since July 2020. Although the negative effects of COVID-19 in exporting countries persisted until August 2020, their magnitude decreased over time.

These results imply that the harmful impacts of COVID-19 on international trade were accommodated to some extent after the first wave of the pandemic. Third, a more detailed analysis considering individual industries revealed heterogeneous effects across industries. For example, labor-intensive industries were observed to be more likely to suffer from the negative effects of COVID-19 in exporting countries. In particular, a negative effect in the footwear industry prevailed until August 2020. The transport equipment industry showed the negative effects of COVID-19 damage in both exporting and importing countries, especially in April and May 2020. In industries providing medical products, the positive effects of COVID-19 on imports were observed.

## **1.2. Impact of COVID-19 on China's Foreign Trade**

### **1.2.1 COVID-19 Outbreak Timelines in and Outside China**

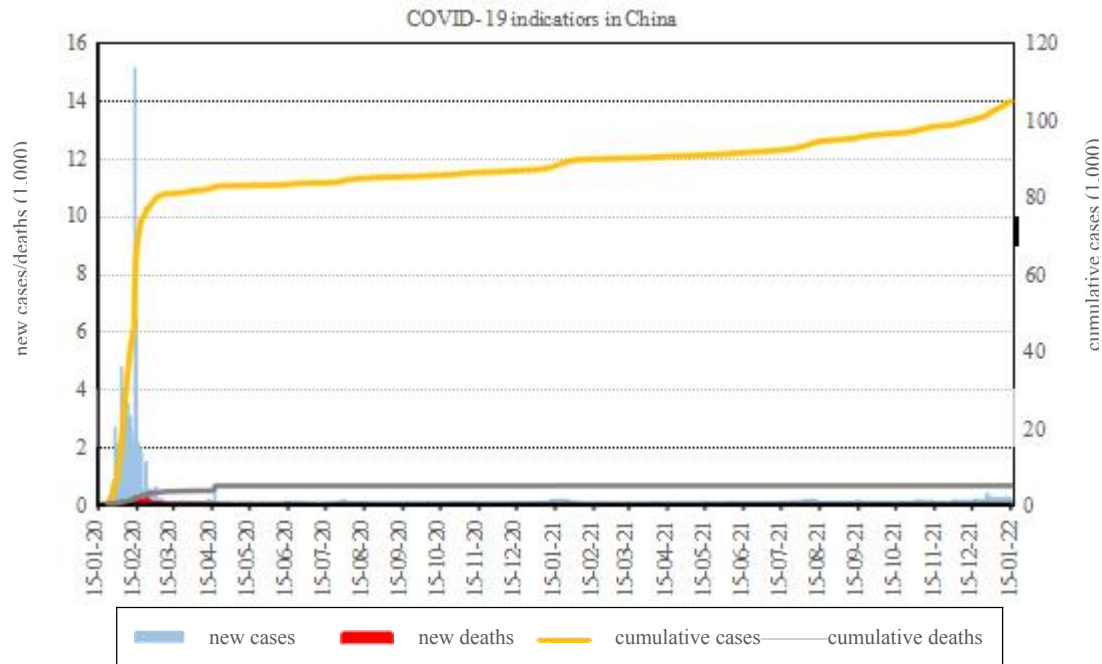
COVID-19 was characterized as the fifth global pandemic by the World Health Organization (WHO) on 11 March 2020. It is also the first time in human history that a coronavirus causes a pandemic. Different countries took different approaches to contain the disease. When the virus spread rapidly in late January 2020, China

decided to quickly quarantine all the people and lockdown Wuhan with a population of over 11 million people. By the end of February 2020, the pandemic was basically brought under control, and economic activities resumed gradually across the country apart from Wuhan (capital city of Hubei) and the rest of Hubei Province. On 8 April 2020, the lockdown in Wuhan was removed after 76 days, signifying the success of China in containing the disease for the whole country.

From May 2020 to September 2021, China suffered a succession of infections caused by imported cases in several cities. Local governments took timely action, such as citywide testing of all residents, home quarantine measures and free vaccination of anti-COVID-19 vaccines. These measures enabled China to maintain daily numbers of confirmed cases below 150 for 19 consecutive months. As can be seen in Figure 1, the total number of confirmed cases in China was 102,314, with 4636 deaths by 31 December 2021.

China has many useful and effective experiences in fighting the pandemic, which could have been shared by other countries. First, the government decisively adopted compulsory quarantine measures to restrict population mobility, cutting off inter-city and community transmission of the disease. Second, the government provided free medical tests, free medical care/treatment and free vaccines. Third, the epicentre was entirely and timely locked down to prevent the disease from spreading to other regions. Fourth, the central government quickly mobilised medical resources, doctors, nurses and food supplies from the whole country to Wuhan, ensuring that the patients and residents there were adequately supported. The Leishenshan and Huoshenshan Hospitals as well as 16 makeshift hospitals in Wuhan were quickly built and

supported by the People's Liberation Army and many other medical teams outside Hubei. Finally, all the Chinese people were cooperative with government instructions and voluntarily isolated themselves at home or wearing medical masks and keeping distances from other people whenever/wherever they were instructed to do so.



**Fig 1.3.** The cases (1000) and recovery/death rates (%) of the COVID-19 pandemic in China.

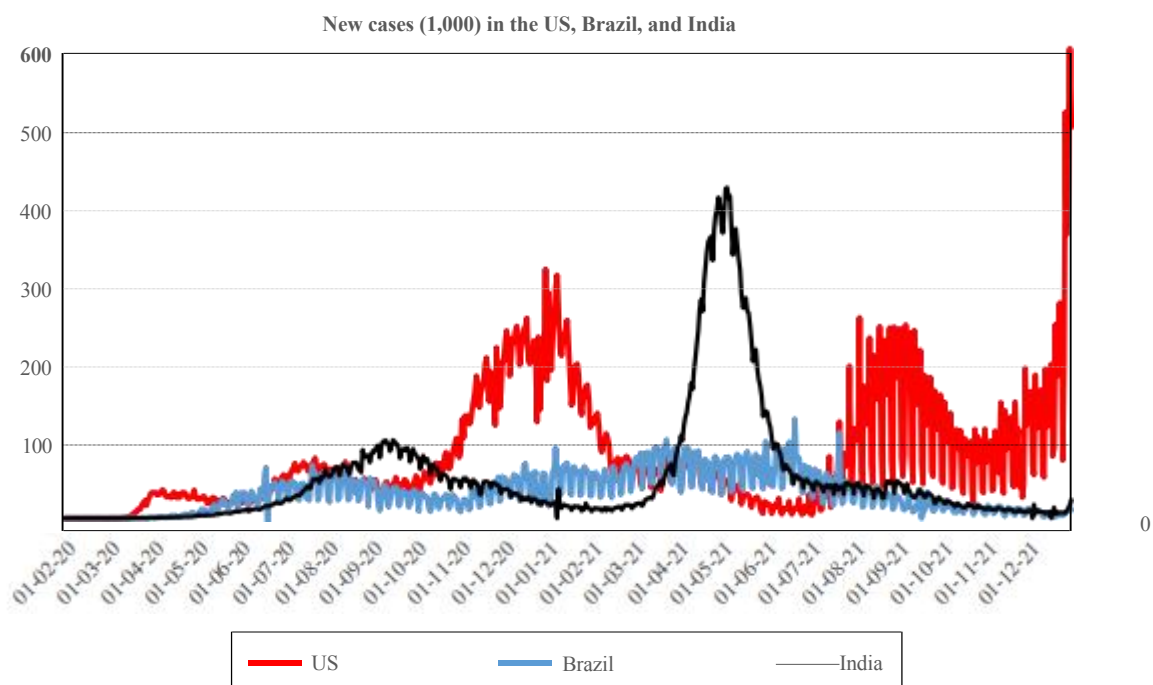
Notes: The abscissa records dates in DD/MM/YY format; for example, 15/1/20 denotes 15 January 2020. The data for China are for mainland China

Sources: The NHCC, <http://www.nhc.gov.cn/>

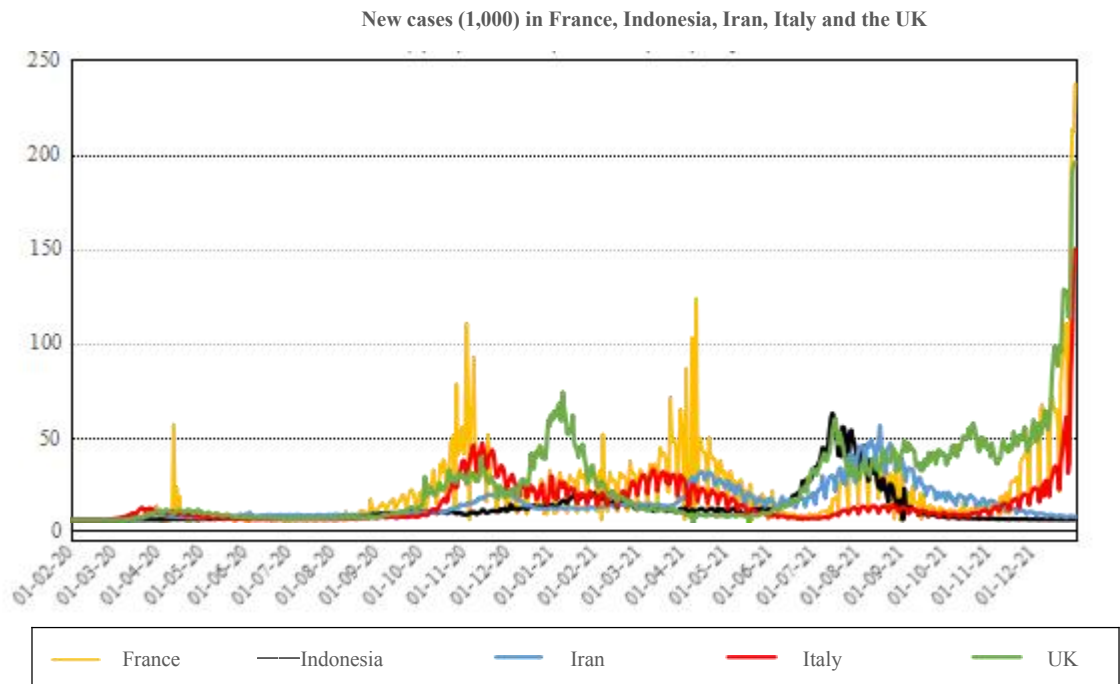
However, over the same period, the situation outside China deteriorated. The hardest-hit countries were shifting from Iran, Italy, to Spain, France, the UK, and then to the United States. In the second and third quarters of 2020, the hardest-hit countries were the United States, Brazil, India, Russia and some South American countries. In the last two months of 2020 and early 2021, large-scale infections broke out in the European countries. And in the second quarter of 2021, Southeast Asian countries also became the hardest-hit areas.

As shown in Figure 2, the number of confirmed infections in the United States exceeded 100,000 by 27 March 2020, recording the highest number of infections in the world. By 31 December 2021, the cumulative numbers of infected cases and deaths in the United States were, respectively, 54,793,602 and 827,254, with a case-fatality rate of 1.51%.

India and Brazil are the second and third most infected countries in the world measured by the absolute numbers of infected cases and deaths. In April–May 2021, the Delta variant of the COVID-19 virus was found in India, causing a surge in the number of new diagnoses, as 100,000–400,000 people were confirmed per day, outnumbering the daily maximum found in the United States. At the end of 2021, the total number of diagnoses in India and Brazil reached 34.9 million and 22.3 million respectively.



**Fig 1.4.** The numbers of new confirmed cases (1000) in the United States, Brazil and India. *Note:* The abscissa records dates in DD/MM/YY format; for example, 1/2/20 denotes 1 February 2020  
*Sources:* Coronavirus Resource Center of JHU, <https://coronavirus.jhu.edu/map.html>



**Fig 1.5.** The numbers of new confirmed cases (1000) in France, Indonesia, Iran, Italy and the UK.

*Note:* The abscissa records dates in DD/MM/YY format; for example, 1/2/20 denotes 1 February 2020

*Sources:* Coronavirus Resource Center of JHU, <https://coronavirus.jhu.edu/map.html>

The contagion trends in Western Europe, represented by the UK, France and Italy, are relatively similar to those in the United States. France experienced three severe waves of outbreaks, occurring in late October-early November 2020, late March-early April 2021 and December 2021. The daily number of new confirmed cases approached or even exceeded 1 million per day. As is presented in Figure 3, this indicator reached a staggering 2 million at the end of 2021. The waves of the UK's outbreaks were not as high as in France, but lasted longer. As a result, the total number of confirmed diagnoses in the UK was the largest in Western Europe and the 4th largest in the world from May 2021.

The Asian countries have overall performed obviously better than countries in the Americas and Europe in 2020, with the exception of India, Iran and Turkey. However, in the third quarter of 2021, the Southeast Asian countries suffered severe

outbreaks, likely relating to the mutated virus. Indonesia, in particular, had about 40,000–50,000 new confirmed cases per day in mid-late July 2021. The peak in Indonesia was even higher than in Iran, which has been in the hardest-hit area of the pandemic since the first half of 2020. Malaysia also became the hardest hit in August–September 2021, with 20,000 confirmed diagnoses per day. Fortunately, the outbreak in these countries was subsequently brought under control.

To sum up, under the threat of the global COVID-19 pandemic, the world's economic structure might have been violently affected, imposing a serious threat and uncertainty on foreign trade and cross-border movement of capital, people and services. Without exception, China's foreign trade endured significant challenges and constraints. How did China's import and export trade with its major trade partners perform? From the perspective of industries and products, which industries have been most affected and which products' exports have been more disrupted? Are there any new trade opportunities emerging from the recessionary trend? From a global perspective, how does China's trade performance compare to that of other countries? These are the foci of our discussion below.

### **1.2.2. The Impact of the COVID-19 Pandemic on China's Foreign Trade**

Before the economic reforms and opening-up, China's economic development pattern was generally an inward-looking economy that implemented import substitution strategies. As shown in Figure 4, China's total trade volume accounted for <1% of the world trade in 1978, with the trade/GDP ratio being about 10%.<sup>1</sup> In the last two decades of the twentieth century, China's foreign trade took off under the prosperous and favourable environment of the global market. The average growth



rate per annum of China's total trade value exceeded 20% from 2001 to 2011 after its WTO accession, with the trade/GDP ratio ranging from 45% to 65%.

Over the past 40 years of economic reforms and opening up, China has made tremendous development progress, being deeply integrated into the global economy, and profoundly embedded into the global value chains (GVCs; Ding et al., 2019). The rapid expansion in foreign trade and foreign direct investment (FDI) over the last two decades has significantly accelerated China's technological progress (Jarreau & Poncet, 2012) and economic growth (Fanget al., 2021). Many empirical studies suggested that China's foreign trade development benefited from foreign technology, capital, management and marketing experiences, particularly for the export-processing industries (Bastos, 2020; Hsieh & Klenow, 2009; Ndzendze & Monyae, 2019). Liu pointed out that the increase in import trade could bring more foreign capital flows to China, which in turn increased China's export trade to these investment home countries, and this synergy greatly promoted trade and FDI expansion. Over the most recent decade, China has quickly emerged as one of the world's largest foreign investors (Yao & Wang, 2014), becoming more and more important in the global trade market (Autor et al., 2013), and an integral part of all sectors in the world economy (Sohrabiet al., 2020).

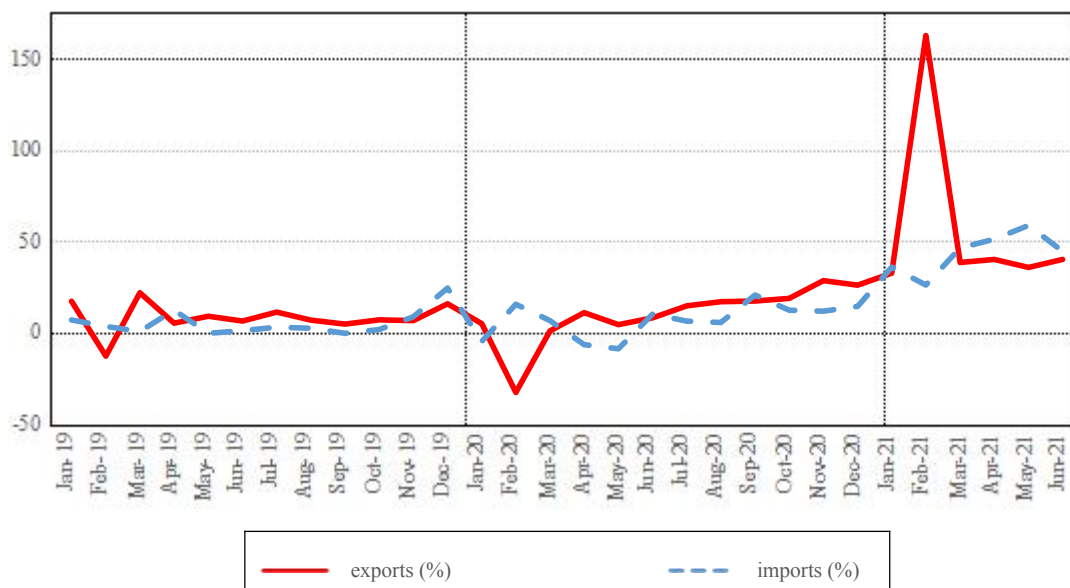
In the context of globalisation, it has become the new normal to division and cooperation under Global Value Chains (GVCs) based on comparative advantage (Baldwin & LopezGonzalez, 2014). Looking back on the 40-year development process since China's economic reforms and opening up, China has gradually changed from a primary product exporter to be the world's largest exporter of

manufacturing goods (West & Lansang, 2018). Its export structure has been shifting from that dominated by resource- and labour-intensive goods to that featured with capital- and technology-intensive products (Caporale et al., 2015). China has initially formed a pattern in which the entire industrial chains are embedded in the GVCs, and it has continuously deepened its integration with the global market over time (Van Assche & Van Biesebroeck, 2018), emerging as one of the core hubs in the global supply and industrial chains (Hoekman, 2015; Lemoine & Unal, 2017). However, China's main competitiveness in global trade is still concentrated on low-tech products, and its ability to provide high value-added intermediate goods is still far behind that of the developed economies (Yu & Luo, 2018).

After the global financial crisis in 2008–2009, global economic growth has notably slowed down, and world trade tensions have gradually escalated. Under the downward pressure of the world economy, China's economic development has entered the so-called New Normal stage, when the GDP growth rate has dropped from the two-digit level to a middle-higher single-digit level of 6%–8%. Trade growth has also slowed down notably. China's trade volume grew by 7% in 2012–2013 and endured a negative growth in 2015–2016 for two consecutive years before it recovered in 2017–2018.

As China raises its global market share, there has already been much debate on the impact of its exports on employment and welfare in the United States and other major trade partners. Autor et al. (2013) presented the China syndrome argument, suggesting that cheap imported products from China had a significant squeeze-out effect on the US industries, resulting in a double-whammy of employment and

average wages and a double-pressure on unemployment relief and financial burden. Many other studies hold different opinions. Such concerns grew, that is, while manufacturing employment in the United States shrank, its labour productivity rose steadily, particularly in the manufacturing sector (Fort et al., 2018), signified by the Sino-US trade war after Donald Trump took power in 2017. However, Bernard et al. (2017) proposed that when most manufacturing enterprises shifted from smokestack industries to service-oriented ones, their most value-added business processes were still retained. As a result, there was no need to worry too much about the relative contraction in manufacturing.



**Fig 1.6.** The year-on-year growth rate (%) by month of China's exports and imports, 2019–2021

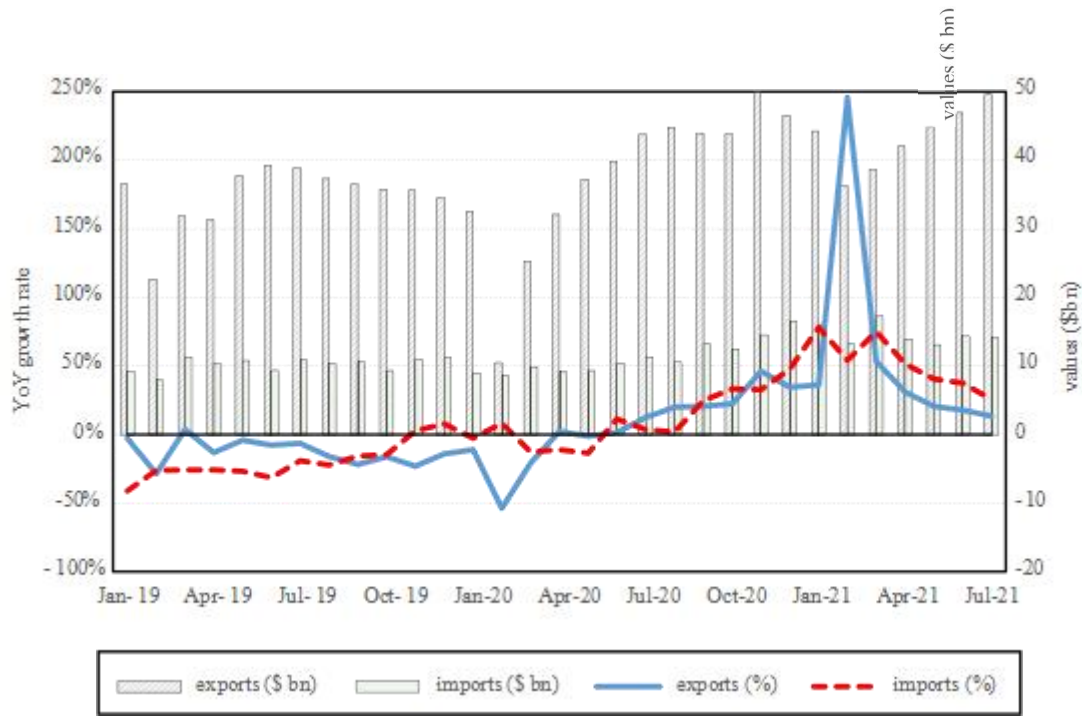
The United States initiated and continuously escalated a trade war with China from 2018 under the Trump Administration. The trade war has undoubtedly affected both the United States and China, as well as the entire world economy. China's trade volume contracted by 0.96% in 2019. In short, China's trade growth has been

significantly weakening in the New Normal stage, compounded by the weakening of international demand as well as the worsening of the Sino-US relationship.

Despite the pressure of sluggish global markets and escalating trade tensions, China managed to become the global largest nation of merchandise trade in 2018, overtaking the United States. In 2018–2019, China's total merchandise trade value reached \$4.6 trillion, with a trade/GDP ratio of around 32%. China has been endeavouring to maintain the development of foreign trade, but has relied more and more on the domestic economic circulation (market) to sustain stable growth signified by the so-called dual-circulations strategy, which is officially defined as “relying on the domestic circulation as the mainstay, and exploiting the mutually promoting effect between the domestic and external circulations”.

As can be seen in Figure 5, China's foreign trade has experienced a V-shaped trend from heavy losses to sharp rises in 2020–2021, with the COVID-19 pandemic sweeping around the world. In February 2020, exports contracted sharply to only 60% of those in February 2019. This decline persisted in the first five months of 2020, after which growth resumed. The year-on-year growth rate of exports in February 2021 reached an impressive 154.7% compared to those in February 2020, a fluctuation largely due to the aforementioned sharp decline. With respect to exports in February 2019, exports grew at a rate of 51.3% in February 2021, supporting a significant recovery without the disturbance of volatility. The rest of this section provides more detailed analyses of China's trade on cross-country/industry/product bases using monthly data from January 2019 to June 2021. The rest of this section

looks at the impact of COVID-19 on China's foreign trade using monthly data in 2019–21 by countries, industries and industrial products.



The US

**Fig 1.7.** The monthly value and year-on-year growth rate (\$ bn and %) of China's exports/imports to/ from the United States, 2019–21.

### **1.3 Political Actions for Economic Recovery in the Post-pandemic Period**

China is the first country to face the pandemic crisis. To deal with the epidemic, the Chinese government took swift action, drawing on its experience in dealing with SARS in 2002-2003.

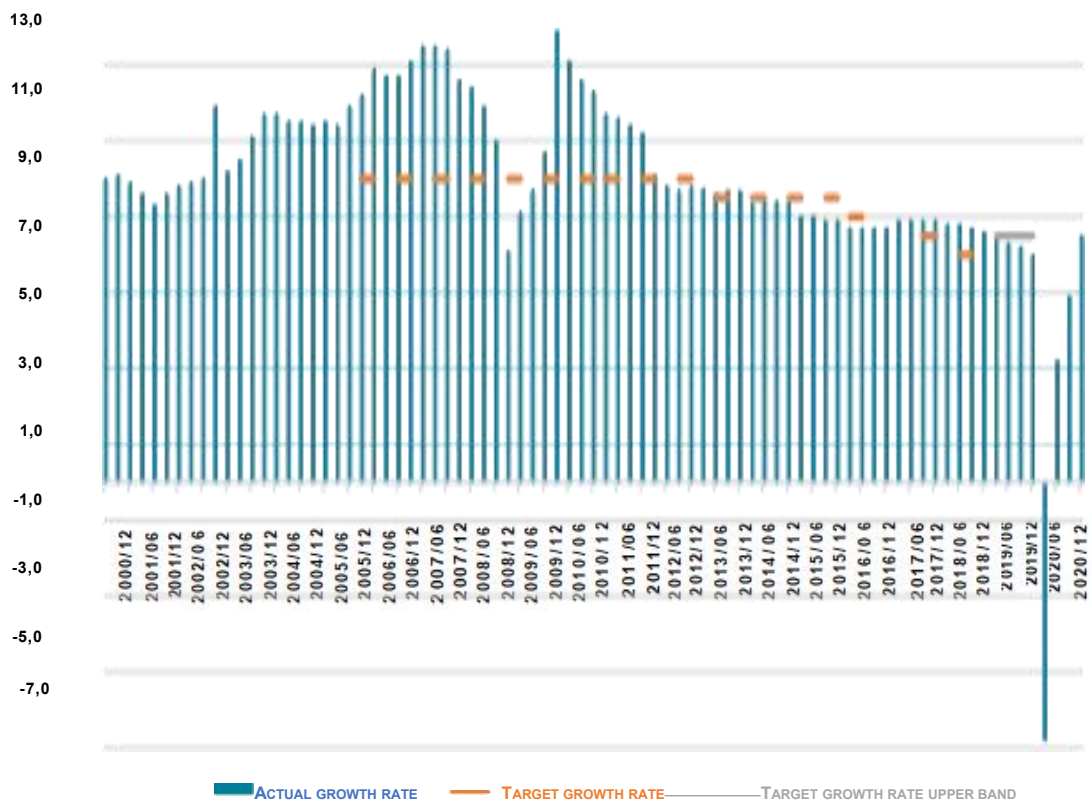
The quick containment of the spread of virus enabled the economy to recover earlier than in many other countries. While monetary expansion, fiscal stimulus, structural reform and continuous economic openness were the key measures involved in reviving the economy, the authorities also took balancing action to avoid negative side effects, such as debt unsustainability, which took years for China to overcome after the Global Financial Crisis (GFC) in 2008.

#### **1.3.1. Economic Impact and Initial Recovery**

The outbreak of Covid-19 has disrupted Chinese economic activity. The initial sharp economic downturn was a reasonable reaction to a drastic exogenous shock. In the first quarter of 2020, China's GDP contracted by 6.8%, the worst figure since China began reporting quarterly growth data, in 1992. This drop was deeper than in the US (-4.8%) and EU (-3.5%) in the same period.

It was much worse than the previous declines during the outbreak of SARS in 2003 and the global financial crisis in 2008 . The first quarter's contraction was mainly driven by the sharp decline of fixed asset investment and retail consumption, which contributed 16.1% and 19% respectively. From the supply side, the decline of industrial production took the leading role, while service and agriculture also fell by 5.2% and 3.3% respectively.

**Fig. 1.8. China's GDP growth (2000Q1-2020Q4, yoy)**



### Initial rebound

China began reopening its economy partially at the end of March. This coincided with the time when many other countries began locking down. The initial recovery showed signs of a quick bounce-back in a limited range of economic activities. However, external demand froze, to the extent that Chinese exporters faced widespread cancellations and postponements of orders from their international trade partners. Therefore, the recovery in April was driven by domestic economic activities. On the supply side, value-added industrial output picked up quickly by 3.9%, the first increase since the outbreak. This was mainly due to the quick output recovery in private enterprises. The private sector increased production by 7% in April. State-owned enterprises (SOEs) only increased 0.5%, whilst joint venture companies and the manufacturing industry recovered by 4% and 5% respectively. It was notable

that high-tech companies took the lead in this recovery, with 10.5% growth, and equipment manufacturing also increased by 9.5%. On the demand side, retail consumption, fixed investment and trade were all in negative territory. Fixed investment declined by 10.3%. Imports fell by 10.2%, while exports increased by 8.2%, mainly in the category of PPE (Personal protective equipment), making an overall drop of 0.7% in trade. Retail sales fell by 7.5%, which represents a substantial but slower decline. It was the first sign of an improvement in consumer confidence since the outbreak of the pandemic.

The second quarter showed stronger recovery than the first. GDP growth rebounded 3.2%, narrowing the first half year's contraction to 2.6%. This recovery was mainly led by 15.7% growth in the information transport, software and technology services sector. The construction sector also contributed 7.8% to the recovery because of the stimulus policy and quick reopening of hard infrastructure projects. Manufacturing grew 4% during the same period, reflecting the resurgence of production. Spending on hotels and restaurants remained low, on -18%. However, the gradual relaxation of travel restrictions helped stop further falls. Household spending remained very weak. Wholesale and retail sales grew by only 1.2%. The third quarter recorded 4.9% growth, a stronger rebound than the prior quarter. The driving force behind this, again, was a strong expansion of 18.8% in the information transport, software and information technology services sector. Industrial production increased by a further 6%, surpassing the fourth quarter of 2019. The service sector picked up by 4.3% in the third quarter.



With the nationwide reopening and removal of travel restrictions, economic activities reaffirmed a steady recovery beginning in November. The manufacturing sector showed the strongest monthly growth since December 2010. The Caixin China Manufacturing Purchasing Manager's Index (PMI) rose to 54.9 from the prior month of 53.6. A similar manufacturing sector PMI released by the National Bureau of Statistics of China increased to 52.1, the highest level since October 2017. The main driver of production growth was that companies began receiving new orders at a faster pace, as economic activities returned to normal. In the meantime, external demand remained weak, compared with domestic expansion.

As a result, the fourth quarter rebounded by 6.5%, making it the fastest of all the quarters in all 3 sectors since the outbreak. Annual growth in 2020 ended up at 2.3% – one of the few positive figures worldwide, according to IMF data. This outcome paved the way for the economy to make a V-shaped recovery.

### **Comparison with the effects of the SARS epidemic and the GFC**

The outbreak of SARS briefly disrupted the economy. The GDP growth rate dropped from 11.1% in the first quarter to 9.1% in the second quarter of 2003. The worst-hit sectors were transportation, hotels and restaurants because of the restrictions on social communication and mobility. For instance, the value-added growth of the transportation sector declined from 7.7% to 2.3% in the first 2 quarters of 2003.

Since the virus infection spread mainly within the borders of Hong Kong and the mainland, the anti-virus measures aimed at high-risk areas and groups of people were effective at containing the virus. From November 2002, when the first case was

reported, to June 2003, when no new cases were found, effective virus containment made it possible for the economy to rebound quickly.

Fiscal policy targeted the sectors worst hit by the outbreak, and involved measures such as forgiving or reducing business tax for airlines, railway companies, hotels, restaurants, recreation, etc. Monetary policy also targeted vulnerable sectors and at the same time the People's Bank of China (PBC) took action to prevent excessive credit expansion at aggregate level, so as to avoid a real estate bubble. With the help of supportive policies, the economy started to recover in the third quarter of 2003 and remained in double-digit growth for the next 4 quarters. In fact, the outbreak of SARS did not change the course of fast growth, and the economy maintained an average growth rate of 10.48% from the first quarter of 2000 until the fourth quarter of 2008.

The economic impact of the GFC in 2008 was considerably more severe than that of the SARS outbreak. China's fast growth had been driven by export and FDI (foreign direct investment) inflows before the GFC. Export as a share of GDP was 31% in 2008. The actual use of FDI saw a cumulative increase of 126.9% between 2000 and 2008. The GFC was an external demand shock for China. Therefore, the impact of the GFC on China's export and investment was tremendous. Export began shrinking in July 2008 until July 2009. The actual use of FDI contracted by 32.67% from December 2008 to January 2009. As a result, the growth rate dropped to 9.5% in the third quarter of 2008, the first time growth had fallen below double digits since 2005.

In response to the crisis, the government implemented fiscal stimulus worth US\$4 trillion to revive investment, coupled with credit expansion to support the financial system. This stimulus policy boosted the growth rate and put it back on track. However, downside effects appeared, as the economic imbalance worsened – overcapacity and overleverage in the economy made the heavily investment-driven growth model unsustainable. In order to correct the problem, the government embarked on a process of economic rebalancing, which has led to a “new normal” in the form of a soft landing for the economy.

When the coronavirus pandemic started in 2020, China had already been on a slower growth trajectory since 2010. The outbreak also coincided with the ongoing shift of China’s economic structure towards a consumption-driven and serviceled economy. Compared with the prior two episodes, the impact of this pandemic crisis and policy response share similarities as well as differences. First, Covid-19 and SARS are both health crises that cause the loss of human life. The quick containment of the virus during the SARS crisis provided both government and society with valuable experience for handling the Covid-19 crisis. Second, while the economic impact of the SARS pandemic was limited, the real economy was significantly damaged by Covid-19 and the GFC.

Furthermore, Covid-19 has caused much deeper disruption than the GFC, because this pandemic is multi-dimensional crisis. Third, the rise of the technology-led sector has played a leading role in the economic recovery from this pandemic crisis. This distinguishing feature was absent from the past 2 episodes of crisis. For instance, the recovery of the information transport, software and information services sector has

become a driver because its value-added growth was faster than that of any other sector in 2020. In comparison, the economic rebound from SARS and GFC was mainly driven by the construction sector (Table 2.1). Fourth, the policy response to the Covid-19 crisis has been relatively prudent compared with the stimulus package implemented after the GFC. This is because the authorities are fully aware of the negative consequences of excessive stimulus and have made strenuous efforts to strike the right balance between reviving the economy and avoiding unwanted debt accumulation.

**Table 1.3.** Comparative economic impact of Covid-19, SARS and GFC

Sector (%, YOY)	Covid-19				SARS			GFC			
	Dec. 2019	Mar. 2020	Jun. 2020	Sep. 2020	Mar. 2003	Jun. 2003	Sep. 2003	Sep. 2008	Dec. 2008	Mar. 2009	Jun. 2009
<b>GDP</b>	6.0	-6.8	3.2	4.9	11.1	9.1	10.0	9.50	7.10	6.40	8.20
<b>Industry</b>	5.9	-8.5	4.1	5.6	13.1	11.1	12.8	9.60	5.80	4.60	6.70
<b>Manufacturing</b>	5.9	-10.2	4.4	6.1							
<b>Construction</b>	5.3	-17.5	7.8	8.1	14.7	13.0	16.3	7.70	10.70	18.80	20.20
<b>Whole sale and retail</b>	5.4	-17.8	1.2	3.1	8.3	10.3	13.8	17.70	16.80	11.40	11.30
<b>Transportation</b>	6.3	-14.0	1.7	3.9	7.7	2.3	7.6	10.50	0.30	-4.40	-2.60
<b>Hospitality and catering</b>	6.2	-35.3	-18.0	-5.1	11.0	7.4	16.9	10.50	9.40	1.70	3.80
<b>Finance</b>	7.0	6.0	7.2	7.9	11.3	7.7	7.2	10.30	13.70	13.40	17.20
<b>Real estate</b>	2.5	-6.1	4.1	6.3	11.1	12.7	6.9	-3.70	-6.20	7.10	12.30
<b>Information transport, software and information services</b>	15.6	13.2	15.7	18.8							
<b>Leasing and commercial services</b>	9.9	-9.4	-8.0	-6.9							
<b>Others</b>	6.0	-1.8	-0.9	2.3	12.1	9.9	6.4	12.20	9.20	7.60	

### **1.3.2. Policy Actions To Revive the Economy**

The Wuhan lockdown began on 23 January. On 27 January, China's National Development and Reform Commission (NDRC) allocated 300 million yuan to fund the construction of 2 temporary coronavirus hospitals in Wuhan. The Organization Department of the Communist Party of China allocated 108 million yuan to help front-line medical professionals on 30 January 2020.

Following the success of bringing the initial outbreak under control, the government took further measures to avert large outbreaks. The following measures were crucial for successful containment: establishing national-level decisionmaking institutions for emergency management and a crossdepartment coordination mechanism; pausing most economic and social activities and making it mandatory to wear masks in public; taking rigorous lockdown measures in multiple levels of cities; striving to test potential virus carriers; tracking all close contacts by various means; isolating all infected patients and close contacts; increasing the supply of medical resources by various means; providing comprehensive measures through a mix of policies; and protecting the elderly and other groups at high risk of infection.

The initial policy responses reflect the following 2 distinct features. First, it is critical to rely on a centralised leadership to secure full implementation of the strict pandemic containment – the key action China adopted in dealing with the SARS epidemic of 2002-03. Second, coordination among the key financial regulatory and decision-making bodies plays a crucial role amidst considerable uncertainties in the early stage of the outbreak. For instance, on 31 January, the People's Bank of China, Ministry of Finance (MOF), China Banking and Insurance Regulatory Commission

(CBIRC), China Securities Regulatory Commission (CSRC) and State Administration of Foreign Exchange (SAFE) issued a joint notice on “Further Strengthening Financial Support for Containing Novel Coronavirus Outbreak”. This was the first coordinated action among the major financial authorities aimed at ensuring smooth financial services in support of epidemic containment nationwide.

### **Prudent monetary policy**

The monetary response to the pandemic crisis has adhered to the principle of serving the real economy with “no floodlike stimulus”. This reflects concerns about the unwanted inflationary pressure that a massive credit expansion could generate and the subsequent over-leverage of the economy – a lesson learnt from the policy adopted during the GFC in 2008. In the meantime, Yi Gang, Governor of the PBC, has adhered to a normal monetary policy with positive interest rate and upward yield curve, which is conducive to sustainable economic recovery. Guided by those principles, throughout 2020, the central bank adopted prudential monetary policy and deployed structural policy tools, including re-lending and rediscount programmes, to stabilise jobs and save businesses affected by the health crisis.

In the early stage of the outbreak, the prime concern was to keep sufficient liquidity in the banking system. The PBC acted swiftly on the first day the stock markets in Shanghai and Shenzhen reopened after the Lunar New Year holiday, by injecting 1.2 trillion yuan of liquidity through reverse bond repurchase agreements. Typically, the PBC carries out liquidity injections through reverse repo operations and adjustment of the Loan Prime Rate (LPR) and Medium-term Lending Facility (MLF) which is more directly linked to companies financing costs. Following the

first injection, the PBC carried out 4 more operations in February, making a total of 2.8 trillion yuan within a month. From March to mid-July, the PBC injected 10 times, totalling 3.31 trillion yuan, through reverse repo operations and MLF in order to keep abundant liquidity in the banking sector.

As the lockdown began to cause severe collateral damage to certain sectors of the real economy, the PBC targeted the most vulnerable small and medium size enterprises (SMEs), rural areas, farms and agriculture firms. One of the most frequently used policies was the re-lending or re-discounting quota, which gave the targeted firms access to bank loans at preferential rates during this difficult period. For instance, on 26 February, the PBC increased the re-lending and re-discounting quota by 500 billion yuan for SMEs, on top of 300 billion yuan approved earlier in February for self-employed businesses. Some small businesses were also allowed to postpone loan repayments. On 3 March, the State Council ordered policy banks to add a special credit quota for loans worth 350 billion yuan to be issued to SMEs at preferential rates. The State Council also decided to increase the PBC's re-lending and re-discount quota by 1 trillion yuan to support SMEs on 31 March. Another policy tool was the central bank's targeted Required Reserve Ratio (RRR) applied to small and medium banks. For instance, the PBC lowered this ear-marked RRR twice, effective on 15 April and 15 May. However, for large banks, the PBC kept the RRR unchanged throughout 2020. The overall average RRR for commercial banks has been lowered from 15% to about 9% since 2018. This reflects the fact that the central bank's policy was clearly aimed at sectors made vulnerable by the pandemic.

As a result, the policy response was less aggressive than the expansionary episode during the GFC in 2008 . Unlike the GFC, this pandemic crisis is multi-dimensional and therefore requires monetary policy to be aimed more specifically at vulnerable small companies and private enterprises, which are the powerhouses of job creation, while allowing fiscal policy to play a bigger role. As the economy returns to normal, this prudent monetary stance leaves room for policy adjustment, so that it can prevent a sharp turn when policy normalisation is needed.

### **Fiscal stimulus**

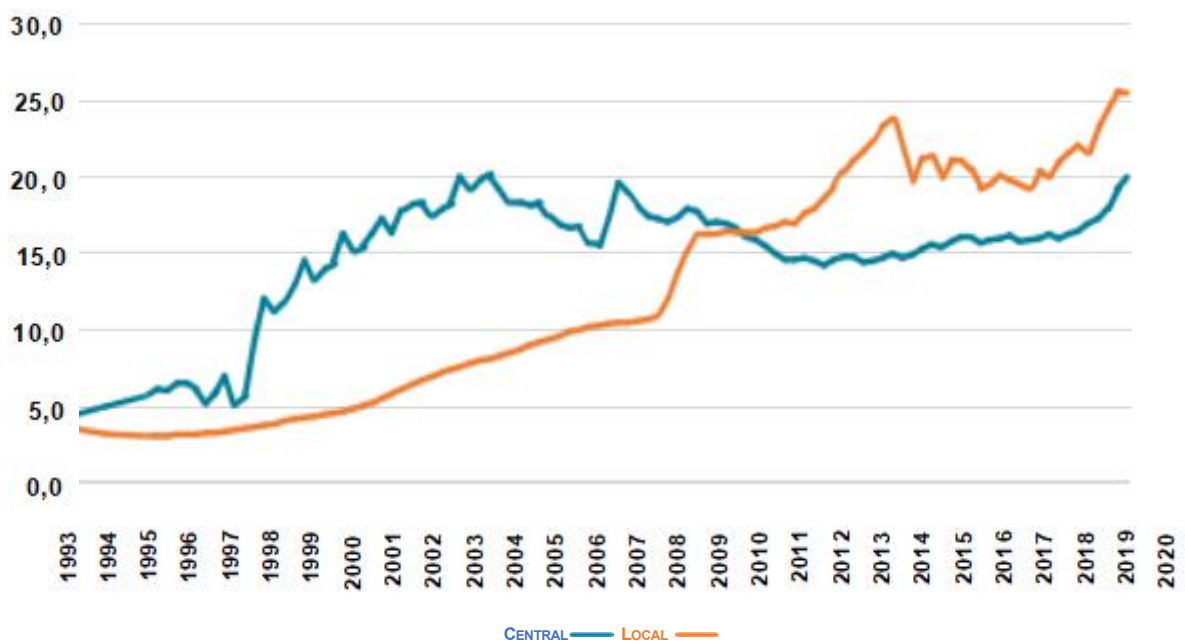
In the early stage of the pandemic, fiscal policy centred on exemption of value-added tax (VAT) and loan subsidies to pandemic control companies. The policy also allowed business to reduce or stop pension fund contributions from February to June. The NDRC lowered companies' electricity prices to support the continued operation of industry. On 17 April, the first quarter's economic data was released. The 6.8% contraction in growth raised the expectation of a large fiscal stimulus. Premier Li Keqiang announced a fiscal stimulus package amounting to 3.75 trillion yuan to support economic recovery. On the top of this package, the government decided to increase the general government fiscal deficit to an all-time high of 3.6% of GDP, compared to 2.8% in 2019. The package includes several stimulus measures to boost the economy. The Finance Ministry also hopes to utilise the capital markets, which are more transparent than bank loans, to finance the real economy. These bonds are key sources for infrastructure financing, a similar measure taken following the 2008 global financial crisis. The difference is that the additional stimulus targets new infrastructure investment, such as 5G telecommunication



networks, new energy vehicle (NEV) charging stations and healthcare services, rather than real estate, bridges and high-speed rail, etc. However, some economists argue that the stimulus package may not be substantial enough, because it was similar in size to the stimulus of 4 trillion yuan deployed in response to GFC in 2008, whereas the Chinese economy is now larger than it was in 2008. The size is also limited compared with the fiscal stimulus deployed in certain other countries during the same period.

There are constraints on massive stimulus. The biggest concern is debt accumulation. In the first quarter of 2020, China's overall debt-to-GDP ratio reached to 259.3%. It is a sharp increase from the last quarter – a reverse of the previous effort of deleverage. There is also a worry that massive stimulus would inflate local government debt further, which has grown very fast since the GFC. Slower growth worsened the debt ratio and reduced fiscal income. It is reported that some provinces fiscal income grew negatively, and debt stockpiles face rollover or default risk.

**Fig. 1.9.** – Central and local government debt-to-GDP ratio (%)



On 10 November, the state-owned coal company Yongcheng Coal and Electricity Holding Group defaulted. After this default, at least 20 Chinese companies suspended plans for new debt issues, totalling 15.5 million yuan. In the past, there has been an assumption that the government would guarantee state-owned enterprises and bail out state-owned borrowers. The local SOEs, which accounted for 60% of all corporate debts, are normally under local government protection. The increasing likelihood of defaults reflects the change in risksharing between central government and local SOEs. Following several high-profile bond defaults, the Vice-Premier, Liu He, warned that the government would show “zero tolerance” for misconduct, at a meeting of the Financial Stability and Development Committee in November. This commitment sends a signal that the regulators are concerned about rising risk in the financial system associated with debt accumulation. Since SOEs have rarely filed to default in the past, the new wave of bond defaults is also a test before more cases arise in the months to come.

### **No growth target**

In May 2020, China’s annual Two Sessions meetings – the 13th National People’s Congress (NPC) and the third annual Chinese People’s Political Consultative Conference (CPPCC) – concluded with a decision to implement more policies to support the economy. In the Work Report, the premier, Li Keqiang, announced that China would not set a GDP growth target for 2020 – the first time the government has not set a target since records began in 1990. In 2019, China set a growth target of 6-6.5%. The actual growth rate was 6.1% in the same year.

Setting an annual growth target has been regarded as a political commitment by the government for more than 2 decades. However, many economists have long argued that the tradition of setting a target would create incentives for inefficient government spending and short-sighted behaviour, while ignoring structural problems that could jeopardise longterm growth and economic development. The rationale behind this decision not to set a growth target lies in the high level of uncertainty caused by the pandemic crisis and its effects on the economy. While the government decided to take strong measures to support employment and livelihoods, and to stimulate the economy without any specific growth target, dropping the growth target does not mean that the government has no ambition for growth. In fact, the government set explicit numerical targets for other areas, which can only be met if a certain growth rate is achieved.

### **1.3.3. Steps Towards Economic Normality**

China launched its 14th 5-year plan in October 2020. One of the major objectives is high-quality economic development. In March 2021, at the Two Session meetings, Premier Li Keqiang announced a growth target of no less than 6% in his Work Report, alongside a set of objectives, including the creation of 11 million new jobs, the issuance of special-purpose local government bonds with an equivalent value of 3.65 trillion yuan, the expansion of effective investment and consumption, and continuous adoption of flexible and targeted monetary policy. To achieve a solid recovery and its long-term economic goal, China need to should carry out more structural reforms.

First, factor market reform is the key to lifting the economy's productivity. In April 2020, the government decided to restart factor market reform – a plan first set out in

2013 at the Third Plenum, but suspended in some key areas in later years. According to the reform plan, market forces will play a decisive role in pricing land, labour, capital, technology and data. Hopefully such reform will improve the efficiency of resource allocation and reduce the distortion that currently exists in the economy.

Second, boosting domestic demand is the core element of changes to economic structure. Domestic consumption has been a key driver for China's GDP growth since 2013. By the end of 2019, consumption contributed 57.8% to GDP, while capital formation and net exports contributed 31.2% and 11.0% respectively. Within the framework of consumption, household spending has been the major driver. This is partly because past growth has generated wealth and a subsequent increase in household disposable income in the country. Household disposable income has increased 11 times in the past 2 decades, alongside the rise of household consumption. It is also because social welfare has been improved in recent years. Higher disposable income has also coincided with a decline in the saving rate since 2010, reflecting the fact that consumers have become confident about spending in the present, instead of saving for the future.

However, this pandemic crisis reduced household income due to the rise of unemployment, while also increasing savings, in view of the high level of uncertainty. While supply-side disruption has largely eased, household consumption is expected to remain sluggish on the back of weak demand. In response to concerns over the slow recovery of consumption, the government stressed the need to carry out "demand-side reform" at the Chinese Communist Party's Politburo meeting in December 2020. This decision is regarded as a measure to balance the previous

“supply-side reform”, and emphasises the shift away from an export- and investment-led growth model, towards a consumption-driven model, and the policy incentives for increasing household disposable income.

Third, a new “dual circulation” strategy is set to guide the economy, in view of the changing external environment and domestic structural constraints. The term “dual circulation” was first used by the Communist Party Politburo in May 2020. It has become a core concept in the 14th 5-year plan released in October. The new 5-year plan actually sets the tone of policy for the years 2021-25. This new strategic economic formula relies on several factors. The first, defined as external circulation, is to maintain economic openness and external links with the rest of the world; the second, defined as internal circulation, is to increase reliance on domestic demand.

This domestic reliance is in line with the demand-driven growth pattern which began after the GFC. In fact, the dual circulation strategy is in the same spirit as the economic rebalancing of recent years. However, the new element in this dual circulation emphasises economic self-sufficiency as a hedge against negative impacts caused by changes in the external environment. There are also concerns about how the circulations interact, and whether it is possible to avoid the unwanted dual circulation scenario in which domestic reliance turns into “internalisation” and self-isolation.

Fourth, high-level economic openness is the way to keep the Chinese economy continuously integrated with the world economy. The major components of this high-level openness include: (1) Opening up the economy across a broader geographical area, e.g. by taking the free trade zone model adopted in coastal areas

and rolling it over to the entire country. (2) Opening up more sectors in the economy, e.g. by continuing to open up the traditional industrial, manufacturing, technology and agricultural sectors, while also opening up certain service sectors, such as finance, science, education and medical services to foreign ownership. Moreover, direct investment will follow a 2-way path of openness, thereby inviting foreign capital into China and encouraging Chinese direct investment abroad. (3) Upgrading the openness of flows of goods and factors to the implementation of international rules and standards. For instance, China will reinforce legal protections for intellectual property rights, implement negative-list measures for foreign investments, ensure an equal, fair and legal-based investment environment, and change China's role in international cooperation from being a rule-taker to one of the rule-makers.

In fact, China is stepping up its openness against a backdrop of worldwide anti-pandemic stimulus and growing de-globalisation sentiment. Policymakers are fully aware that China's continuous economic and financial integration with the world can offset the downside effects of de-coupling. From the Chinese perspective, the country's commitment to openness may help raise expectations regarding the consistency and stability of its policy.

Last but not least, financial openness goes hand in hand with China's currency strategy, centring upon internationalisation of the renminbi. This strategy came on stage right after the GFC, when the central bank's governor, Zhou Xiaochuan, put forward the idea of a super sovereign reserve currency and suggested a rethink of the international monetary system, dominated by a single currency. This idea was in line with the discussion on improving the existing international reserve currency system,

such as by reforming the Special Drawing Rights (SDRs) of the International Monetary Fund. For the currency to become usable internationally, a set of conditions needed to be in place. One of the important conditions was capital account liberalisation. In the following years, Chinese policymakers implemented a series of policies to boost the renminbi. Currently, the currency's international use covers the functions of store of value, unit of account and medium of exchange. However, the share of the renminbi in global usage is still very limited.

The PBC's measured monetary policy certainly helps to maintain the currency's value against a backdrop of widespread ultra-easy monetary conditions. In addition, the relatively fast economic recovery helps keep the currency attractive to foreign investors. As a result, China experienced sharp capital inflows in most months of 2020, which is a double-edged sword, because it impacts on domestic financial stability. The PBC has been managing the trade-off between financial openness and stability, by using a set of macro-prudential capital flow management measurements and a flexible exchange rate as buffers to mitigate financial and macro-economic risks.

## Conclusions on Chapter 1

COVID-19 was characterized as the fifth global pandemic by the World Health Organization (WHO) on 11 March 2020. It is also the first time in human history that a coronavirus causes a pandemic. We summarize the possible effects of the COVID-19 damages in exporting and importing countries separately.

China's foreign trade has experienced a V-shaped trend from heavy losses to sharp rises in 2020–2021, with the COVID-19 pandemic sweeping around the world. In February 2020, exports contracted sharply to only 60% of those in February 2019. This decline persisted in the first five months of 2020, after which growth resumed.

In responding to this crisis, the authorities did not want to repeat that mistake and decided to take a balanced approach to reviving the economy. Looking ahead, the factor market reforms proposed in April 2020 will be critical to restarting structural reforms in the coming years. At the 2021 two sessions, Premier Li Keqiang reiterated the need to deepen the reform of diversified ownership of soes. Such a reform will help build confidence and pave the way for China's future progress. Another challenge to China's domestic recovery is the external impact of highly interconnected global supply chains. There are some signs of a recovery in production in China, but this can only be sustained if external markets provide demand.

Moreover, it is not just the pandemic that is disrupting trade and investment flows. Trade tensions and broader anti-globalist sentiment will reshape economic relations. Another long-term effect is the reallocation of global value chains. It is certainly not in China's interest to lose its place in global value chains. But the



Chinese mindset that challenges are opportunities can turn stress into motivation. China will draw lessons from experience, learn best practices, improve its legal system and ensure fair competition, while persisting in the combination of continued opening-up and domestic reform.

## **CHAPTER 2**

### **ANALYSIS OF THE STATE AND TRENDS IN THE DEVELOPMENT OF FOREIGN TRADE**

#### **2.1. Trade and economic cooperation between Ukraine and China in the conditions**

Modern global economic system is characterized with tendencies of extending tradeeconomic integration of countries, strengthening their interdependence in order to reach stable economic growth of each one of them, which consequently creates challenges that reveal both drawbacks and new opportunities, and directions of development. Over the last years, People ' s Republic of China has occupied the leading role of a trade partner of Ukraine .

However, the events of 2020 had a negative impact on the international economic cooperation system, including the relations between Ukraine and China. In this context, it is of great significance to study the dynamics of economic and trade relations between Ukraine and China during and after the COVID-19 pandemic.

Chinese economy is the first economy in the world in terms of value added and it concentrates considerable investments, innovations, scientific and technical potential. Ukraine is considering China as a strategic partner. In its turn, PRC demonstrates interest in cooperation with Ukrainian partners despite a number of negative social-economic factors. In 1992, the agreement between the Government of Ukraine and the Government of People's Republic of China established the most favored-nation treatment concerning the countries joining the World Trade

Organization. Currently, legal treaty base of mutual relations numbers 300 documents.

### **Empirical results and discussion**

Over the last years, China has occupied the leading place among trade-economic partners of Ukraine. In 2015, People’s Republic of China had the second place after the Russian Federation whose index was twice as great – 12.66% – in the export structure. However, it must be mentioned that in 2019 China occupied the leading position and its market significance increased to 7% whereas the one of Russia plummeted from 12% to 6% during the years under study. The same tendency is observed in the import structure. According to the information from State Statistics Service of Ukraine, trade turnover with China made \$12 billion 797.9 million in 2019 and grew by 30% compared to the previous year. Commodity structure of Ukrainian export in 2019 confirms the prevailing of goods with low value added.

The part of agricultural goods and foods increased in Ukrainian export to China over the years under study. It must be mentioned that according to the information of International Trade Center, Ukrainian exporters covered 66% of Chinese joint import of corn and 64% of sunflower oil in 2019.

**Table 2.1. Key commodity items of trade between Ukraine and China in 2019, %.**

Export to PRC	part* of commodities in		Import from PRC	part* of commodities in	
	Export of Ukraine	Import of PRC		Export of PRC	Import of Ukraine
Ironstone	34	1.1	Semi-conductors	3.5	93
Corn	13	66	Smartphones	0.2	57
Sunflower oil and seeds	14	64	Computers	0.3	67
Rape oil	62	6	Electric transformers	0.7	53
Barley	21	10	Epoxy resins in primary forms	1.6	39

In order to define the significance of PRC as a trade partner of Ukraine, we consider it reasonable to study the dependence of GDP change from the change of Ukrainian goods export to China using correlation-regressive analysis with the following input data received from statistics reports of State Statistics Service of Ukraine and International Trade Center .

**Table 2.2. Initial data of export to China and GDP of Ukraine for correlation-regressive analysis of 2002-2019, \$ millions**

Year	2002	2003	2004	2005	2006	2007
GDP	42,393	50,133	64,883	86,142	107,753	142,719
Export	699.9	1,003.2	831.4	735.2	569.5	470.0
Year	2008	2009	2010	2011	2012	2013
GDP	179,992	117,228	136,419	163,160	175,781	183,310
Export	611.2	1,509.0	1,390.4	2,255.2	1,858.4	2,803.0
Year	2014	2015	2016	2017	2018	2019
GDP	131,805	90,615	93,270	112,190	130,902	153,781
Export	2,719.5	2,439.7	1,892.6	2,129.0	2,200.1	3,590.0

The received number is over 0 which proves the direct connection meaning that the increase of export volumes to China leads to the increase of Ukrainian GDP.

**Table 2.3. SWOT analysis of trade-economic partnership between Ukraine & China**

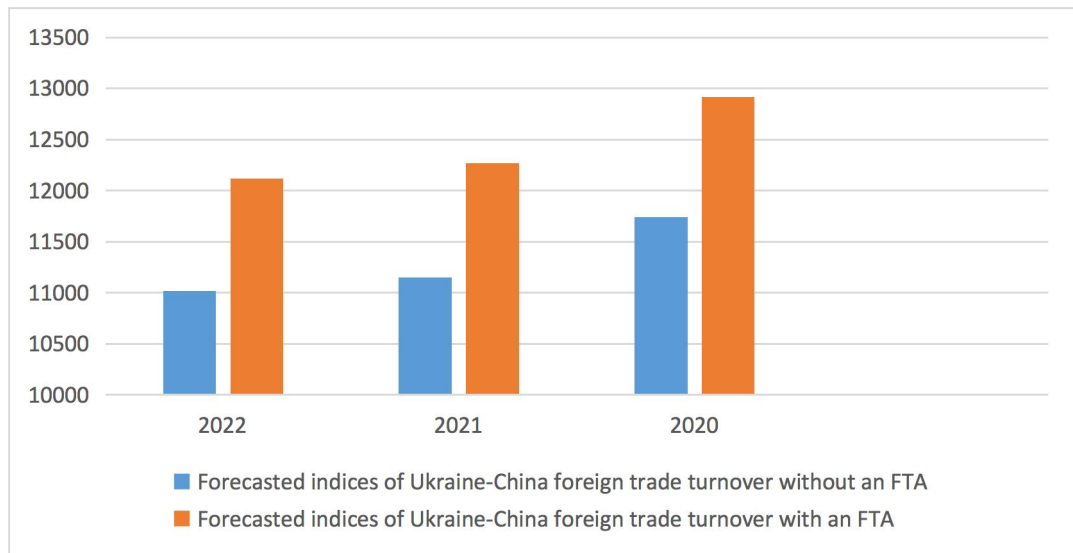
EXTERNAL FACTORS	Opportunities (O)	Threats (T)
	1. Partnership extension among countries within <i>One Belt One Road</i> project in ecological, trade, and investment spheres and implementing technologies within Industry 4.0. 2. Creating an FTA between Ukraine and China.	1. Technological asymmetry in the countries' trade: export of raw material from Ukraine and high technology export of PRC. 2. Limited entering the Chinese market by domestic business. 3. Keeping the negative balance in trade with China. 4. High level of tariff protection particularly for

<b>INTERNAL FACTORS</b>	<p>3. Entering the Chinese market and extending trade-economic partnership in priority industries.</p> <p>4. Using the experience of overcoming COVID-19 and crisis phenomena provoked by the latter.</p>	<p>agricultural produce.</p> <p>5. Conflict aggravation with the USA. The possibility of a conflict breakout with other countries.</p> <p>6. Deterioration of epidemiological situation.</p>
<p><b>Strengths (S)</b></p> <ol style="list-style-type: none"> <li>1. Advantageous geographical position, close proximity to Europe.</li> <li>2. Ukraine is rich with natural resources.</li> <li>3. High level of human development and social progress.</li> <li>4. Scientific and technical potential.</li> <li>5. Capacious financial, goods and services, investment, technological and other markets.</li> <li>6. Considerable raw material base.</li> </ol>	<p><b>Expectations(S+O):</b> Liberalization of trade, strengthening trade-economic relations, intensification of symmetric interdependence between both countries, creating a free trade area, economic growth, diversification of trade torrents, overcoming the pandemic and decreasing crisis consequences, strengthening partnership in new industries in post-pandemic time.</p> <p><b>Strategy: <i>INTENSIFICATION OF TRADE-ECONOMIC INTEGRATION</i></b></p>	<p><b>Expectations (S+T):</b></p> <p>Growing demand for import goods on the domestic market, decrease of product range of national export.</p> <p>Growing disproportion in producing and technological opportunities of countries, growing dependence upon export in raw material sector, low level of goods and geographic diversification of Ukrainian export.</p> <p><b>Strategy: <i>POLICY OF INNOVATIVE BREAKTHROUGH</i></b></p>
<p><b>Weaknesses (W)</b></p> <ol style="list-style-type: none"> <li>1. Military conflict in the East of Ukraine.</li> <li>2. Social, political, and economic instability.</li> <li>3. Power dependence of the country.</li> <li>4. Low competitiveness of domestic goods and services.</li> <li>5. Instability of national currency rate.</li> <li>6. Complicated epidemiologic situation.</li> </ol>	<p><b>Expectations (W+O):</b> Decreasing velocity of partnership intensification due to unstable economic, political, and epidemiologic situation, appearance of new approaches for developing Chinese-Ukrainian relations, trade-economic partnership for promoting national interests, boosting power independence.</p> <p><b>Strategy: <i>THE ONE OF GEOGRAPHIC AND COMMODITIES DIVERSIFICATION</i></b></p>	<p><b>Expectations (W+T):</b> Decreasing trade turnover between the countries, destabilizing trade- economic relations of the two countries, takeover of Ukrainian companies, weakening competitiveness of Ukrainian companies, aggravating investment climate in Ukraine, appearance of new trade limitations and obstacles.</p> <p><b>Strategy: <i>STRUCTURE DIVERSION OF FOREIGN TRADE</i></b></p>

Apart from the current state of trade between the two countries under scrutiny, the gravity model also allows us to define the volume of mutual trade for the following years. In order to do so, we used forecast indices of the International Monetary Fund concerning GDP of Ukraine and China, and oil prices in 2020-2022 .

According to the results of studying the gravity model and the forecast of experts, the foreign trade turnover in 2022 is expected to increase to \$11,740 millions

**Fig. 2.1.** Forecasted trade turnover between Ukraine and China in 2020-2022, \$ millions.



**Fig. 2.2. Forecasted trade turnover between Ukraine and China in 2020-2022, \$ millions.**

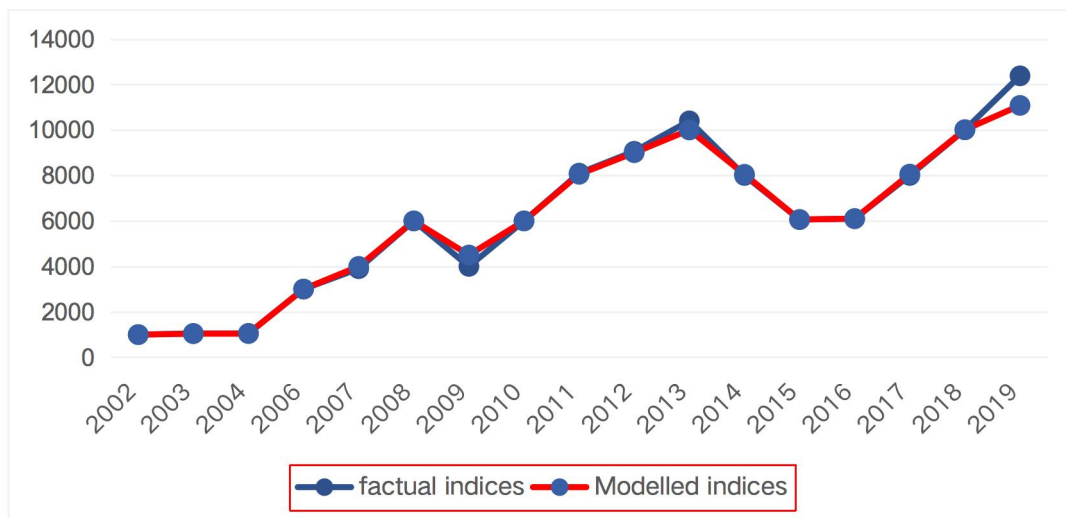


Fig. 2.2. Factual and modelled indices of foreign trade turnover between Ukraine and China in 2002-2019, \$ millions.

Creating an FTA and intensifying partnership may favorably influence the change of the forecasted indices, in particular, mutual trade turnover will increase by \$0.1 for every dollar as a result of an active free trade area.

This model also allows us to draw a conclusion that should the gross domestic product of China increase by \$1, the foreign trade turnover of the countries will increase by \$0.617; should the GDP of Ukraine increase by \$1, the foreign trade

turnover will increase by \$0.592; should oil prices increase by \$1, the foreign trade turnover between the two countries will increase by \$0.174.

A considerable barrier for Ukrainian export to enter the market of China is non-tariff measures, too, whose larger number concerns technical, sanitary, and phytosanitary regulation and licensing a significant part of import. Moreover, requirements to import may change rapidly and differ depending on ports and regions whose regulation is complicated and non-transparent.

China will primarily benefit from establishing an FTA. First and foremost, it is caused by subjective and objective factors; moreover, rates of Ukrainian customs tariffs are bound which testifies invariability and stability of entered obligations and their reliability. Therefore, a decision of forming an FTA must be weighed and signed within mutually beneficial and transparent cooperation.

In order to promote trade-economic interests of Ukrainian business on the Chinese market, representatives of economic diplomacy of Ukraine must use a number of work methods aimed at protecting economic interests of domestic producer on the Chinese market, particularly: boosting overcoming and removal of tariff and non-tariff barriers; analyzing mutual trade-economic relations as well as the ones among the third parties with host country; searching potentially possible free niches and favorable conditions for realizing produce of domestic producer; monitoring markets and industries that are a priority for the Ukrainian side: machinery construction, agriculture, food and light industries, power engineering, etc.; establishing business contacts with Chinese representatives of different economy sectors, and meeting and negotiating with potential partners; collecting and spreading

the information about trade-economic activity of Ukraine and perspectives of its extension, and others.

### **Summary**

Modern international economy system is characterized with interdependence of countries that generates both challenges and new development opportunities. The crisis caused by coronavirus has changed the tendency of integration processes having intensified the use of protectionist measures. The policy of deliberate economic slowing down and the policy of minimizing economic damage with cooperation intensification have become features of trade and investment processes and transformation of approaches of opposing the pandemic. The influence of the pandemic consequences on international economic relations of countries is demonstrated through unilateralism, protectionism, increasing uncertainty factors, dynamisation of trade arguments, decreasing economic indices, reduction in import demand, and discontent of population.

The dynamics of trade-economic cooperation between Ukraine and China has also undergone some changes. Mutual relations of the countries are now defined as a strategic partnership. Over the last years, China has occupied a leading position among trade-economic partners of Ukraine. Modern export and import structures affirm a disproportion that is dangerous for Ukraine: export of raw material from Ukraine and high-technology import from PRC; keeping negative balance of foreign trade with the world and with China in particular; weak commodities and geographic diversification of Ukrainian export. Direct moderate dependence between the change of GDP of Ukraine and export to China has been established using



correlation-regression analysis, which indicates the importance of the cooperation direction under study.

PRC is implementing a number of projects with One Way One Belt project being one of the most important for Ukraine since participating in it increases economic and investment interest of China towards the Ukrainian side. The following areas are defined as priority directions of cooperation and attraction of Chinese investment: agriculture, power engineering, infrastructure, tourism, military-industrial complex, shipbuilding, technology within Industry 4.0. In order to strengthen cooperation and positions of Ukraine as a link in trade torrents between China and the EU, the issue of creating a Ukrainian-Chinese free trade area is being considered, which may create a number of threats apart from opportunities within mutual partnership in its turn.

Possible scenarios of further trade-economic cooperation between Ukraine and China have been identified and substantiated, and their extension has been reasoned. It has been defined that the most optimal variant is extension of mutual cooperation between Ukraine and China with the dysproportion of their development, keeping the rules and norms of international trade system when considering today's realia.

Using gravity model of international trade, hypothetical effects from possible creating a free trade area, coronavirus crisis and other factors on foreign trade turnover (FTT) between Ukraine and China have been established, their volume has been forecasted for the following years with and without an FTA (free trade area) being created. In particular, it has been defined that mutual trade turnover of the countries will increase by \$0.1 for every dollar as a result of a free trade area being

created; should GDP of China increase by \$1, foreign trade turnover of the countries will increase by \$0.617; should GDP of Ukraine increase by \$1, FTT will increase by \$0.592; should oil prices increase by \$1, FTT between the two countries will increase by \$0.174. Also, using the regressive analysis, the hypothesis stating that an increase of GDP of the partnering countries positively influences FTT between them while an increase of oil prices effects it negatively has been proved.

“Windows of opportunity” in development of mutual trade-economic relations in the following areas have been identified: infrastructure, logistics (modernization of rail ways and ports, building modern roads), agriculture and food industry (attracting Chinese investment into process manufacturing for redirecting from raw material export to highlymarginal ready-made produce), power engineering, military-industrial complex (modernization of facilities), digitalization of business processes and transition to Industry 4.0.

Recommendations for boosting trade-economic cooperation within COVID-19 pandemic and in post-pandemic time have been substantiated, particularly: active participation in One Way One Belt initiative (extending harmonization of legislation of Ukraine with Chinese and European ones); digitalization and intellectualization of international trade activities (attracting Chinese investment into development of Industry4.0. technologies); diversification of goods structure of export and monitoring priority market sides: machinery construction, agriculture, food and light industries, power engineering; supporting domestic producer (collecting and spreading information; insuring against risks of foreign trade agreements realizing).

## **2.2. Impact of COVID – 19 on China’s Foreign Trade Enterprises and Countermeasures**

The COVID – 19 epidemic has an impact on China’s economy , especially on foreign trade and enterprises . It is a test of the national governance system and governance capacity. Based on the analysis of international public emergencies and the problems encountered by foreign trade enterprises , this paper systematically analyzes and formulates countermeasures from three aspects of enterprises , governments and financial institutions. Foreign trade enterprises should construct the external environment from improving the policy and legal environment, the public security emergency system and the new system of open economy, then should build up the internal ability from improving the management ability , accelerating the transformation and upgrading , opening up international cooperation , then jointly promote those high – quality development.

### **2.2.1.The impact of COVID-19 on China's foreign trade enterprises**

The international transport and personnel controls, trade embargoes and exchange rate fluctuations caused by the COVID-19 outbreak will inevitably have an impact on the steady growth of China's foreign trade, and the survival of foreign trade enterprises will be severely challenged.

#### **(1) Bring challenges to the basic survival of enterprises**

Since the outbreak of the epidemic, cross-regional traffic, movement and gathering of people have been restricted across the country, and urban and rural residents have been quarantined at home, affecting business operations and social activities. On the

one hand, in order to strengthen the epidemic prevention, business stores temporarily closed. Customers, business and revenue streams fell, but rigid expenses such as rent and employee salaries did not. [4] On the other hand, most enterprises in our country are small and medium-sized enterprises and private enterprises. According to the General Administration of Customs, China had 406,000 private enterprises with export and import records in 2019, making it the largest foreign trade entity. Although small and medium-sized enterprises and private enterprises provide the most jobs, they are weak in capital, financing ability and the ability to resist business risks. Against the backdrop of China's economic downturn, declining business efficiency and increasing employment pressure, the epidemic has increased the burden on small and medium-sized foreign trade enterprises and brought challenges to their survival and development.

## **2. Increasing pressure on foreign trade**

The epidemic prompted some countries to take exit and entry control measures against China, which increased trade barriers and challenged the growth of foreign trade. 1. Trade in goods was disrupted. On the one hand, some countries take various measures to restrict the import of our goods. First, stricter inspection and quarantine measures will be taken on Chinese personnel, cargo, containers, vehicles and postal parcels, and even personnel will be forcibly isolated. The second is to suspend the import of Chinese goods. This increases enterprise costs, reduces export efficiency and market competitiveness, and delays or even terminates the delivery of orders. On the other hand, the ability and willingness of foreign trade enterprises to undertake new orders has also been weakened due to the increasing difficulty of export. 2.

Trade in services has fallen sharply. Outbreaks caused by transportation, personnel flow control at home and abroad, whether it is a transportation, tourism, construction, personal culture and traditional services such as entertainment, or communications, insurance, financial, computer and information, and other emerging knowledge-intensive services, such as business generally affected by foreign even suspended and China's service trade activity, resulting in a decline in trade. For example, as the world's largest outbound tourism market in recent years, China has suffered a sharp decline in tourists due to the impact of the epidemic, which has greatly impacted the tourism industry. The Japan Travel Industry Association estimates that at least 400,000 Chinese tourists will not be able to travel as planned. The Singapore Tourism Board expects visitor arrivals and spending to fall by 25% to 30% in 2020; Thai authorities expect Chinese tourists to contribute 300 billion baht (9.7 billion U.S. dollars) less in tourism revenue between the end of January and June 2020.

### **3. Forcing enterprises to transform and upgrade**

Sudden crises may not only eliminate weak enterprises, but also encourage strong enterprises to survive and seize the market. They may also provide opportunities for new enterprises to swim upstream. For example, during the SARS epidemic in 2003, the number of Internet users and the Internet penetration rate increased significantly, which promoted the flourishing of new business forms such as emerging information websites and instant messaging. During the COVID-19 pandemic, people across the country have been isolated at home, and their daily activities such as study, work, life and purchase mainly rely on the mobile Internet and various e-commerce platforms,

which has provided a large space for the development of related industries. The application of big data, cloud computing, Internet of Things, artificial intelligence, blockchain and other new technologies has continuously improved the efficiency of e-commerce platforms and logistics, and boosted the upgrading of cross-border e-commerce. At the same time, it also severely squeezed the living space of traditional trade enterprises. Foreign trade enterprises should evaluate the situation, improve their management and anti-risk capabilities, and transform and upgrade to digital economy and digital trade.

### **2.2.2. Measures to promote the resumption of work and production of foreign trade enterprises under the COVID-19 epidemic**

In the face of the COVID-19 epidemic, the government, enterprises and financial institutions should respond quickly and work together to help foreign trade enterprises to resume production and tide over the difficulties smoothly.

#### **(1) Enterprises should take active measures to reduce losses**

1. Check the order in hand and pay attention to the performance risk. Foreign trade enterprises should comprehensively sort out and evaluate the orders in hand. For the orders that may be delayed, timely communicate with the buyers, explain the relevant situation, and try to extend the delivery time with the buyers through written forms (email, supplementary agreement, re-signing contract, etc.). In the period of blocked communication with buyers and shortage of personnel, we should consider

comprehensively, sort out customer categories as soon as possible, try our best to care for core customers, and timely adjust business strategies.

2. Fulfill the obligation of notification and issue relevant certificates. For orders that cannot be fulfilled due to the impact of the epidemic, foreign trade enterprises should inform the buyers as soon as possible, try their best to appease the buyers, and reach a consensus through consultation, so as to reduce the possible losses. When necessary contact with ccpit and other relevant departments, under the help, get unexpected public health events caused the factual proof of force majeure, delivered to the other party as soon as possible, and make the certificate of the retained, prove that the incident has practical implications for the performance of a contract, by law, reduce the liability for breach of contract, reduce the risk of late to be counter claim by the buyer and the loss.

3. Arrange transportation in advance and pay attention to logistics risks. At present, due to the impact of the epidemic, traffic in some areas has been temporarily blocked, and attention should be paid to avoid delays caused by logistics. Especially in the case of L /C payment in trade, we should pay close attention to the latest shipment date, negotiate with the buyer to modify the latest shipment date if necessary, and reserve sufficient shipment date to avoid discrepancies in the delivery of documents. At the same time, enterprises should actively pay attention to the operation of domestic ports, airports and other important delivery locations, and timely change logistics and warehousing if the temporary closure is caused by the epidemic.

4. Comb upstream customers and pay attention to supply chain risks. Export enterprises actively keep close contact with domestic suppliers, assess the extent of

the impact of the epidemic on their suppliers, and confirm the latest situation such as the resumption of work and shipment arrangement. If upstream supply is tight, make alternative plans for domestic suppliers or increase inventory appropriately when necessary to ensure the safety of raw material supply.

5. Urge the buyer to perform the contract and pay attention to the foreign exchange risk. In case of enquiries from overseas buyers, it is recommended that export enterprises actively communicate with buyers and truthfully inform them of the current situation and the latest progress of the epidemic to dispel buyers' doubts. In case overseas buyers refuse to accept goods or delay payment due to COVID-19, export enterprises should clearly point out to the buyers that the provisional recommendations published by WHO do not contain trade measures that may restrict exports, argue and properly keep relevant evidence.

## **(2) Government departments introduce policies to help enterprises**

1. Tax cuts and tax breaks to reduce the pressure on enterprises. We will increase tax support, implement the national tax reduction and fee reduction policies and import tax preferential policies, give priority to tax exemption procedures for epidemic prevention and control materials, support the expansion of imports of high-end equipment, key parts and components and important raw materials, and extend the period for enterprises to pay taxes. For enterprises that are unable to pay social insurance premiums in full due to temporary business difficulties, the collection period will be extended appropriately and late fees will be waived. For the insured enterprises that do not lay off employees or lay off fewer employees, part of the unemployment insurance premium actually paid in the previous year can be



refunded; For enterprises with temporary difficulties, unemployment insurance and work-related injury insurance premiums will be gradually lowered and extended. The government will reduce or waive the rent of business premises and services of enterprises and provide compensation.

2. Strengthen operation monitoring and identify potential risks. We should strengthen monitoring and analysis of foreign trade operations during the epidemic period, identify problems as early as possible, respond promptly and effectively, and ensure the steady development of foreign trade. China has intensified credit services for overseas buyers of enterprises during the epidemic period, providing them with risk early warning information, country risk information, credit investigation of limited buyers, and overseas investment consulting services, timely issuing risk early warning during the epidemic period, and guiding enterprises in developing risk prevention plans. China has set up a rapid response mechanism for overseas epidemic response to provide coordination services for overseas Chinese enterprises.

3. We will strengthen international communication and do a good job in trade remedies. We will strengthen the communication with WHO and other international agencies and regional organizations, restore the normalization of our trade and personnel exchanges as soon as possible, and provide support for the international cooperation of our foreign trade enterprises. With the support of the Commerce Department, the Chamber of Commerce provides services for enterprises, provides foreign-related legal support for enterprises that have disputes with foreign customers due to the epidemic, and provides legal advisory services for enterprises to sign new orders, so as to reduce trade risks. For those unable to perform international trade

contracts as scheduled or due to the impact of the epidemic, timely provide commercial law, trade and investment promotion and other public services, and help the enterprises to apply for factual certificates related to force majeure to the Council for the Promotion of International Trade or the Chamber of Commerce for Import and Export, so as to safeguard the legitimate rights and interests of the enterprises.

4. Support enterprises to participate in the exhibition and provide overseas subsidies. Support enterprises to participate in various international exhibitions and provide subsidies for key exhibitions; Actively coordinate with foreign exhibition organizations to help enterprises unable to participate in the exhibition due to the epidemic properly deal with the paid fees and other related issues; For foreign trade enterprises that are forced to give up the exhibition due to force majeure in the process of organizing overseas exhibitions and the overseas organizers still refuse to refund after coordination, the booth fee will be subsidized.

5. Online customs clearance, improve the level of convenience. The customs promotes single window, online handling of administrative license, enterprise registration and filing, certificate of origin issuance and other businesses, and implements paperless guarantee approval operation to reduce the risk of infection. We will implement inclusive and prudent supervision, and guide enterprises to make online disclosure of customs regulatory violations during the epidemic, and the customs will accept them online. We will carry out diversified follow-up supervision and provide maximum convenience to enterprises within the scope permitted by laws and regulations. We will improve the business environment at ports, enhance trade facilitation, and shorten customs clearance time.

6. We will establish a support mechanism to support enterprises in resuming work. We will encourage foreign trade enterprises to resume work and production in an orderly manner, actively connect resources of epidemic prevention products, and provide necessary health protection guarantees for enterprises to resume work. Coordinate with relevant departments to help enterprises solve practical difficulties such as staff returning to work, recruitment, supply of raw materials, transportation of materials and reduction of plant rent; Appropriate subsidies will be provided to enterprises for increased logistics and transportation costs during the epidemic, and support funds and subsidies for foreign trade and processing trade will be arranged in a timely manner. We will establish a mechanism to help enterprises respond to the epidemic and resume work, collect their difficulties and demands in a timely manner, and coordinate efforts to solve major problems.

**(3) Financial institutions to increase capital and reduce interest rates to prevent the rupture of funds**

1. Ease the loan pressure. Financial institutions have introduced policies to ease the multiple risks faced by foreign trade enterprises and ensure continuous lending and no withdrawal of loans during the epidemic. Enterprises seriously affected by the epidemic can extend or renew loans, exempt loan interest to a certain extent, reduce loan interest rates, increase credit loans and medium - and long-term loans, relax the purpose of loans and provide special loans, and provide certain discount interest support. Enterprises unable to repay due to the impact of the epidemic can be compensated by government-funded guarantee institutions in a timely manner, and

their losses can be written off in accordance with laws and regulations in accordance with the appropriate extension of the time limit for recovery.

2. We will increase credit support. Financial institutions shall provide loan financing support to foreign trade enterprises that are in difficulty in operation and have export orders. For enterprises whose loans are due, financial institutions will flexibly adjust relevant credit policies and service methods, take measures such as extending loans without paying the principal, emergency loan transfer, etc., and strive to make sure that they can continue as long as possible, as soon as possible, to help enterprises tide over difficulties, and shall not blindly withdraw loans, cut off loans or pressure loans. As the epidemic progresses, follow-up policies have been adjusted to prevent large-scale bankruptcies.

3. We will increase support for export credit insurance. We will implement policies to support export credit insurance and promptly allocate export credit insurance subsidies. We will relax claims acceptance requirements, open a green channel for special loss settlement and compensation, and give priority to claims claims due to the epidemic. We will increase support for export credit insurance for new forms and models of foreign trade, actively respond to restrictions on overseas trade, deepen innovative development of trade in services, and encourage enterprises to make good use of preferential policies under free trade agreements. We will encourage IT to innovate its product and service models, simplify business processes through online insurance and automatic renewal, and guide enterprises to make comprehensive use of products such as pre-shipment risk protection and import prepayment insurance to cope with the impact of the epidemic.

4. We will strengthen innovation in financial services and products. Financial institutions will enhance the convenience of online services to ensure smooth financial services for enterprises. We will review the list of key foreign trade enterprises, improve preferential export financing policies for small, medium and micro foreign trade enterprises, expand the scale of risk compensation, lower the threshold for starting risk compensation, and expand the scope of benefits from these policies. Give full play to the role of the supply chain platform to reduce the capital occupation costs of micro, small and medium-sized enterprises. Innovatively developing special financial products such as "wage loan", "rent loan", "receivables pledge loan" and "tax rebate loan" to meet the financing needs of foreign trade enterprises. Special financial products of enterprises involved in the production of epidemic prevention and control materials, raw materials and auxiliary materials can be included in the scope of "inclusive loan" compensation. During the epidemic, financial institutions can issue principal bonds to support loans to foreign trade enterprises. For enterprises with promising development prospects but experiencing temporary difficulties, we will promptly allocate special funds for technological transformation, science and technology, mass entrepreneurship and innovation, and human resources, promptly organize enterprises to apply for applications, establish a green channel for fund review, speed up the process of fund review, and improve the efficiency of fund allocation.

### **2.2.3. Suggestions on promoting high-quality development of foreign trade enterprises**

In the context of COVID-19 prevention and control, it is a systematic project for foreign trade enterprises to deal with public health emergencies. In addition, in recent years, the external environment for our foreign trade development is severe and complex. The world economic growth continues to slow down, and the risks and challenges at home and abroad are obviously rising. The pressure on foreign trade enterprises to survive is huge. Therefore, strengthening the cooperation between the government, society, enterprises and other aspects can promote the high-quality development of foreign trade enterprises. (1) Building an external environment for high-quality development of foreign trade enterprises

1. Improve relevant policies and the legal environment. First of all, the temporary assistance measures introduced by governments and relevant agencies at all levels during the epidemic have played a positive role in supporting foreign trade enterprises to regain vitality and accelerate economic recovery. After the epidemic, it is suggested that some of these measures should be solidified into long-term policies to provide a driving force for the sustainable development of foreign trade enterprises, especially small and medium-sized enterprises and private enterprises. Secondly, for the high-quality development of enterprises, it is necessary to optimize the legal environment supporting the development of foreign trade and improve the policies supporting the development of small and medium-sized foreign trade enterprises. Third, we should further improve the policy system to build a friendly and clean relationship between government and business, escort the development of small and medium-sized private foreign trade enterprises, enhance their ability to resist risks, and stabilize the confidence of international investment.

2. We will improve the public security and emergency response systems. First, we should strengthen the building of national emergency management capacity system. We will build a system of emergency management rules and regulations for the assessment, prevention, early warning, handling and rescue of public emergencies, improve our capacity for disaster prevention, mitigation and relief, and ensure that we can not only meet the needs of our foreign trade development in the new era, but also meet international standards and better fulfill our international obligations. Second, we need to establish a public health security system and a major epidemic emergency response mechanism. Learn from relevant foreign laws and systems, strengthen risk awareness, improve the collaborative mechanism of research, evaluation, decision-making, prevention and control of major public health risks, and revise, improve, refine and expand existing Chinese laws, regulations and systems concerning international public health emergencies; We will improve the emergency response mechanism for major epidemics, establish a centralized, unified and efficient command system, and ensure clear, systematic and orderly instructions, smooth and effective execution, so as to accurately address front-line problems of the epidemic. Third, clear foreign trade enterprise supervision focus, improve the inspection and quarantine supervision hand

We should strengthen strict control over the supply of raw materials, production process, packaging and transportation of export products, so as to ensure the product quality and public health and safety reputation of foreign trade enterprises.

2. We will improve the new system of high-quality open economy. First, we will improve policies and service systems for promoting all-round opening up and

outbound investment, gradually establish a guarantee system for outbound investment and an evaluation system for outbound investment promotion, improve the precision, facilitation and universality of outbound investment promotion services, and strengthen our ability to provide comprehensive services for outbound investment. Second, we need to improve the system of foreign-related economic and trade laws and rules, respond to the new situation and requirements of opening up wider to the outside world, open wider to the outside world in a wider and deeper way, and advance the Belt and Road Initiative. Third, we will speed up the development of pilot free trade zones, free trade ports and other areas of opening-up, and use them as engines to promote institutional innovation, replication and promotion. We will continue to simplify approval procedures, support the private economy in "going global", and enhance the international competitiveness of foreign trade enterprises' products and their ability to cope with crises and withstand risks. Foreign trade enterprises and inspection and quarantine departments should strictly control the quality of export products, accumulate good reputation for enterprises in peacetime, and have irreplaceability in public health emergencies, to reduce losses to a certain extent.

## **(2) Improve the internal ability to ensure high-quality development of enterprises**

1. Enterprises penance internal work, improve their own management ability. Managers of foreign trade enterprises should pay attention to the development situation of world politics and economy, establish crisis consciousness, digital consciousness, credit consciousness, and strengthen enterprise management ability.



First, improve the enterprise crisis management mechanism. Set up specialized agencies with professional personnel, use big data and other digital technologies to build an enterprise crisis management platform, connect with relevant government departments and warning platforms, pay attention to global public emergencies, and forecast crises in time through big data technology for rapid response; According to the situation of industry, business and stakeholders, analyze the specific content of possible crisis and prepare crisis response plan; Daily crisis simulation exercises should be conducted to maintain the ability to respond to crises and test the effectiveness of crisis response plans. Second, business management is going digital. Establish telecommuting system and online assessment system and standard, help telecommuting, online and intelligent production, and realize working at home, not stopping work and flexible work. Thirdly, establish enterprise credit risk management mechanism. The close combination of big data technology and credit management enables credit management to use public credit platforms to carry out in-process and post-operation supervision facilitation and enhance risk supervision capacity; In addition, we can cooperate with third-party credit service agencies to promote the sharing of enterprise credit information across departments by relying on the mode of "government affairs service platform + mutual network", gradually improve the incentive mechanism for keeping faith and punishment mechanism for breaking faith, which is conducive to the extensive application of credit tools by enterprises in bidding, market access, qualification review and other fields. The capital structure and liquidity of enterprises have been optimized, with higher efficiency and transparency, and they have played a better role in mitigating credit risks.

2. We will use the digital economy to accelerate the transformation and upgrading of enterprises. Under the COVID-19 pandemic, more and more suppliers and consumers have switched from offline to online, indirectly promoting the promotion and application of digital technologies such as big data, cloud computing, mobile Internet, artificial intelligence and 5G. The managers of foreign trade enterprises should deeply realize that the digital economy is a revolution of management concepts and methods. If they want to transform to the digital economy, they need to improve their own ability to match it. First of all, we should enhance the capacity of enterprises themselves. This requires enterprises to master core technologies, have independent innovation ability and independent intellectual property rights, and set up network platforms independently or jointly with the outside world. In this platform to rapidly develop the corresponding services, improve the enterprise's independent research and development ability and introduced technology digestion and absorption ability. Secondly, we should promote the application, promotion and popularization of the concept and technology of digital economy in enterprises, do a good job in the deep integration and development of digital economy and foreign trade enterprises, and promote the platform of enterprise management and digitalization of supply chain. Using Jingdong, Ali and other online business platforms, promote online service mode, explore online customer resources, and establish online supply system and consumption system. Based on the supply chain service platform, it scientifically analyzes and predicts the logistics, information flow and capital flow of the enterprise, and determines its own business situation, so as to quickly integrate into the market after the end of the epidemic. Third, give full play to the guiding and policy

supporting role of the government to promote the transformation of enterprises to cloud services. The government has formulated preferential policies to promote the development of the digital economy, enabling foreign trade enterprises to obtain computing, storage, software, data and other services conveniently through cloud services, reducing the cost of information construction, transforming the mode of operation, and improving management efficiency.

3. We should seize the opportunities brought by the epidemic and expand areas of international cooperation. The health industry, 5G technology, health and social services, which have received public attention in the fight against COVID-19, will bring new international trade and investment opportunities for foreign trade enterprises. Foreign trade enterprises in the process of opening up the international market should pay attention to: strive for government guidance, policy support, strengthen the service guarantee; Prevention and control of political, environmental, regulatory and anti-dumping risks; Make detailed and comprehensive special research and full preparation for the market; Adopt localization strategies, fully respect local laws, culture and customs, assume more social responsibilities, and actively integrate into local society. First of all, we should actively promote international production capacity cooperation in the health protection products industry. Foreign trade enterprises should fully grasp the market demand information, depends on international cooperation channels, help health protection products enterprises in resources, low production cost, close to the target market of the national investment construction projects and products processing base, local employment and economic growth is to solve the problem, also effectively promote our country related industry

equipment, technology, standards, and parts of "going out", We will improve the quality and upgrade of the economy. Second, actively explore the 5G technology, product and service market. The 5G communication technology developed by Chinese enterprises has the characteristics of large bandwidth and high speed, and is gradually applied in medical and health care, Internet of vehicles, VR/AR, industrial Internet and other fields. 5G technology is emerging in the fields of COVID-19 prevention and control, telemedicine, education, office and other fields, and will be promoted in the early stage to further expand the market. Thirdly, trade in health and social services should be actively explored. China has accumulated rich experience and trained a large number of professionals in scientific research, clinical treatment, drug development, epidemiological investigation and public health management of COVID-19. In today's world where health is widely valued, the advantages of health and social services formed in some fields are not only satisfying public health and humanitarian assistance, but also huge international market demand, which is the foundation for China to develop new service export and become a powerful country in service trade.

### **2.3. Use of new trading technologies during and after the pandemic**

This part focuses on the role of new technologies in China during and after the Covid-19 outbreak. The analysis is structured as follows: it starts to examine how China has managed the pandemic by leveraging the pervasive use of technological tools at the beginning and thereafter; the second concentrates on innovation in the

health sector; the third section moves to the role of technologies in the economic recovery. The last section provides a brief conclusion.

### **2.3.1. Pandemic Control**

China managed to control the spread of the virus through well-targeted, strict, pervasive and effective measures, relying partly on robust, widespread enforcement. Starting with a severe, stringent lockdown, central and local authorities have implemented a broad range of measures to control the virus, relying on traditional tools and introducing new ones based on innovative technologies. In doing this they have followed a long-term and focused strategy, rooted in past practices and aimed at strengthening them. Targeted local restrictions have been complemented by large-scale testing. A capillary and intrusive contact-tracing model has been adopted, strengthening and leveraging instruments and procedures for social control already in place, while new ones have been introduced. China used these tools extensively, exploiting the sizeable margins granted by a privacy protection framework that is considerably lighter than in other countries.

After the first phase, the number of infections fell drastically. Where sporadic localised Covid-19 outbreaks have arisen, they have been tightly monitored and actively managed, leveraging pervasive tracking models and adopting strict quarantines. The domestic strategy has been accompanied by tight control of inbound visitors, with visa restrictions, flight limitations, several tests required and centralised quarantine requirements.

Although the number of new cases is now close to zero, people still wear masks in public places, indoors and outdoors in most cities. Other containment measures

remain in place, including extensive and intrusive social controls. This is especially true in Beijing, even though the city has recorded very few coronavirus cases (since the end of February 2021, when there were fewer than 1,050 Covid-19 outbreaks out of a population of about 22 million).

The Chinese government has taken innovative measures to deal with the epidemic. The most widely used technologies are biometrics and mobile applications such as tracking and the spread of frontline viruses. With the necessary involvement of telecommunications and technology companies, these digital technologies can provide useful data about people's activities, almost in real time.

Mobile health advice apps (Health Codes) were adopted locally during the first phase. Different apps were used in different provinces and cities, with several applications sometimes coexisting in the same area. At the beginning of 2021, the tracking apps were harmonised nationally to manage the greater movement expected for the Chinese New Year. The result is further data centralisation. In this period, hundreds of millions of Chinese workers normally go back to home villages in the world's largest annual mass migration. Unlike in the past, this time the number of people travelling was reduced drastically (by over 70%), as the Government urged and encouraged people to avoid non-essential travel. More recently, an international travel health certificate was launched. It is managed by Tencent and used an encrypted QR code. It is currently only available for Chinese citizens, allowing authorities to verify the holder's personal information. This certificate is updated with vaccine inoculation information, and nucleic acid test and serum antibody results.

The Health Code, even if not compulsory, is required to enter to all closed areas, from the underground to shopping centres, individual shops, restaurants and even residential buildings. In large cities, such as Beijing, people may be excluded from several essential services if they do not have advised apps. The implications of such requirements may be relevant for people who do not own or are not proficient with smartphones.

These apps are merely disease prevention and social control technology, based on big data and social tracking systems. Downloaded on mobile devices, they show the places visited by the phone's owner and the risk of close contact with Covid-19 patients, thus reducing contagion risk. They are automatically updated with Covid-19 test results. This information can be used to recognise not only close contacts of individuals that have tested positive, but also to identify people who have been in high/medium risk areas. Those individuals may have to be tested, isolated or quarantined. The outcome is a stringent, far-reaching limitation on people's mobility and privacy, confirming the powerful, pervasive role of the Government. The apps, through geolocation data collection, can identify the users registered from their ID card or passport, relying on the limited data and privacy protection. China has managed to effectively and promptly control the pandemic thanks also to the widespread use of these technologies. Having become part of the surveillance system, they are not expected to be removed once the pandemic is over.

### **2.3.2. The Health Sector**

Starting with the Covid-19 outbreak, innovative approaches and services have been introduced in the health sector, hinging on technologies. Healthcare is moving

forward to “digital health”, leveraging new tools and traditional medical expertise to revisit models of care delivery. Online services have seen rapid development, with a large customer base and an extensive range. The trend has been exacerbated by the shortage of medical resources, which had to mainly be concentrated on fighting the pandemic. To meet people’s needs, healthcare services have increasingly been provided online, including both medical advice and delivery of medicines. The process was driven by the needs of households that were not fully met by the limited public services. Public resources for the healthcare system are limited in China, as confirmed by the most recent Double Session in March 2021. Public subsidies for basic medical insurance for rural and nonworking urban residents was planned to increase by an average of 30 yuan per person, while those for basic public health services by 5 yuan per person.<sup>8</sup> The new technologies make it possible to provide some healthcare services to more people, at a lower cost and requiring fewer human resources, partially offsetting the major gaps in the Chinese system.

In hospitals during the pandemic, robots, some of which were 5G-enabled, have replaced humans in common and easy tasks, redesigning processes and roles so as to reduce crossinfection risks. Nurses and other operators had to be moved to other activities to compensate for the lack of professionals, while the healthcare system was required to work beyond its capacity in the areas of China most affected by Covid-19. Diagnostic procedures have been improved by artificial intelligence algorithms supporting, facilitating and accelerating medical analysis.

An internet hospital can be defined as a platform to deliver health services, (i.e. consultation, treatment, diagnosis, prescriptions) using internet technologies. After



the Covid-19 outbreak, the Central Government issued policies to favour internet hospitals addressing public health emergencies. Online medical services were incorporated into health insurance. Several Chinese hospitals began to establish their own internet-based services. They minimise contacts, reduce costs, and expand and improve service distribution, narrowing the gap between rural and urban areas. They provide prompt telemedicine relying on multidisciplinary experts, enhancing the efficiency of treatment.

After the Covid-19 emergency, they could help, even in normal times, to improve the healthcare system, partially offsetting its weaknesses. In the medium and long term, the pandemic can work as a catalyst for the development of the domestic healthcare system fostered by the adoption of technologies, even if more resources, both human and financial, are needed. The Government is committed to promoting the well-regulated growth of the Internet Plus Healthcare initiatives.

### **2.3.3. E-Commerce and Supply Chains**

During the recent crisis, e-commerce services, which were already widely used in China, developed further, adapting to new and booming needs. They have managed to boost revenues by diversifying what they already offered – from cooked meals to fresh and healthy food to prepare at home – as well as introducing other goods – from cosmetics to books and electronics. They have benefited from consolidated logistics and scale effects. They have been introducing safer business models such as contactless delivery. New vendors were forced to join online platforms, from retail shops to restaurants, to ensure the viability of their business when no customers were entering during lockdown.

The growing number and greater diversity of requests have fostered innovation. This was the case for the use of drones to ensure last-mile delivery. Online sales platforms are being promoted to redesign merchants' internal processes, structures and organisations. Back-office operations have to be digitalised. Systems are introduced to collect orders in real-time, to ensure accurate and instant inventory updating, to systematise business planning – all leading to innovation and greater efficiency. These changes have usually relied on third-party service providers, who can propose additional advanced and effective facilities. They optimise business models through digitalisation to serve customers more efficiently and to increase competitiveness.

The outbreak has hastened the move of offline retail stores to online commerce to reduce the impact of people's isolation and to avoid the shut-down of activities. The anti-Covid measures have shattered retail shops, which recorded extraordinary sales drops, sometimes resulting in the decision to close a business. Several vendors have withstood the crisis by innovating their business models, adopting new strategies, procedures and technologies. The crisis has been a catalyst for change and updating in the retail sector. They have remained linked to their shoppers and reached new ones, offering updated services and adapting to emerging consumer habits. (N. Baird)

The approach has moved forward to minimise contacts in every step of the shopping process, from selection, to payment and delivery. Online shopping has continued to increase after lockdown, leading to new advertising strategies. This is the case of the livestreaming adopted in the 11.11 event, reaching record revenues of RMB 498.2 billion (about US\$75.4 billion) compared to RMB 268.4 billion (about US\$38.4

billion) in 2019 (+85%). Along with such benefits, e-commerce has led to sector concentration, reducing the share of small vendors and their profit margins. The result has been a major redefinition of China's retail markets, but not necessarily strengthening them.

Livestreaming in China has seen a huge increase in sales activity thanks to social media. WeChat has offered an e-commerce platform to connect retailers with customers, through new affiliates and staff adopting a sales commission approach and running livestreaming incentives. New features have been developed in line with basic marketing strategies by several players, including TikTok. This app, owned by ByteDance, a Chinese company, has focused on video sharing. TikTok's audience is mainly young people, largely not using Facebook (40%) or Twitter (63%) (H. Murphy). The platform has recorded great success, fostered by the pandemic lockdown. The plan for 2021 sets out aggressive expansion into e-commerce in the US. TikTok is thus starting to cooperate with e-commerce platforms, blurring the line between its selling goals and its specific content. The 2021 plan could represent the first step forward to transform itself into an e-commerce player, based on the experience gained in 2020. In line with this possibility, in China ByteDance is establishing another business line to offer electronic payment services. This project could benefit from the anti-monopoly regulation for the highly concentrated payment sector, recently issued in draft form for comments by the Central Bank.

Chinese people were already used to shopping for all kinds of goods using their mobile phones. People now prefer to buy online, or at least to check on the web for product availability in the store before visiting it. Real-time in-store inventory and

prompt refilling has become a critical activity for all shops. The Covid-19 outbreak has highlighted the relevant role of the supply chain at the domestic and global levels. A consolidated supply chain ensures reliable and fast delivery of products to households, guaranteeing full compliance with lockdown measures, supporting retail consumption and accelerating production recovery. Smart supply chains and smart logistics have been strengthened, as the related quality and efficiency can have a relevant impact on the business viability and sustainability of many industries.

The quality of a company's supply chain is increasingly important around the world. It is now recognised as a cornerstone of collaboration among countries, sectors and industries, as a core factor for the development of both services and manufacturing, and as essential for economic growth. Smart supply chains can improve logistic efficiency, thus reducing costs and supporting the economy and social development. At the same time, it requires faster origination and the setting-up of innovative infrastructure. Innovative infrastructure can also increase consumption, introducing new products and services, and improving their delivery and accessibility. Smart logistics and supply chains, as well as innovative infrastructure, are critical to achieve the kind of high quality economic growth that remains one of the Chinese Government's priorities.

## **Conclusions on Chapter 2**

The outbreak of the pandemic has highlighted that a key driver for the development and application of technologies is the rapidly-evolving needs of

consumers, which can stimulate the introduction of new and customer-oriented services. In order to achieve this goal, in China as well as in other countries, it is still essential to reduce the digital gap and to overcome the lack of broadband connectivity in rural and peripheral areas in order to guarantee broader access to online services. The Chinese Government is expected to continue to invest in digital infrastructure, as well as in research and development into the new technologies they require.

In the meantime, governance, management, standards and regulations, including in the area of competition, should be updated and adapted to the emergence of innovative services and new business models at global level. It is essential to open up dialogue with industries. The emerging risks connected to new technologies, from data security and privacy to cybersecurity, may severely affect consumers, investors and corporates. Other and new concerns may arise in the most innovative sectors. In all countries, it is key to prevent and prohibit monopolistic conduct, to protect fair competition in the related markets, to safeguard the interests of consumers and to promote innovative but sound developments in the use of technologies.

## **CHAPTER 3**

### **PROPOSALS FOR IMPROVING INTERNATIONAL ECONOMIC RELATIONS**

#### **3.1. Impact of RCEP after its entry into force**

##### **3.1.1. The Role of RCEP in Balancing the Trade and Pandemic Shocks**

The economic impacts of the RCEP as a regional trading bloc are significant for East Asia to mitigate the negative effects of trade and economic shocks, such as the US–China trade war (Petri and Plummer, 2020; Park, Petri, and Plummer, 2021). The trade agreement under the RCEP is also expected to create positive impacts on output in the region, mitigating the negative effects of the COVID-19 pandemic shock. A recent study by Petri and Plummer (2020), accounting for only the US–China trade war, highlighted that all RCEP member countries would gain from the trade agreement, and no member country would experience a negative impact (Singapore and Brunei have the smallest marginal gains). The RCEP also reflects the importance of the CJK effects in the region, as it provides the first free trade arrangement for CJK that allows for greater movement of goods and services in the region.

The key benefits of the RCEP depend critically on the participation and positioning of the respective AMS in GVCs for both manufacturing and services. This is reflected in the gains of Indonesia, Malaysia, Thailand, and Viet Nam, which have stronger GVC participation in regional and global value chain activities. The ASEAN LDCs – Cambodia, Lao PDR, and Myanmar – also experience positive gains from the RCEP but need to undertake deeper structural reforms to fully benefit from the agreement.

The importance of regional cooperation under ASEAN and Asia-Pacific Economic Cooperation (APEC) and multilateral trade arrangements such as the RCEP – in balancing sustainable and inclusive growth from trade – will be fundamental to manage the impact of globalisation in the region.

### **3.1.2. The Impact of RCEP on China's international trade**

The Impact of RCEP on China: A Four-dimensional Perspective First of all, it should be affirmed that the RCEP is already the highest-standard free trade agreement (FTA) that China has signed. Considering the rather large differences of development level among the RCEP parties and the turbulent background to the negotiations, it was not easy to achieve an agreement up to the current standard level. When analyzing the impact of a trade agreement, we cannot just look at the impact on GDP, trade investment, or well-being based on the results of numerical simulations, which are actually just an analysis of economic benefits. It is necessary to look at the impact of the agreement in its entirety. We believe that the impact of RCEP on China can be analyzed from four dimensions: trade in goods, market opening, institutional rules, and strategic impact. These four dimensions correspond respectively to economic benefits, opening benefits, reform benefits, and strategic benefits.

The first dimension is trade in goods, which can be further divided into three areas: tariff reductions, reductions of trade barriers, and rules of origin. Whether tariff barriers or non-tariff barriers are lowered, the purpose of doing so is to promote the freer movement of goods. On the one hand, it promotes exports for the parties to the agreement, which is conducive to the growth of GDP, and on the other hand, by expanding imports, the needs of consumption and production can be better met. Rules

of origin actually affect trade costs as well. More uniform rules of origin would facilitate the free movement of goods within the region. Goods that would not otherwise be recognized as originating goods are more likely to be recognized as originating goods after the agreement takes effect, and as a result they will enjoy the benefits of tariff reductions.

The second dimension is market opening. The first dimension is actually the opening of the goods market. But to distinguish the second dimension from this traditional opening, we take market opening in the areas of trade in services, investment, and government procurement as the second dimension. There are special market access lists in the agreement for these three areas, and each can be divided into the positive, negative, and mixed list models. If we say that the extent of the tariff reductions and the relative length of the transition periods in the tariff reduction schedules reflect the opening up of the goods market, then these lists actually reflect the opening up of the service, investment, and government procurement markets.

The third dimension is institutional rules. International economic and trade rules have been constantly evolving, from traditional rules to the current high-standard ones. What are we to call some of the rules that the United States has promoted in recent years targeting China? Actually, they are institutional rules, and their impact on our national trade and investment is mostly indirect. In essence they aim to constrain a country's own laws, regulations, and institutions in order to achieve the goal of institutional convergence among all countries. Of course, the convergence here refers to convergence with American institutions. In fact, institutional convergence is controversial in the international academic community. Why can't the



diversity of institutions be allowed? Institutional rules are difficult for a country to accept, because they require it to make reforms, instead of simply being open, as required in the first and second dimensions. Compared with opening, reform faces greater resistance; the risk assessment of reform is also more difficult, and the beneficial effects of reform do not appear as quickly.

The fourth dimension is strategic impact. The impact of signing an agreement is not limited to the agreement itself – there are broader strategic implications, too. One is that it affects a country's external environment, since the signing sends a strong signal to other countries about its determination to open up. Also, through the closer economic and trade relations with the other parties to the agreement, a country can enhance the stability of its own development. Another one is strengthened political relations with the parties to the agreement. When the economic and trade relations are close, the political relations will also solidify.

Through these four dimensions, we can not only examine the signing of trade agreements in general, but also review the impact of China's entry into the WTO. China's WTO accession marked the first time it integrated into the world trade and international division of labor system. The opening up of trade in goods, trade in services, and investment has brought huge economic benefits. Its strategic significance is also self-evident. China's successful integration into the system established by the United States has not only strengthened China-US relations, but has also made the entire West accept China. China has also developed political relations with many countries through the strengthening of economic and trade relations. Although the WTO's international economic and trade rules still seldom

involved institutional rules when China entered the WTO, for China at the time, it also meant that we had to change many of our own laws, regulations, and institutions. These were actually high-standard rules for China, so in terms of the rules dimension discussed above, China has also benefited enormously. In short, China has benefited enormously in the four areas of the economy, opening up, reform, and strategy since its WTO accession.

Let's use the four dimensions again to look at the RCEP's impact on China. In general, the RCEP will have a greater impact on China mainly through the trade in goods and strategic impact dimensions, while the impact in the market opening and institutional rules dimensions will be limited. If we compare the gaps between RCEP and CPTPP in terms of trade in goods, market opening, and institutional rules, we can see that, despite the gaps in trade in goods, they are still relatively small. As for zero tariffs, the gap between RCEP and CPTPP is that, on the one hand, the RCEP's final zero tariff ratio is seven or eight percentage points lower than that of the CPTPP, and on the other hand, the zero tariff ratio immediately after the agreement takes effect is much lower than that of the CPTPP. However, the RCEP's final zero tariff ratio also exceeds 90%. Meanwhile, the RCEP will also significantly reduce non-tariff barriers, and what cannot be ignored is that, after the RCEP implements the unified rules of origin, it will make it easier for products that could not enjoy tariff reduction treatment before to be defined as originating goods, so as to enjoy tariff reduction. Regardless of institution or the method adopted, the reduction in the cost of trade in goods will bring huge economic benefits to the RCEP parties, including China. The RCEP's advantage over the CPTPP in terms of production is that there is the sense of

a hierarchy in levels of development among the RCEP parties, and that the technology, capital, and labor within the region are all sufficient. The RCEP's advantage in terms of consumption is that it is backed by China's huge consumer market. The promotional effect of the RCEP on trade in goods is far beyond that of the CPTPP.

If we look at the RCEP from the perspective of China-Japan-Korea economic and trade relations and China's construction of a new development pattern, the agreement's benefits will also be considerable. China is a closer neighbor to Japan and Korea than to the United States, Mexico, and Canada, but the economic and trade potential of the former is far from being released. The negotiation of the China-Japan-Korea Free Trade Agreement has been very difficult due to historical and political reasons, but the establishment of an agreement through the RCEP is actually a plan acceptable to all three parties, since it will effectively promote the economic and trade ties among them. The RCEP is also obviously beneficial for China's domestic and international circulation. Many of the RCEP countries are close neighbors to China, so it will facilitate economic and trade ties between these countries and the provinces bordering them, thereby driving domestic circulation. Meanwhile, the RCEP will be able to generate fuller infraregional circulation, which will further benefit the international circulation between China and its neighbors. The cooperation among RCEP countries along industrial and supply chains will be conducive to China's construction of a more secure industrial and supply chain system. Security and efficiency cannot be simultaneously optimal—for any big country, it is impossible to act as producer for all the links in these chains because of

security concerns, since this would greatly sacrifice efficiency. This means that it is necessary to strengthen political relations, so that the possibility of sanctions against China by external countries is reduced. Another RCEP benefit is that the other RCEP countries will not dare to sanction China, even if their political relations with China have some ups and downs, because they are not large enough.

The RCEP can also bring huge strategic benefits to China. In the context of qualitative changes in China-US relations, the United States will seek to compress China's room for action no matter who the US president is. In the realm of international economy and trade, the pressure from the United States will be manifested in the area of the high-standard rules that it formulates and wants China to accept. Meanwhile, in terms of spatial configuration, in the short and medium term, it has been trying to establish trade agreements that exclude China. In addition, while the multilateral trading system has run stuck, unable to make any further progress, giant FTAs have indeed become an aspect of the future. A giant FTA can be defined as an agreement has the participation of at least two of the four major economies – the United States, China, the European Union, and Japan. By signing the RCEP, China has successfully established a trade agreement with Japan, thus having its own first giant FTA. The RCEP's strategic significance for China lies not only in that it would be able to deal with a decoupling between China and the United States and a US attempt to establish a parallel system, but also in that China can use RCEP to stabilize its relationship with neighboring countries. The rise of any big country is bound to be accompanied by a stable periphery.

After it had its free trade agreement, the United States put the arrangements of its agreement with Mexico and Canada in first place.

However, the RCEP brings limited benefits to China in terms of market opening and institutional rules. After all, the CPTPP is dominated by the United States, and the openness of the services sector and investment is inevitably highest. RCEP, however, includes many of ASEAN's low-development countries, so its degree of openness cannot be very high, which is quite understandable. For China, the RCEP is the first agreement it has signed that adopts the negative list model in the investment chapter, but this is really only of symbolic significance. For a long time now, there has not been any difficulty in adopting the negative list, whether in services or investment, since China in recent years has opened up more and more in the services sector and investment. What China most needs to solve is the opening up of more sensitive industries—and this is exactly what the CPTPP requires. It should also be emphasized that the content of RCEP's government procurement chapter is mainly “in principle,” and there is no market access list, so in this area, RCEP is still far from opening markets. It mainly attempts to make procurement fairer and more transparent. The reason for this is that most of the RCEP parties are not yet members of the WTO's Government Procurement Agreement (GPA).

In institutional rules, it brings the least benefits. Although the RCEP has indeed taken important steps in e-commerce, intellectual property, and other rules, it is lacking in high-standard rules in areas such as state-owned enterprises, the environment, and labor, which are precisely the kinds of rules being emphasized by the United States. It goes without saying that rules on state-owned enterprises,

whether through FTAs or WTO reform, are part of what the United States is vigorously promoting, and an area that Western countries in general are concerned about. For China, this is thorny but unavoidable issue. Meanwhile, the environment and labor are what Biden emphasized during his campaign; he pointed to a carbon adjustment fee on goods exported to the United States from countries that do not care about the environment, while arguing that any agreement should include a labor component. Even though the RCEP agreement has chapters on these issues, there is still a big gap between them and their CPTPP counterparts. This means that China has relatively little reform work to do in order to implement the RCEP—the benefits brought by the RCEP’s institutional rules are naturally smaller.

#### -China's trade with RCEP members sustains steady growth

Trade between China and members of the Regional Comprehensive Economic Partnership (RCEP) saw steady growth since the trade agreement took effect at the beginning of this year, official data showed.

China's trade with the other 14 member states expanded 6.9 percent year on year to 2.86 trillion yuan (about 448.6 billion U.S. dollars) in the first quarter of 2022, accounting for 30.4 percent of China's total foreign trade value, according to the General Administration of Customs (GAC).

Data showed that exports and imports between China and RCEP members logged steady growth, increasing 11.1 percent and 3.2 percent from a year earlier to 1.38 trillion and 1.48 trillion yuan, respectively.

In the first three months, China's trade with the Republic of Korea (ROK) and Japan each took up 20 percent of the country's total trade volume with RCEP

members. And exports and imports between China and multiple countries, including ROK, Malaysia, and New Zealand, registered double-digit year-on-year growth, said the GAC.

In terms of goods types, exports of mechanical and electrical products and labor-intensive products dominated, taking up 52.1 percent and 17.8 percent of the total. Imports of mechanical and electrical products, metal ore and ore sand, and agricultural products accounted for 48.5 percent, 9.6 percent, and 6 percent, respectively, GAC data showed.

The RCEP's entry into force represents both free trade on a larger scale and opening-up at a higher level. According to Tu, RCEP members' opening-up level under the agreement evidently surpasses that under their other bilateral and multilateral agreements in terms of trade in services, and those adopting positive list for services trade will convert to negative list within six years since the agreement came into force.

As regards investment, RCEP members have made high-quality commitments on adopting negative list for non-service industry investment, with no new restrictions added outside the list, and strengthened the level of investment protection.

By 2035, the RCEP will bring the cumulative increase in regional exports and imports to \$857.1 billion and \$983.7 billion, injecting strong impetus into regional and global economic growth, according to a report released by the Chinese Academy of International Trade and Economic Cooperation on the potential influence of the RCEP on the regional economy.

### **3.2. Waiting on the Silk Road of Health after the Pandemic**

The section analyses how and to what extent – through enhanced “global health and vaccine diplomacy” – China may gain leadership in forging global health strategies after the pandemic, influencing existing multilateral institutions and/or redrawing international institutional mechanisms while ensuring linkage with the so-called “Health Silk Road” and its multiple bilateral arms.

At the beginning of the decade, China was the world’s largest aid recipient, but by 2011, on the heels of its rapidly growing economy, it had become a net provider of foreign assistance. Despite a slowdown in 2020, when the Chinese economy grew “only” by 2.3% (the lowest since 1976) as a result of the pandemic, a growth of 6.5% was recorded in the last quarter, industrial production increased by 2.8% and the foreign trade surplus grew by 27%. It is estimated that growth could approach 20% in the first quarter of 2021.

Today China is the world’s largest emerging donor. Its fast-growing aid programme has contributed to the country’s growing influence in the Global South and challenged the international aid system, which was traditionally dominated by the most advanced market economies. According to official sources, from 2013 to 2018, China provided US\$41.73 billion in financial aid to foreign countries and regions, including grants for US\$19.7 billion, accounting for 47.3% of the total.

#### **Towards the Health Silk Road**

In 2013, China proposed its Belt and Road Initiative (BRI) to promote trade, infrastructure, and commercial associations with 65 countries in Asia, Africa, and Europe that account for 65% of the world’s population, more than 30% of global



GDP and 75% of known energy reserves. Chinese President Xi Jinping later qualified that initiative as “ a road of peace, prosperity, openness, green development and innovation and a road that brings together different civilizations” .

The Belt and Road Initiative action plan was released by the National Development and Reform Commission on 28 March 2015. The objectives of the BRI are supposed to be aligned with the development goals of potential host countries, but some of the infrastructural projects may not take into account the long-term host country needs. Social and environmental sustainability concerns are also legitimate.

Health components were formally included in Belt and Road in 2015 and was firmly established during the first Belt and Road Forum for International Cooperation in Beijing in May 2017.

As early as 2015, Beijing asserted its intention to increase China ’ s role in multilateral health governance and in January 2017, China and the World Health Organization (WHO) signed a Memorandum of Understanding on cooperation in the health sector as part of the Belt and Road Initiative, using the phrase “ Health Silk Road” for the first time.

According to that agreement a number of specific areas will be prioritised including: (1) implementation of the International Health Regulations (IHR 2005) and public health emergency responses, management and capacity-building, as well as establishment of emergency medical teams; (2) health systems strengthening including universal health coverage; (3) prevention and control of infectious diseases, including HIV/AIDS, tuberculosis, malaria and schistosomiasis; (4) prevention and control of non-communicable diseases; (5) traditional medicine and prequalification

of Chinese medicines and vaccines; (6) capacity building and health workforce training; (7) local production of medicines; and (8) other areas of mutual interest.

Besides increasing its contributions to WHO and maintaining its engagement with the Global Fund to fight HIV/AIDS, tuberculosis and malaria – a partnership dating back to 2001, when China actively supported the process of setting up the Global Fund-in 2016 China started contributing to GAVI, the Vaccine Alliance. However, it has been claimed that China may prioritise “its own” initiatives including South-South cooperation and the Belt and Road Initiative over partnerships such as GAVI and the Global Fund.

According to analysts, China’s role in the WHO’s governing bodies has always been low-profile in terms of the number of interventions, tabled resolutions and proposed agendas, and it needs to increase its participation and involvement, as well as to institutionalise its practice of influence in order to play its role of global health leader.

The inclusion of the health sector in the gigantic BRI initiative responds to China’s aim to position itself as a leader in global health as well. China’s national achievements in health (including the decrease of maternal and child mortality, the extension of coverage of essential health care to over 95% of the population, and granting access to clean water and sanitation to 1.3 billion people) are often indicated as an argument for the country’s repositioning as an emerging leader in global health.

The Healthy China 2030 vision, which consists of five main targets (to improve the health levels, control major risk factors, increase health service capacity, expand health industry scale, and improve the health care system), came with a phenomenal

investment amounting to US\$2.4 trillion, confirming a strong political commitment to advancing the agenda.

An additional asset is attributed by Chinese scholars to China's "whole of government" approach to health, and the prioritisation of sustainable results which align the Belt and Road Initiative to the United Nations Agenda for Sustainable Development and its integrated, indivisible and universal SDGs and health-related targets. China's major role as a supplier of medicines, vaccines and medical devices is well known and it has proved to be a critical resource for many healthcare systems around the world.

### **The Pandemic as Opportunity**

Concerned about a possible cover-up of the emergence of a severe acute respiratory syndrome (SARS) originating in Guangdong province, in 2003 governments around the world and the World Health Organization put China under severe scrutiny. It took some time for the Chinese government to change its position and reveal the true severity of the outbreak.

At the international level the experience led to a review of the International Health Regulations (IHR), with the new edition being unanimously adopted by the 61st World Health Assembly in 2005 and coming into force in 2007 as a binding instrument of international law.

In more recent years China supported West African countries affected by the 2014-15 Ebola outbreak and contributed to post-Ebola reconstruction by supporting recovery efforts. It also participated in the humanitarian health response to the Syria crisis (2016-17), as well as in the response to the dramatic cholera outbreak in Yemen

(2017) and to the Ebola outbreaks in RDC (2018).<sup>30</sup> With the Covid-19 pandemic, China's international image suffered another serious setback. In January 2020 WHO Director General Tedros Adhanom Ghebreyesus praised the country's efforts to control the outbreak and its openness to sharing information about the virus and its spread. Soon thereafter, however, the Trump administration in the US spearheaded an effort to attribute to China direct responsibilities for the SARSCoV-2 outbreak and for hiding information and delaying the international response, this time with the complicity of the WHO, which the US later abandoned.<sup>32</sup> Some authors suggest that Trump was reacting to China's position and growing influence in international governmental organisations in general and WHO in particular, although paradoxically the US withdrawal may have increased China's influence within the WHO.

The origin of SARS-Cov-2 has still to be identified with certainty. Indeed, it has been shown that the virus was already circulating in Europe and elsewhere in November 2020, before the first cases were detected in China. At the time of writing, the much-anticipated report from the WHO-led international mission to China to investigate Covid-19's origins has not yet been published. The team has been working under intense US and Chinese pressure. The US criticised the terms of the visit, under which Chinese experts carried out the first phase of research. The team's plea is to keep the investigation free of political pressure, keeping in mind that several attempts may be necessary before achieving results, and that there are no "guarantees of answers", as declared by WHO emergency chief Mike Ryan at a recent press briefing.

Indeed, the Covid-19 pandemic has also created an opportunity for China to show direct support to countries, adopting health diplomacy as an effective countermeasure.

As of June 2020, when only one-fifth of the global demand for Personal Protective Equipment (PPE) and diagnostic tests had been met and many countries had halted their exports, China sent huge quantities to various countries, especially – but not only – in Africa. Between March and December 2020, China exported 224 billion surgical masks in addition to other personal protection devices, diagnostic tests, and ventilators: the so-called “mask diplomacy”, which may contribute to tie those countries closer to China.

Amid the ongoing Covid-19 pandemic, China provided assistance to more than 150 countries and 13 international organisations and sent 36 expert medical teams to countries in need. In addition, 46 Chinese medical teams already based in African partner countries were mobilised to help in the response to the pandemic. According to China’s National Health Commission nearly 1,000 Chinese medical personnel have been working in Africa long-term.

This effort “was China’s most intensive and largest-scale emergency humanitarian assistance mission since 1949”.

China’s strategy in global health is now adding “vaccine diplomacy” as an additional pillar. In May 2020, at the seventy third “World Health Assembly”, Xi Jin Ping promised that the SARSCoV-2 vaccines being developed in China would be proposed as “a global common good” once available. On 17 June 2020, an “Extraordinary China-Africa Summit on Solidarity against Covid-19” was held, a

virtual meeting between the Chinese President Xi Jin Ping and 13 African heads of state and government. Previous commitments to supply medical equipment were confirmed. In turn, African countries confirmed their support of Chinese policies regarding Hong Kong and Taiwan: an evident achievement of “vaccine diplomacy”.

In October, China joined the COVAX initiative, the vaccine pillar of the ACT Accelerator, convened by two global publicprivate partnerships (CEPI and GAVI) and the WHO. This initiative is speeding up the search for an effective vaccine for all countries, supporting the building of manufacturing capabilities, and buying supply. A total of 189 countries are participating, including all members of the EU and 92 lowincome countries, with the notable absence-to date-of the US and the Russian Federation.

On 19 January, Sinovac, Sinopharm, and CanSino, the three Chinese companies engaged in the development of anti-covid vaccines, requested their vaccines to be included among those that the COVAX alliance will acquire and distribute.

So while drug manufacturers prioritise regulatory approval in high-income countries where profits are highest, rather than submitting full dossiers to accelerate a WHO-backed global vaccine distribution initiative, and wealthy countries are stockpiling vaccines, mostly from Pfizer-BioNTech, Moderna and Astra-Zeneca, space is created for China, as well as India and to some extent Russia, to develop, produce and supply vaccines to middle and low-income countries.

A peculiarity of Chinese vaccines being tested is that they are based on inactivated viruses or vector viruses and can be stored at normal refrigeration temperatures (2°C - 8°C), making them particularly suitable for use in low-resource

settings. Chinese vaccines were the first to enter phase 3. Given the low number of Covid-19 cases in China, trials have taken place in several countries in Latin America, Asia, and the Middle East. In exchange, these countries will have priority access to those vaccines. On 30 December 2020, Sinopharm reported that its vaccine had 75% efficacy, but it did not provide related data. The Chinese Regulatory Agency granted conditional approval for its use the following day and mass inoculation was initiated on the 1st of January 2021 to high-priority groups. The United Arab Emirates and Bahrain had already granted permission based on studies implemented on their territory. The UAE began inoculating 31,000 volunteers with the vaccine in July and Bahrain in August. Both authorised its use in December, declaring an efficacy of 86%. Under their agreement with Sinopharm, they have not published the relevant data. In the coming months they aim not only to administer but also to produce the Sinopharm vaccine, with the possibility of supplying many low-income countries in Africa and elsewhere.<sup>44</sup> Sinopharm also signed an agreement with Morocco allowing for clinical trials of the vaccine to be implemented in that country, priority access to 10 million doses of the vaccine itself and the transfer of technology to an industrial hub in the “Cité Mohamed VI Tanger Tech”. The hub is part of a project launched in 2017 after a visit to Beijing by King Mohammed VI, and it aims to host, among others, at least 200 Chinese companies that will enjoy tax incentives and maritime access to the largest harbour in the Western Mediterranean. It will now include a vaccine production unit with its scope extending to the entire African continent.

The “vaccine diplomacy” towards Arab oil producing countries may obviously be linked to wider economic strategic interests, while the Chinese interest in

establishing good relations with Muslim countries also ties in with Sinovac's vaccine approval and distribution in Turkey.

### **3.3. The impact of the Digital Silk Road (DSR) on international economic relations**

President Xi captured China's sense of technological vulnerability in an arresting way: Our dependence on core technology is the biggest hidden trouble for us. Therefore, having a good command of core Internet technology is our mission. Heavy dependence on imported core technology is like building our house on top of someone else's walls: No matter how big and how beautiful it is, it won't remain standing during a storm.

#### **DSR in the context of the Belt and Road Initiative**

China's digital development began to attract greater global attention around 2015, following the launch of the Made in China 2025 (MiC2025) plan, which outlines a 10-year industrial policy aimed at transforming 10 core industries into world leaders in their respective sectors. The plan was updated in 2017, with a closer focus on domestic autonomy in key emerging technologies. Its Internet+ subset outlined the intention to integrate manufacturing and services with digital technology more fully by design. The 13th Five-Year Plan included specific GDP and R&D targets, with a view to powering economic growth through innovation. It was followed by China's 2016 AI Strategy and China Standards 2035, each citing specific targets, as well as industrial and capacity resources, with an eye to Chinese technological leadership.



## **The DSR as an app plug-in for the BRI**

The Digital Silk Road (2015) draws on three core state-driven strategies: Made in China 2025, the Belt and Road Initiative and China Standards 2035. The DSR integrates all three, while simultaneously seeking to generate network effects for the competitiveness of China's ICT stack; creating new markets and digital service relationships to the Middle Kingdom, and export Chinese industry standards in next-generation technologies. Over 6000 tech enterprises are registered on the BRI Portal and over one third of Chinese FDI in BRI countries is in technology areas. The BRI combines the landbased economic belt, made up of 6 development corridors, with the XXI century maritime silk road.

The initiative names 5 key priorities: 1) policy coordination, 2) infrastructure connectivity, 3) unimpeded trade, 4) financial integration, and 5) connecting people. The initiative is funded by a mix of Chinese state-owned and state-controlled banks and funds, as well as a number of international finance institutions (IFIs), including the Asia Development Bank and European Bank for Reconstruction and Development (EBRD).<sup>18</sup> As of January 2021, China has signed BRI Memoranda of Understanding (MoUs) with 140 countries, including 34 in Europe and Central Asia and, by Chinese accounts, 18 EU countries (although many of these dispute or have not confirmed their formal participation).

DSR projects were initially perceived as primarily plugin projects to core BRI projects in rail, maritime and road infrastructure. The BRI model is a highly integrated infrastructure ecosystem that links ports to research parks and cities. This pairs connectivity along transport infrastructure with more specific AI-surveillance

and security monitoring at stations, ports and shipping and storage facilities. It also allows for latent control over a broader infrastructure ecosystem that can make the recipient country susceptible to normative influence in benign times, extract concessions in competitive times or be weaponised at times of hostility.

The defining feature of the DSR, however, has been its core focus on connectivity infrastructure, both in telecommunications/5G hardware and smart cities. Most attention in Europe has therefore centred on equipment sourcing for core and radio access network (RAN) 5G infrastructure from Huawei and ZTE. Together Huawei and ZTE account for 38% of the global mobile equipment market. An aggressive push for external market share in partner countries has been aided by two factors: first, the relatively low cost of Chinese technologies, particularly telecommunications equipment, due to massive state subsidy support, and second, aggressive state-backed diplomacy, marketing and in-country availability, which long went unchallenged by competitors from Europe, the US, Japan and South Korea. Across the global South in particular, ZTE and Huawei have secured exclusive rights as the countries “sole equipment supplier”, allowing them to work with the government and telecom networks to create conditions for digital surveillance, repression and control.

China’s campaign for telco infrastructure extends beyond 5G equipment, to undersea and spacebased aspects of Internet connectivity as well. Chinese companies have developed fibre optic cable networks in 70 countries and have been involved in at least 32 undersea cable projects in South East Asia. Papua New Guinea partnered with Huawei Marine to lay undersea fibre optic cables in the island nation, despite

considerable political opposition from the US, Australia and Japan. Argentina and ZTE have entered into a fibre optic cable system agreement. In February 2021, China and Pakistan completed the PEACE fibre optic cable network connecting China to Europe through Pakistan and significantly reducing Pakistan's reliance on Indian Internet infrastructure. The China-Myanmar International (CMI) terrestrial cable has been a key node in Chinese support to build out Myanmar's network coverage, with the focus on Myanmar as a DSR connectivity bridge between East, South East and South Asia.

A China-centric connectivity ecosystem would be sourced end-to-end with each component of physical Internet infrastructure, including copper and fibre cables, 5G equipment, satellite networks and mainframe computers for data processing, AI and cloud services. One underexplored aspect is normative capture. Third-country market adoption has an acculturating effect. Usage can necessitate implicit agreement, through contracts and terms of use, and create tacit acceptance of Chinese-centric conditions. Normative change can be hard to dislodge, given technological lock-ins and the effect of latent socialisation that comes through everyday use.

### **Challenges facing the construction of the Digital Silk Road**

One, the international discourse power of Chinese digital trade is insufficient. At present, our country is still in a weak position in the rule-making of digital trade. By virtue of their first-mover advantages in the digital market and digital core technologies, Europe and the United States are in a leading position in the formulation of digital standards in the field. They try to maintain their advantages by formulating their own data protection regulations and trading rules, and promote their

own digital transformation alternatives to participate in the global digital market competition. In the process of building the "Digital Silk Road", China and the countries and regions along the "Belt and Road" must abide by and apply the relevant standard agreements and technical specifications set by European and American countries. The cost of digital market entry and digital governance is relatively high.

Second, the "digital divide" restricts the speed of development and the sharing of results. The number and quality of digital infrastructure in countries along the "Belt and Road" is small, and the digital economy services are not yet popularized, which makes it difficult to form an overall connectivity at the level of hardware and software, causing a double "gap" in the access and application of digital technology, and seriously restricting the comprehensive development of their digital economy and trade. The rapid development of countries and regions with technological advantages is likely to further exacerbate the imbalance in the development of digital economy between regions and bring about a wider "digital divide", which is not conducive to sharing the fruits of digital economy development.

Third, the digital transformation of Chinese enterprises' internationalization is inadequate. In 2020, Accenture research showed that more than nine out of 10 (92 percent) Chinese companies surveyed felt that their digitalization efforts were not effective enough. The development of internationalization requires enterprises to be able to support enterprises to carry out agile and efficient transnational operation and continuous innovation. Enterprises with weak digital capability will face many obstacles, such as difficulty in information system compatibility, difficulty in business application entry, poor ability of international business operation, etc.,

which will make it difficult to adapt to the new trend of digitalization and intelligence, better integrate into the global industrial chain and supply chain, and form a competitive edge in the overseas market of the Belt and Road Initiative.

Digital trade causes data security risks. With the deepening of the construction of the "Digital Silk Road", massive data and information flows will inevitably be formed. At present, the countries and regions along the "Belt and Road" have different levels of legislation on cyberspace governance, privacy protection and digital intellectual property related laws and regulations in digital trade, and their rights and responsibilities are not clear. The risk of data leakage is high. Once data leakage occurs, enterprises will face huge penalties, bringing a "crisis of confidence" for the establishment of data interconnection.

At the same time, the lack of manpower support for the development of digital industry in the countries and regions along the Belt and Road also hinders the progress of the construction of the "Digital Silk Road". We can make improvements in the following aspects:

First, take an active part in building the institutional framework and digital governance system of the "Digital Silk Road". We will promote international convergence and alignment of digital technology rules, accelerate the development of digital intellectual property rights certification and technical standards, accelerate the distribution of patents, expand international cooperation in the Internet of Things, 5G and other fields, promote joint efforts with partner countries to build a standard, efficient, orderly, fair, open and secure digital environment, and jointly explore the formation of unified digital governance standards and data sharing principles. At the

same time, the emergence of digital barriers should be avoided to enhance the global voice of digital economic governance.

Second, deepen infrastructure development and cooperation in digital economy and narrow the "digital divide". Chinese companies can take the initiative to grasp the digital infrastructure construction needs of countries along the Belt and Road and increase their Internet penetration. At the same time, we will vigorously develop "Silk Road e-commerce" and foster innovative cooperation models so that Chinese companies can expand their global presence.

Third, enhance the digital international operation capacity of Chinese enterprises. Chinese enterprises should strengthen their awareness of data, make good use of technology and digital tools to enhance their international business capabilities, and actively carry out differentiated digital business cooperation with host countries. Attach importance to the collection, analysis and research of data, accurately connect with the needs of overseas customers, grasp the characteristics of different regional markets and different consumers of the "Belt and Road", carry out differentiated international marketing, and gradually transform into a high-end automation and intelligent solution supplier to participate in the "Belt and Road" construction.

Fourth, strengthen the enterprise data security management awareness and ability. Strengthen the security protection of data on the cloud, improve the confidentiality awareness and alertness of data security, build a corresponding data security system, build a data security operation and management platform, carry out regular security management, and reduce the risk of data leakage. Comply with the relevant laws and

regulations of different countries, reduce the loss caused by data security risks, and increase the establishment of data trust relationship between international partners.

Promote the cultivation of digital talents and build a bond of digital cultural exchange. Chinese enterprises and domestic colleges and universities can cooperate with local governments to build digital education platforms, build integrated bases for digital technology production, teaching and research, build standards and certification systems for digital talents training, and promote colleges and universities to deliver digital talents and teachers, so as to provide talent guarantee for the subsequent digital development of local governments.

In general, the countries and regions along the Belt and Road, which are in the early stage of the development of the digital economy, have an urgent vision and impetus for digital development. Chinese companies should seize their digital technology advantages and strengthen cooperation with countries along the Belt and Road in digital cooperation framework, digital infrastructure and digital capacity to facilitate China's economic transformation in the new era and the high-quality development of the Digital Silk Road, so that the successful bloom of digital cooperation will fill the prosperous land of the Silk Road and realize a bright future of win-win cooperation.

### Conclusions on Chapter 3

The RCEP is already the highest-standard free trade agreement China has ever signed. It will not be easy to reach an agreement at the current standard level, given the large differences in the development levels of the RCEP parties and the volatile background of the negotiations. We believe that the impact of RCEP on China can be analyzed from four dimensions: trade in goods, market opening, institutional rules and strategic impact. These four dimensions correspond to economic benefit, opening benefit, reform benefit and strategic benefit respectively.

By 2035, the RCEP will bring the cumulative increase in regional exports and imports to \$857.1 billion and \$983.7 billion, injecting strong impetus into regional and global economic growth, according to a report released by the Chinese Academy of International Trade and Economic Cooperation on the potential influence of the RCEP on the regional economy.

It also analyses how and to what extent – through enhanced “global health and vaccine diplomacy” – China may gain leadership in forging global health strategies after the pandemic, influencing existing multilateral institutions and/or redrawing international institutional mechanisms while ensuring linkage with the so-called “Health Silk Road” and its multiple bilateral arms.

Today China is the world’s largest emerging donor. Its fast-growing aid programme has contributed to the country’s growing influence in the Global South and challenged the international aid system, which was traditionally dominated by the most advanced market economies. According to official sources, from 2013 to 2018,



China provided US\$41.73 billion in financial aid to foreign countries and regions, including grants for US\$19.7 billion, accounting for 47.3% of the total.

In terms of the Digital Silk Road (DSR) , President Xi captured China's sense of technological vulnerability in an arresting way: Our dependence on core technology is the biggest hidden trouble for us. Therefore, having a good command of core Internet technology is our mission. Heavy dependence on imported core technology is like building our house on top of someone else's walls: No matter how big and how beautiful it is, it won't remain standing during a storm.

## CONCLUSIONS

This paper began to analyze the background and the impacts of the coronavirus epidemic. The epidemic in China was at a relatively serious stage in January 2020. To protect the health of citizens, the government implemented the quarantine policy, which reduced the output of all industries. But by May, the outbreak had become relatively stable across the country, and most companies and factories had resumed their previous operations and procedures. The economy has improved during this period, enabling China to export some needs to other countries experiencing the epidemic's impact.

Due to the strict measures learnt from the experience of SARS in 2002-03, China quickly halted the spread of the virus nationwide. The sharp economic downturn was a reasonable reaction to a drastic exogenous shock. The policy response to this pandemic crisis has been relatively measured compared with the stimulus package implemented after the GFC.

A common downtrend in the development of China's trade with its top five major trade partners in the first half of 2020 can be witnessed. This was inextricably linked to the suspension of production activities and the adoption of strict quarantine measures. The cost of suspending trade and economic activities for China in the first half of 2020 was high, but China appeared to have generated a huge pay-off compared with the other major economies in terms of economic growth and foreign trade recovery. In 2020, China was the only one of the world's largest ten economies to achieve a positive GDP growth of 2.3% and its foreign trade also rose by 1.9%. In the first seven months of 2021, China's export/import performance was also much

more robust compared to its major trade partners. China should continue to expand trade with ASEAN, Japan and South Korea while maintaining a steady trade volume with the EU, the UK and the United States. China should especially strengthen its integration with countries upstream and downstream of the Asian value chains, taking full advantage of the RCEP.

China's recovery from the pandemic and from the recession caused by lockdowns and social distancing has been faster than in any other country. This recovery has relied on two pillars: digitisation and regionalisation.

The digital economy has been at the heart of the economic and health recovery in China. Innovative digital infrastructure – such as internet-based artificial intelligence, data centres, big data, cloud computing, the Internet of Things and 5G networks – has been heavily supported by the Government, which has promoted several applications of such technology in a variety of sectors, from home-working and e-learning to e-commerce and entertainment, leading to a brand-new digital ecosystem. This is shaping the new domestic economy and will influence the country's foreign relations in the future.

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