

2021 China Business Survey

On Business Performance and Adjustments of

Companies in China during the COVID-19 Period



CEIBS China and the World Research Area CEIBS Healthcare Sector Research Centre

2021 China Business Survey

On Business Performance and Adjustments of Companies in China during the COVID-19 Period

Howei Wu | Bin Xu | Dongsheng Zhou | Danni Chen | Ruoshi Li | Liyang Ruan

CEIBS China and the World Research Area CEIBS Healthcare Sector Research Centre

Copyright ©2021 CEIBS All Rights Reserved

TABLE OF CONTENTS

THE RESEA	ARCH TEAM	1
ACKNOWL	EDGEMENT	2
SECTION 1	: PREFACE	3
	1.1. INTRODUCTION OF RESEARCH PROJECT	4
	1.2. MACROECONOMIC BACKGROUND	6
SECTION 2	: DESCRIPTION OF SAMPLE ENTERPRISES	9
	2.1. REGISTRATION TYPES	10
	2.2. REVENUE CONTRIBUTION OF BUSINESS IN CHINA	13
	2.3. INDUSTRY DISTRIBUTION	14
	2.4. BUSINESS SIZES	17
	2.5. PRODUCT/SERVICE POSITIONING	18
	2.6. CLIENT TYPES IN CHINA	19
SECTION 3	: COMPARING THE IMPACT FROM COVID-19 PANDEMIC WITHIN-CHINA AND OUTSIDE-CHINA	21
	3.1. IMPACT ON BUSINESS OPERATIONS REGION-WISE	22
	3.1.A. BUSINESS-IN-CHINA	22
	3.1.B. BUSINESS-OUTSIDE-CHINA	25
	3.1.C. IMPACT FROM BUSINESS-OUTSIDE-CHINA BY REGION	28
	3.2. IMPACT ON BUSINESS OPERATIONS TIMEWISE	30
	3.2.A. BUSINESS-IN-CHINA	30
	3.2.B. BUSINESS-OUTSIDE-CHINA	31
	3.3. RECOVERY ON BUSINESS OPERATIONS IN CHINA	32
	3.4. SUPPLY CHAIN	34

SECTION 4: ADJUSTMENTS TO THE IMPACT FROM COVID-19 PANDEMIC	37
4.1. ADJUSTMENTS TO ONLINE OPERATIONS	38
4.2. ADJUSTMENTS TO HUMAN RESOURCE (HR)	41
4.2.A. EMPLOYEE SIZE	41
4.2.B. EMPLOYEE SALARY	42
4.3. EVALUATION OF POLICY SUPPORT RECEIVED	43
SECTION 5: CONFIDENCE IN BUSINESS OPERATIONS IN CHINA	45
5.1. MOST IMPORTANT FACTORS CONSIDERED FOR BUSINESS IN CHINA FOR 2021	46
5.2. MOST IMPORTANT FACTORS CONSIDERED FOR BUSINESS IN CHINA FOR 2021-2025	48
5.3. EVALUATION OF CHINA'S DOMESTIC AND INTERNATIONAL BUSINESS ENVIRONMENT OVER THE PAST FIVE YEARS (2016-2020)	50
5.4. CONFIDENCE INDICES FOR BUSINESS OPERATIONS IN CHINA FOR 2021 AND 2021-2025	52
SECTION 6: HEALTHCARE RELATED COMPANY AND PERSONAL ADJUSTMENTS	55
6.1. ADJUSTMENTS TO BUSINESS AND EMPLOYEE BENEFITS	56
6.1.A. ADJUSTMENTS TO BUSINESS OPERATIONS	56
6.1.B. ADJUSTMENTS TO EMPLOYEE BENEFITS	60
6.2. PERSONAL CHANGES AND ADJUSTMENTS	61
6.2.A. CHANGES IN STRESS LEVEL	61
6.2.B. PERSONAL MEDICAL AND HEALTH CONSUMPTION	66
SECTION 7: CONCLUSION	67
APPENDIX: QUESTIONNAIRE	71

THE RESEARCH TEAM





Dr. Howei Wu is Assistant Professor of Economics at CEIBS. She received her B.A. and B.S. from Tsinghua University (Taiwan, China), and M.A. and Ph. D. from Stanford University. Dr. Wu does research in macroeconomics, monetary economics, innovation, and the Chinese economy. She has published at the Journal of Economics Dynamics and Control and others. Before joining CEIBS, Dr. Wu taught at Shanghai University of Finance and Economics and was a member of China's Macroeconomic Analysis and Forecast Project Team.

Dr. Bin Xu is Professor of Economics and Finance, Wu Jinglian Chair Professor in Economics at CEIBS. He received his B.A. and M.A. from Fudan University, and Ph. D. from Columbia University. Dr. Xu's research focuses on issues of the global and Chinese economy. He has published extensively in both international and Chinese journals, and is author of Applying Macroeconomics (2019) and International Trade (2009). Dr. Xu has worked as a consultant for International Monetary Fund (IMF) and the World Bank.

Dr. Dongsheng Zhou is Professor of Marketing at CEIBS and Director of CEIBS Healthcare Sector Research Centre. He received his B.S. from the University of Science & Technology of China (USTC), and Ph. D. from the University of British Columbia (UBC), Canada. Dr. Zhou's research focuses on marketing strategies, game theory, multinational firms in China, and the globalisation of Chinese firms, and has published extensively in academic journals. Dr. Zhou has conducted consulting services for companies such as IBM and Du Pont.

Danni Chen is Research Assistant of the Department of Economics and Decision Sciences at CEIBS. She received her bachelor's degree from the University of Rochester in 2018, with triple majors in financial economics, mathematics and philosophy, and her M.S. degree in Economics from the Chinese University of Hong Kong in 2019. Danni was co-author of the 2020 CEIBS Survey on COVID-19's Impact on Business Operations in China.



Ruoshi Li is Research Assistant of the Department of Economics and Decision Sciences at CEIBS. She received her bachelor's degree from Boston University in 2017, with major in Economics and minor in Business Administration, and her M.A. degree in Quantitative Economics and Econometrics from Boston University in 2019. Before joining CEIBS, Ruoshi worked as an analyst in a Chinese state-owned private equity investment fund.



Dr. Liyang Ruan is Research Fellow of CEIBS Healthcare Sector Research Centre. She received her Ph.D. in management from Shanghai Jiaotong University in 2017. Dr. Ruan's research focuses on healthcare industry, marketing strategies, supply chain management, and CSR, and has published in both SSCI and CSSCI journals. She also has published nearly 20 teaching cases in the Global Platform of China Cases, Harvard Business Publishing, and IVEY Publishing, and co-edited Synergise (2019), a case collection book.

The authors would like to thank CEIBS alumni and students for their active participation in the survey, CEIBS staff from offices of Alumni, IT, Marcom, EMBA, FMBA, GEMBA, HEMBA, MBA, and Executive Education for their great support in distribution and promotion of the survey, and the financial support of a CEIBS research grant (Grant Number: 17BICS). Our gratitude is extended to Swiss Center China and the various Swiss organizations and their affiliated companies for collaboration on the survey project. The report is co-produced by CEIBS China & the World Research Area and CEIBS Healthcare Sector Research Centre. The authors are responsible for all the errors.

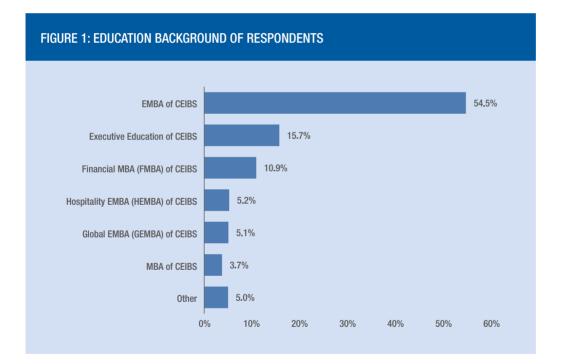


SECTION 1 PREFACE

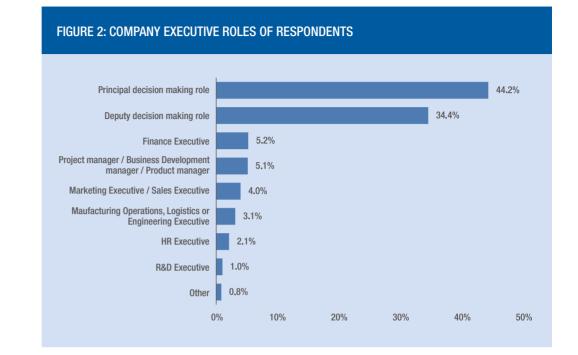
1.1. INTRODUCTION OF RESEARCH PROJECT

The China and Europe International Business School (CEIBS) Research Team with three professors and three research assistants conducted an online survey from April 1st to April 14th 2021, receiving 1,188 valid responses in total. Among the 1,188 survey participants, 883 (about 75%) work for Chinese-owned firms or firms with 50% or more Chinese ownership, and 294 (about 25%) work for foreign-owned firms in China or firms with more than 50% foreign ownership.¹

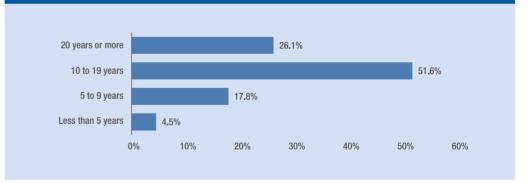
Figure 1 shows the education background of survey respondents. As the survey was conducted mainly via CEIBS platforms, the majority of participants are CEIBS alumni and students (95% of the sample), among whom EMBA alumni and students are the largest group (54.5% of the sample). Figure 2 shows the roles played by survey respondents in their companies. 44.2% of them are principal decision makers (such as CEOs/GMs/Owners/Partners/Chief Representatives), 34.4% are deputy decision makers (such as VPs/Vice GMs/Directors/ Assistants of GM), and the remaining 20% are senior executives of their respective divisions. Figure 3 shows the management experience of survey respondents: 77.7% of them have at least ten years of management experience. Among the survey respondents, 28.3% are female and 71.5% are male.



¹ Foreign-owned firms include Hong Kong (China), Macao (China) and Taiwan (China) companies. Chinese-owned firms refer to mainland China companies. Hereinafter we will refer to them as "foreign-owned firms" and "Chinese-owned firms" respectively. In our sample, 294 work for foreign-owned firms, 883 work for in Chinese-owned firms, and 11 is classified as "other" due to lack of information.







The education and professional background of survey respondents indicates that the survey sample is not a typical sample of enterprises operating in China, but rather reflects the situation of the enterprises of the senior executives who have study experiences in CEIBS, as more than two-thirds of the survey respondents are alumni and students of the programmes for company executives (EMBA/GEMBA/HEMBA). According to the class profile of CEIBS EMBA programme, the average age of participants is 39.8, average years of working experience is 16, and their average years of managing experience is 11.7. More than 98% of the participants are senior managers. CEIBS has more than 20,000 alumni, including 10,000 EMBA alumni who participated the most in this survey among all alumni or students. Based on the above information, we conclude that the survey result has reference value in the sense that it largely reflects how "head companies" (the leading companies and most active ones in their respective industries) in China assessed and judged the COVID's impact on business operations. This is also confirmed by the fact that majority of the firms in the sample target the high-end spectrum of the market (see Section 2.5).

1.2. MACROECONOMIC BACKGROUND

The preliminary accounting results of China's 1st quarter GDP released by the National Bureau of Statistics (NBS) on April 16, 2021 summarize the macroeconomic setting of this survey. Figure 4 shows the year-on-year growth rates of GDP and value added of broad industries (at constant price), that is, the growth rate over the same period last year (1st quarter of 2020). The released numbers show that China grew 18.3% year on year, recovering from the lows caused by COVID-19 in 2020. The biggest rebound can be seen in "Accommodation & Restaurants" (43.7%), which showed the biggest contraction of 35.3% among all industries in the first quarter of 2020. "Transport, Storage & Post" showed the second-highest recovery rate (32.1%), against a drop of 14% the year before.

The primary industry (Farming, Forestry, Animal Husbandry & Fishery) showed a small increase, with a year-on-year growth rate of 8.0%. In the secondary industry, both "Construction" and "Industrial Sector" had improved quite significantly, by 22.8% and 24.4% respectively. In the tertiary industry (service industry), which was faced with the biggest year-on-year decline in 2020 has also rebounded. "Wholesale & Retail Trades" reported a 26.6% growth, against a drop of 17.8% in 2020. "Finance" and "Transmission, Software & Information Technology Services", the only two industries that reported a positive growth in the 1st quarter of 2020, continued to grow in 2021 with 5.4% and 21.2% respectively.

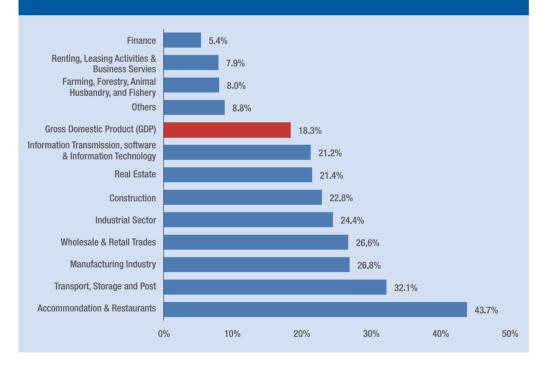


FIGURE 4: INDUSTRY GROWTH RATE OF CHINESE ECONOMY IN 1ST QUARTER OF 2021 (Y-O-Y)

Industry	Share of GDP	Broad Classification	Current Value (Trillion yuan)	Share of GDP	Year-on-Year Change
Primary Industry	4.8%	Farming, Forestry, Animal Husbandry, & Fishery	1.19	4.8%	8.0%
Secondary	37.3%	Construction	1.20	4.8%	22.8%
Industry	37.3%	Industrial Sector	8.10	32.5%	24.4%
		Accommodation & Restaurants	0.41	1.6%	43.7%
		Wholesale & Retail Trades	2.40	9.6%	26.6%
		Transport, Storage & Post	1.01	4.0%	32.1%
Tertiary	57.9%	Renting, Leasing Activities & Business Services	0.77	3.1%	7.9%
Industry		Real Estate	1.95	7.8%	21.4%
		Other Services	4.47	17.9%	8.8%
		Finance	2.31	9.3%	5.4%
		Information Transmission, software & Information Technology	1.13	4.5%	21.2%
Total	100.0%	Gross Domestic Product (GDP)	24.93	100.0%	18.3%

DATA DISPLAY: THE PRELIMINARY ACCOUNTING RESULTS OF CHINA'S 1ST QUARTER GDP RELEASED BY NATIONAL BUREAU OF STATISTICS (NBS) OF CHINA IN APRIL, 2021

2020 has been a challenging year with only China enjoying growth. Recovery will be a common phenomenon around the globe and global trade will pick up (from the World Economic Outlook by IMF in April). It is likely that China's early success in containing the pandemic will again set her apart from other countries and continue to report stronger growth compared to other countries. Although China is welcoming a recovery in economic performance, the recovery path is heterogeneous among different industries and firms. Comparing manufacturing and service official PMI we find that both sectors exhibit immediate recovery in March 2020 and have remained to be expanding since then. However, from the official PMI for manufacturing, we see small and medium enterprises have been struggling to recover.²

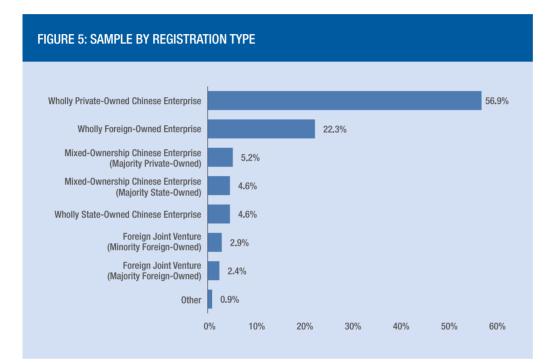
² Official manufacturing PMI rebounded from 35.7 in 2020 February to 52 in 2020 March, and service PMI from 30.1 to 51.8, both remained above 50 since then. Small manufacturing enterprise rebounded in March but dipped below 50 seven times between 2020 June and 2021 February. Medium manufacturing enterprise also reported PMI below 50 twice in 2020 May and 2021 February.



SECTION 2 DESCRIPTION OF SAMPLE ENTERPRISES

2.1. Registration Types

Table 2 reports the companies in our survey sample by 8 categories according to their ownership structures. More than half of companies, specifically 56.9%, are wholly private-owned Chinese enterprise. The second-largest number is wholly foreign-owned enterprise which account for 22.3%. Chinese State-Owned Enterprise (SOEs), which is defined as majority state-owned enterprise plus wholly state-owned enterprise, account for 9.2% (110 firms) of the whole sample. Chinese private-owned enterprise, which contains wholly private-owned enterprise and majority private-owned companies, takes up 62.1% (738 firms). Foreign firms including wholly foreign-owned and majority foreign-owned joint ventures which together account 24.8% (294 firms).



DATA DISPLAY: REGISTRATION TYPES				
	Number	Percent		
Wholly Private-Owned Chinese Enterprise	676	56.9%		
Wholly Foreign-Owned Enterprise	265	22.3%		
Mixed-Ownership Chinese Enterprise (Majority Private-Owned)	62	5.2%		
Mixed-Ownership Chinese Enterprise (Majority State-Owned)	55	4.6%		
Wholly State-Owned Chinese Enterprise	55	4.6%		
Foreign Joint Venture (Minority Foreign-Owned)	35	2.9%		
Foreign Joint Venture (Majority Foreign-Owned)	29	2.4%		
Other	11	0.9%		
Total	1,188	100.0%		

Among the firms with foreign ownership, the top three regions are Europe (39.8%), United States (28.7%), and Hong Kong China (14.2%). The exact ranking is reported in Figure 6.³

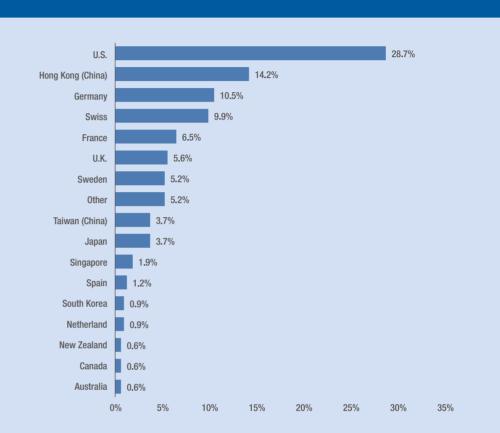


FIGURE 6: SOURCE OF BIGGEST FOREIGN OWNERSHIP

³ Some respondents may choose "other" to some questions and specify. If one situation is repeatedly specified, we will list it as a separate situation when analyzing the responses, instead of putting it under "other". For example, in terms of source of biggest foreign ownership, location where the company is listed, industry, revenue, salary, measures to safeguard employees' health condition, and important factors considered on business operations in China, the report lists more situations than the options of corresponding questions in the questionnaire.

Of the 1,188 firms, 355 (29.9%) are listed, with Shenzhen (23.1%), Shanghai (22.8%) and United States (19.7%) as the top three listing locations (Figure 7).

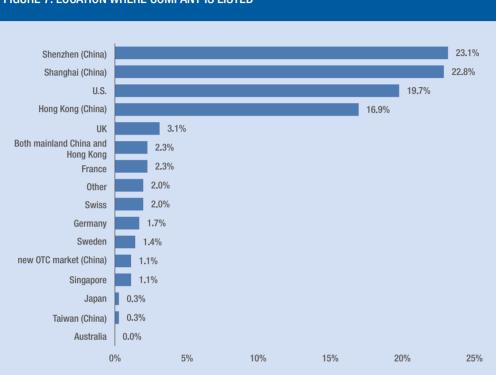
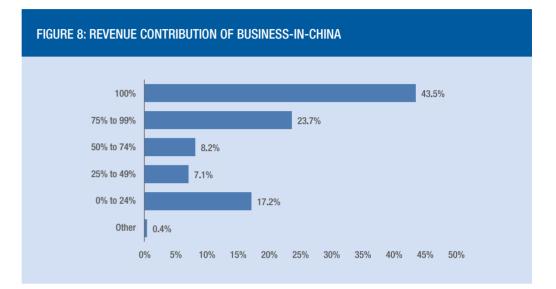


FIGURE 7: LOCATION WHERE COMPANY IS LISTED

2.2. REVENUE CONTRIBUTION OF BUSINESS IN CHINA

Figure 8 presents the revenue contribution of business-in-China. 890 firms report 50% or more revenue from business-in-China (76%), we define them as "introverted". Firms with 50% or more revenue from overseas business are defined as "extroverted" (281 firms with a share of 24%).

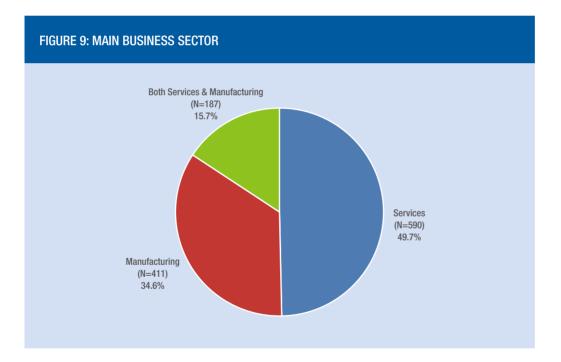


DATA DISPLAY: REVENUE CONTRIBUTION OF BUSINESS-IN-CHINA				
		Number	Percent	
Introverted: Business in China accounts	100%	517	43.5%	
for more than 50% of the total revenue	75%-99%	281	23.7%	
(N=890; Share=76%)	50%-74%	97	17.2%	
Extroverted: Overseas Business accounts	25%-49%	84	8.2%	
for more than 50% of the total revenue	0%-24%	204	7.1%	
(N=281; Share=24%)	other	5	0.4%	
	Total	1,188	100.0%	

2.3. INDUSTRY DISTRIBUTION

Figure 9 presents the distribution of main business sector of our survey sample. Figure 10 presents the industry distribution of firms in service sector. Figure 11 presents the industry distribution of firms in manufacturing sector.

The first column of table below shows the first level industrial classification of the National Bureau of Statistics, and the third column shows the industry classification used in this survey. There are 26 industries in the questionnaire: 1 industry in the primary sector (Agriculture, Forestry, Animal Husbandry, Fishing & Mining)⁴, 12 in the secondary sector, and 13 in the tertiary sector. There are 23 Agribusiness companies which account for only 1.7% in our sample. Considering that companies of most CEIBS alumni and students are engaged in modern agricultural production similar to manufacturing, we put "Agriculture, Forestry, Animal Husbandry, Fishing & Mining" under manufacturing. As a result, the sample size of manufacturing companies becomes 598 with a share of 43.5%, including 13 industries. We further combined "Construction" and "Real Estate", and put it under service sector, so the size of service sector is 777 with a share of 56.5%, covering 13 major industries.



⁴ We later refer to this industry as "Agribusiness" in the report.

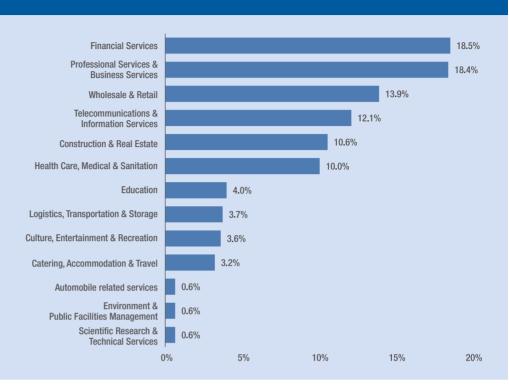
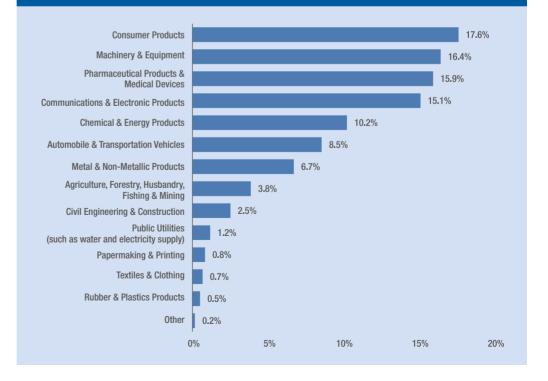


FIGURE 10: INDUSTRY DISTRIBUTION OF SERVICE SECTOR

FIGURE 11: INDUSTRY DISTRIBUTION OF MANUFACTURING SECTOR



Industry Classification (NBS)Share of GDP (NBS)Industry Classification (Survey)Number (Survey)Percent (Survey)Primary IndustryAgriculture, Forestry, Husbandry, Fishing & Minnig231.7%Secondary IndustryAgriculture, Forestry, Husbandry, Fishing & Minnig987.6%Machinery & Equipment986.9%Phramaceutical Products & Medical Devices906.5%Communications & Electronic Products906.5%Communications & Electronic Products906.5%Communications & Electronic Products906.5%Communications & Electronic Products906.5%Construction151.1%Automobile & Transportation Vehicles513.7%Civil Engineering & Construction151.1%Public Utilities (water, electricity, etc.)70.5%Papermalking & Printing550.4%Tertiary Industry (Including construction)62.7%Total (Manufacturing)598Marcial Estate7.8%Construction & Real Estate826.0%Finance9.3%Financial Services14410.5%Real Estate7.8%Construction & Real Estate826.0%Information Transmission, software & Information A Restaurants1.6%Catering, Accommodation & Storage292.1%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Accommodation & Restaurants1.6%Catering, Accommodation & Travel<	DATA DISPLAY: INDUSTRY DISTRIBUTION OF SURVEY VS. INDUSTRY DISTRIBUTION OF NATIONAL BUREAU OF STATISTICS (NBS) OF CHINA BY SHARE OF GDP					
Primary Industry 4.8% Agriculture, Forestry, Husbandry, Fishing & Mining 23 1.7% Kerner Consumer Products 105 7.6% Machinery & Equipment 98 7.1% Pharmaceutical Products & Medical Devices 90 6.5% Communications & Electronic Products 90 6.5% Communications & Electronic Products 90 6.5% Communications & Electronic Products 90 6.5% Chemical & Energy Products 40 2.9% Civil Engineering & Construction 15 1.1% Public Utilities (water, electricity, etc.) 7 0.5% Papermaking & Printing 5 0.4% Construction 1 0.1% Finance 9.3% Financial Services 144 0.1% Real Estate 7.8% Construction & Real Estate 8.6% 4.6% Construction 4.8% Scientific Research & Retail 108 7.9% Information Transmission, software & Information Technology 4.5% Scientific Research & Technical Services 9.4.6			Industry Classification (Survey)			
Secondary Industry (Excluding Construction 92.5% 7.1% 32.5% Machinery & Equipment 98 7.1% Secondary Industry (Excluding Construction 90 6.5% 6.9% Communications & Electronic Products 61 4.4% Automobile & Transportation Vehicles 51 3.7% Metal & Non-Metallic Products 40 2.9% Civil Engineering & Construction 15 1.1% Public Utilities (water, electricity, etc.) 7 0.5% Papermaking & Printing 5 0.4% Textiles & Clothing 4 0.3% Rubber & Plastics Products 30 0.2% Intertiary Industry (Including Construction 62.7% 7 0.5% Finance 9.3% Financial Services 144 10.5% Finance 9.3% Construction & Real Estate 82 6.0% Konelae & Retail Trades 9.6% Wholesale & Retail 108 7.9% Information Transmission, software & Information 4.5% Scientific Research & Technical Services 5	Primary Industry		Agriculture, Forestry, Husbandry, Fishing & Mining	23	1.7%	
Secondary Industry (Excluding Construction) 95 6.9% 32.5% Communications & Electronic Products 90 6.5% Communications & Electronic Products 90 6.5% Chemical & Energy Products 61 4.4% Automobile & Transportation Vehicles 51 3.7% Metal & Non-Metallic Products 40 2.9% Civil Engineering & Construction 15 1.1% Public Utilities (water, electricity, etc.) 7 0.5% Papermaking & Printing 5 0.4% Rubber & Plastics Products 3 0.2% Other 1 0.1% Finance 9.3% Financial Services 14 0.5% Construction 4.8% Construction & Real Estate 82 6.0% Construction 4.8% Construction & Services 94 6.8% Wholesale & Retail Trades 9.6% Wholesale & Retail 108 7.9% Information Transmission, software & Information & Services 5 0.4% 0.4% Scientific Research & Te			Consumer Products	105	7.6%	
Secondary Industry (Excluding Construction)Communications & Electronic Products906.5%32.5%Chemical & Energy Products614.4%Automobile & Transportation Vehicles513.7%Metal & Non-Metaliic Products402.9%Civil Engineering & Construction151.1%Public Utilities (water, electricity, etc.)70.5%Papermaking & Printing50.4%Rubber & Plastics Products30.2%Other10.1%Fertiary Industry (Including Construction)62.7%Financial Services144Finance9.3%Financial Services14410.5%Real Estate7.8%Construction & Real Estate826.0%Wholesale & Retail Trades9.6%Wholesale & Retail1087.9%Information Transmission, software & Information4.5%Scientific Research & Technical Services946.8%Menting, Leasing Activities & Business Services3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Other Services17.9%Culture, Erthertainment & Recreation282.0%Information Technology151.6%Catering, Accommodation & Travel251.8%Construction & a Restaurants1.6%Catering, Accommodation & Travel251.8%Construction & a Restaurants1.6%Catering, Accommodation & Travel28 <td></td> <td></td> <td>Machinery & Equipment</td> <td>98</td> <td>7.1%</td>			Machinery & Equipment	98	7.1%	
Secondary Industry (Excluding Construction) 32.5% Chemical & Energy Products61 4.4% Automobile & Transportation Vehicles51 3.7% Metal & Non-Metallic Products40 2.9% Civil Engineering & Construction15 1.1% Public Utilities (water, electricity, etc.)7 0.5% Public Utilities (water, electricity, etc.)7 0.5% Public Utilities (water, electricity, etc.)3 0.2% Read Estate7.8\%Construction 15 Finance9.3%Financial Services 144 0.5% Finance9.3%Construction & Real Estate 82 6.0% Information Transmission software & Information Technology 4.5% Construction & Real Estate 82 6.0% Information Transmission software & Information Technology 4.5% Catering, Accommodation & Storage 29 2.1% Renting, Leasing Activities & Business Services 1.6% Catering, Accommodation & Travel 25 1.8% Accommodation & Restaurants 1.6% Catering, Accommodation & Travel 25 1.8% Other Services 1.6% Catering, Accommodation & Travel 25 1.8% Other Services 1.6% Catering, Accommodation & Travel 25 1.8% Accommodation & Restaurants 1.6% Catering, Accommodation & Travel 25 1.8% Other Services 1.6% Catering, Accommodation & Travel 25 0.4% Other Services 1.6% </td <td></td> <td></td> <td>Pharmaceutical Products & Medical Devices</td> <td>95</td> <td>6.9%</td>			Pharmaceutical Products & Medical Devices	95	6.9%	
Secondary Industry (Excluding Construction) Automobile & Transportation Vehicles 51 3.7% 32.5% Metal & Non-Metallic Products 40 2.9% Civil Engineering & Construction 15 1.1% Public Utilities (water, electricity, etc.) 7 0.5% Papermaking & Printing 4 0.3% Rubber & Plastics Products 3 0.2% Other 1 0.1% Finance 9.3% Financial Services 144 10.5% Real Estate 7.8% Construction & Real Estate 82 6.0% Wholesale & Retail Trades 9.6% Wholesale & Retail 108 7.9% Information Transmission, software & Information Transmission, software & Information Transmission, software & Information Transmission, software & Information A.5% Scientific Research & Technical Services 5 0.4% Accommodation & Resider A.0% Logistics, Transportation & Storage 29 2.1% Renting, Leasing Activities & 3.1% Professional Services & Business Services 143 10.4% Accommodation & Restaurants 1.6% Catering, Accommodation & Trave			Communications & Electronic Products	90	6.5%	
Secondary Industry (Excluding Construction) 32.5% Metal & Non-Metallic Products 40 2.9% Civil Engineering & Construction 15 1.1% Civil Engineering & Construction 15 1.1% Public Utilities (water, electricity, etc.) 7 0.5% Papermaking & Printing 5 0.4% Textiles & Clothing 4 0.3% Rubber & Plastics Products 3 0.2% Other 1 0.1% Finance 9.3% Financial Services 144 10.5% Real Estate 7.8% Construction & Real Estate 82 6.0% Wholesale & Retail Trades 9.6% Wholesale & Retail 108 7.9% Information Transmission, software & Information Technology 4.5% Scientific Research & Technical Services 94 6.8% Restign Activities & Business Services 3.1% Professional Services & Business Services 94 6.8% Accommodation & Restaurants 1.6% Catering, Accommodation & Travel 25 1.8% Accommodation & Restaurants			Chemical & Energy Products	61	4.4%	
(Excluding Construction) 32.5% Metal & Non-Metallic Products 40 2.9% Civil Engineering & Construction 15 1.1% Public Utilities (water, electricity, etc.) 7 0.5% Papermaking & Printing 5 0.4% Textiles & Clothing 4 0.3% Rubber & Plastics Products 3 0.2% Other 1 0.1% Tertiary Industry (Including Construction) 62.7% 0ther 1 0.1% Finance 9.3% Financial Services 144 10.5% Real Estate 7.8% Construction & Real Estate 82 6.0% Vholesale & Retail Trades 9.6% Wholesale & Retail 108 7.9% Information Transmission, software & Information A.5% Scientific Research & Technical Services 9.4 6.8% Professional Services & Business Services 143 10.4% 10.4% Restaurants 1.6% Catering, Accommodation & Travel 25 <t< td=""><td></td><td></td><td>Automobile & Transportation Vehicles</td><td>51</td><td>3.7%</td></t<>			Automobile & Transportation Vehicles	51	3.7%	
Civil Engineering & Construction 15 1.1% Public Utilities (water, electricity, etc.) 7 0.5% Papermaking & Printing 5 0.4% Papermaking & Printing 4 0.3% Rubber & Plastics Products 3 0.2% Other 1 0.1% Tertiary Industry (Including Construction) 62.7% 598 43.5% Finance 9.3% Financial Services 144 10.5% Real Estate 7.8% Construction & Real Estate 82 6.0% Construction 4.8% Construction & Real Estate 82 6.0% Vholesale & Retail Trades 9.6% Wholesale & Retail 108 7.9% Information Transmission, software & Information Transmission, Technology 4.5% Scientific Research & Technical Services 5 0.4% Renting, Leasing Activities & 3.1% Professional Services & Business Services 5 0.4% Business Services 3.1% Professional Services & Business Services 143 10.4% Other Services 1.6%	, , ,	32.5%	Metal & Non-Metallic Products	40	2.9%	
$\begin{tabular}{ c c c c } \hline Papermaking & Printing & 5 & 0.4\% \\ \hline Papermaking & Printing & 5 & 0.4\% \\ \hline Textiles & Clothing & 4 & 0.3\% \\ \hline Rubber & Plastics Products & 3 & 0.2\% \\ \hline Rubber & Plastics Products & 3 & 0.2\% \\ \hline Other & 1 & 0.1\% \\ \hline Other & 1.0\% \\ \hline Other & 1 & 0.1\% \\ \hline Other & 1 & 0.1\% \\ \hline Other & 1 & 0.1\% \\ \hline Other & 1.0\% \\ \hline Other & $	(Excluding construction)		Civil Engineering & Construction	15	1.1%	
Image: Construction in the section is the section in the section is the section in the section is the section in the sectin the section in the section in the section in the secti			Public Utilities (water, electricity, etc.)	7	0.5%	
Rubber & Plastics Products 3 0.2% Rubber & Plastics Products 3 0.2% Other 1 0.1% Tertiary Industry (Including Construction) 62.7% 598 43.5% Finance 9.3% Financial Services 144 10.5% Real Estate 7.8% Construction & Real Estate 82 6.0% Construction 4.8% Construction & Real Estate 82 6.0% Information Transmission, software & Information Technology 9.6% Wholesale & Retail 108 7.9% Renting, Leasing Activities & Business Services 3.1% Telecommunications & Information Services 94 6.8% Accommodation & Restaurants 4.6% Scientific Research & Technical Services 5 0.4% Restaurants 1.6% Catering, Accommodation & Travel 25 1.8% Mealth Care, Medical & Sanitation 78 5.7% 1.2% Other Services 17.9% Culture, Entertainment & Recreation 28 2.0% Environment & Public Facilities Management 5			Papermaking & Printing	5	0.4%	
Image: constructionImage: constructionImage: constructionImage: constructionTertiary Industry (Including Construction)62.7%Image: constructionSet 3Finance9.3%Financial Services14410.5%Finance9.3%Construction & Real Estate14410.5%Real Estate7.8%Construction & Real Estate826.0%Construction4.8%Telecommunications & Real Estate946.8%Information Transmission, software & Information Transmission, Technology4.5%Scientific Research & Technical Services946.8%Transport, Storage and Post4.0%Logistics, Transportation & Storage292.1%Renting, Leasing Activities & B.3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Other Services17.9%Culture, Entertainment & Recreation785.7%Other Services17.9%Culture, Entertainment & Recreation282.0%Automobile related services50.4%Automobile related services50.4%			Textiles & Clothing	4	0.3%	
Tertiary Industry (Including Construction)62.7%Total (Manufacturing)59843.5%Finance9.3%Financial Services14410.5%Finance9.3%Financial Services14410.5%Real Estate7.8%Construction & Real Estate826.0%Construction4.8%Construction & Real Estate1087.9%Information Transmission software & Information Technology4.5%Telecommunications & Information Services946.8%Scientific Research & Technical Services50.4%0.4%0.4%Renting, Leasing Activities & Business Services3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%1.8%Other Services17.9%Culture, Entertainment & Recreation282.0%Intervences17.9%Culture, Entertainment & Recreation282.0%Automobile related services50.4%1.6%1.6%1.6%Environment & Public Facilities Management Automobile related services50.4%Construction & Recension282.0%1.6%1.6%Environment & Public Facilities Management50.4%Other Services150.4%1.6%1.6%Environment & Public Facilities Management50.4%Environment & Public Facilities Management50.4%Environment & Public Facilities Management50.4			Rubber & Plastics Products	3	0.2%	
Tertiary Industry (Including Construction)62.7%62.7%14410.5%Finance9.3%Financial Services14410.5%Real Estate7.8%Construction & Real Estate826.0%Construction4.8%Construction & Real Estate826.0%Wholesale & Retail Trades9.6%Wholesale & Retail1087.9%Information Transmission, software & Information Technology1.6%Scientific Research & Technical Services946.8%Software & Information Technology4.0%Logistics, Transportation & Storage292.1%Renting, Leasing Activities & Business Services3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Other Services17.9%Culture, Entertainment & Recreation282.0%Environment & Public Facilities Management50.4%Automobile related services50.4%			Other	1	0.1%	
(Including Construction)62.7%60.7%Finance9.3%Financial Services14410.5%Real Estate7.8%Construction & Real Estate826.0%Construction4.8%Construction & Real Estate826.0%Wholesale & Retail Trades9.6%Wholesale & Retail1087.9%Information Transmission, software & Information Technology4.5%Telecommunications & Information Services946.8%Scientific Research & Technical Services50.4%6.8%0.4%Renting, Leasing Activities & Business Services3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Other Services17.9%Culture, Entertainment & Recreation282.0%Other Services17.9%Culture, Entertainment & Recreation282.0%Accommodation & Restaurants17.9%Culture, Entertainment & Recreation50.4%Culture, Entertainment & Recreation282.0%2.0%2.0%Culture, Entertainment & Recreation50.4%2.0%0.4%Culture, Entertainment & Recreation50.4%0.4%Culture, Entertainment & Recreation50.4%0.4%Culture, Entertainment & Recreation50.4%0.4%Culture, Entertainment & Recreation50.4%0.4%Culture, Entertainment & Recreation50.4%0.4% <th></th> <th></th> <th>Total (Manufacturing)</th> <th>598</th> <th>43.5%</th>			Total (Manufacturing)	598	43.5%	
Real Estate7.8% ConstructionConstruction & Real Estate826.0%Wholesale & Retail Trades9.6%Wholesale & Retail1087.9%Information Transmission software & Information Technology4.5%Telecommunications & Information Services946.8%Transport, Storage and Post4.0%Logistics, Transportation & Storage292.1%Renting, Leasing Activities & Business Services3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Other Services17.9%Culture, Entertainment & Recreation312.3%Other Services17.9%Culture, Entertainment & Recreation282.0%Health Care, Medical & Sanitation50.4%Culture, Entertainment & Recreation282.0%Health Care, Musical Services50.4%Culture, Entertainment & Recreation282.0%Environment & Public Facilities Management50.4%Automobile related services50.4%Automobile related services50.4%Automobile related services50.4%		62.7%				
Construction4.8%Construction & Real Estate826.0%Wholesale & Retail Trades9.6%Wholesale & Retail1087.9%Information Transmission, software & Information4.5%Telecommunications & Information Services946.8%Scientific Research & Technical Services50.4%Transport, Storage and Post4.0%Logistics, Transportation & Storage292.1%Renting, Leasing Activities & Business Services3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Other Services17.9%Culture, Entertainment & Recreation312.3%Other Services17.9%Culture, Entertainment & Recreation282.0%Invironment & Public Facilities Management50.4%Automobile related services50.4%Coulture & Recreation282.0%Invironment & Public Facilities Management50.4%Coulture & Revice Industry77756.5%	Finance	9.3%	Financial Services	144	10.5%	
Construction4.8%Wholesale & Retail Trades9.6%Wholesale & Retail1087.9%Information Transmission, software & Information Technology4.5%Telecommunications & Information Services946.8%Scientific Research & Technical Services50.4%Transport, Storage and Post4.0%Logistics, Transportation & Storage292.1%Renting, Leasing Activities & Business Services3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Other Services17.9%Culture, Entertainment & Recreation312.3%Other Services17.9%Culture, Entertainment & Recreation282.0%Automobile related services50.4%Other Services17.9%Service Industry77756.5%	Real Estate	7.8%	Construction & Pool Estate	00	6.00/	
Information Transmission, software & Information Technology4.5%Telecommunications & Information Services946.8%Software & Information Technology4.5%Scientific Research & Technical Services50.4%Transport, Storage and Post4.0%Logistics, Transportation & Storage292.1%Renting, Leasing Activities & Business Services3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Mealth Care, Medical & Sanitation785.7%Other Services17.9%Culture, Entertainment & Recreation282.0%Environment & Public Facilities Management50.4%Other Services17.9%Service Industry77756.5%	Construction	4.8%	Construction & Real Estate	02	0.0%	
software & Information Technology4.5%Scientific Research & Technical Services50.4%Transport, Storage and Post4.0%Logistics, Transportation & Storage292.1%Renting, Leasing Activities & Business Services3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Mealth Care, Medical & Sanitation785.7%Other Services17.9%Culture, Entertainment & Recreation282.0%Environment & Public Facilities Management50.4%Other Services17.9%Service Industry77756.5%	Wholesale & Retail Trades	9.6%	Wholesale & Retail	108	7.9%	
TechnologyScientific Research & Technical Services50.4%Transport, Storage and Post4.0%Logistics, Transportation & Storage292.1%Renting, Leasing Activities & Business Services3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Mealth Care, Medical & Sanitation785.7%Other Services17.9%Culture, Entertainment & Recreation282.0%Environment & Public Facilities Management50.4%Mutomobile related services50.4%CultureService Industry77756.5%	-		Telecommunications & Information Services	94	6.8%	
Renting, Leasing Activities & Business Services3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Mestaurants1.6%Catering, Accommodation & Travel251.8%Mestaurants1.6%Catering, Accommodation & Travel251.8%Mestaurants17.9%Health Care, Medical & Sanitation785.7%Other Services17.9%Culture, Entertainment & Recreation282.0%Environment & Public Facilities Management50.4%Automobile related services50.4%Culture, Entertainment & Service Industry77756.5%		4.5%	Scientific Research & Technical Services	5	0.4%	
Business Services3.1%Professional Services & Business Services14310.4%Accommodation & Restaurants1.6%Catering, Accommodation & Travel251.8%Mestaurants1.6%Catering, Accommodation & Travel251.8%Mestaurants1.6%Health Care, Medical & Sanitation785.7%Other Services17.9%Culture, Entertainment & Recreation282.0%Environment & Public Facilities Management50.4%Automobile related services50.4%Culture, Entertainment & Services50.4%MethodsService Industry77756.5%	Transport, Storage and Post	4.0%	Logistics, Transportation & Storage	29	2.1%	
Restaurants1.6%Catering, Accommodation & Iravel251.8%Restaurants1.6%Health Care, Medical & Sanitation785.7%Other Services17.9%Culture, Entertainment & Recreation312.3%Environment & Public Facilities Management50.4%Automobile related services50.4%Service Industry77756.5%		3.1%	Professional Services & Business Services	143	10.4%	
Other Services 17.9% Education 31 2.3% Environment & Recreation 28 2.0% Environment & Public Facilities Management 5 0.4% Automobile related services 5 0.4% Service Industry 777 56.5%		1.6%	Catering, Accommodation & Travel	25	1.8%	
Other Services 17.9% Culture, Entertainment & Recreation 28 2.0% Environment & Public Facilities Management 5 0.4% Automobile related services 5 0.4% Service Industry		17.9%	Health Care, Medical & Sanitation	78	5.7%	
Environment & Public Facilities Management50.4%Automobile related services50.4%Service Industry77756.5%			Education	31	2.3%	
Automobile related services50.4%Service Industry77756.5%	Other Services		Culture, Entertainment & Recreation	28	2.0%	
Service Industry 777 56.5%			Environment & Public Facilities Management	5	0.4%	
			Automobile related services	5	0.4%	
Total 100.0% Total 1,375 100.0%			Service Industry	777	56.5%	
	Total	100.0%	Total	1,375	100.0%	

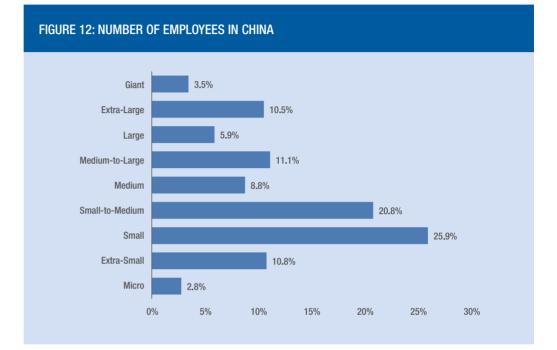
DATA DISPLAY: INDUSTRY DISTRIBUTION OF SURVEY VS. INDUSTRY DISTRIBUTION OF NATIONAL BUREAU OF

Note: We have 187 firms in the survey with business operations that belong to both service and manufacturing sector.

The composition of the service sector in our sample is close to the contribution of service industries to the first guarter China's GDP in NBS report. For example, "Financial Services" accounts for 10.5% of the service sector in terms of sample number, and 9.3% of China's GDP in NBS report; "Information Services" accounts for 6.8% of the service sample and 4.5% of GDP. "Logistics, Transportation & Storage" accounts for 2.1% of the service sample and 4.0% of GDP. "Catering, Accommodation & Travel" accounts for 1.8% of the service sample and 1.6% of the GDP. In the NBS data, service industries such as "Education", "Health Care" and "Entertainment" are lumped together into "Other Services", while in our case, "Education" (2.3%), "Health Care" (5.7%) and "Culture, Entertainment & Recreation" (2.0%) are listed separately. These similarities in industry distributions increase the reference value of the survey result.

2.4. BUSINESS SIZES

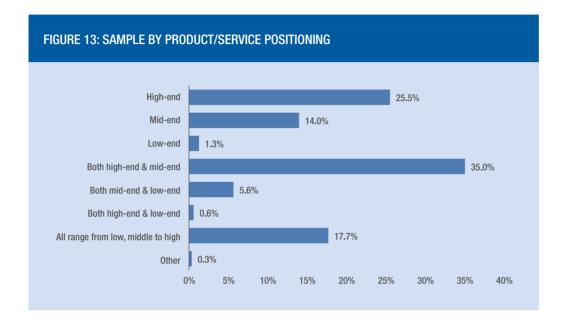
Figure 12 presents the distribution of firm size. We measure firm size by number of employees in China.



DATA DISPLAY: FIRM SIZE (NUMBER OF EMPLOYEES IN CHINA)				
	Number	Percent		
Giant	50,000 or above	41	3.5%	
Extra-Large	10,000 to 49,999	125	10.5%	
Large	5,000 to 9,999	70	5.9%	
Medium-to-Large	2,000 to 4,999	132	11.1%	
Medium	1,000 to 1,999	104	8.8%	
Small-to-Medium	300 to 999	247	20.8%	
Small	50 to 299	308	25.9%	
Extra-Small	10 to 49	128	10.8%	
Micro	0 to 9	33	2.8%	
	Total	1,188	100.0%	

2.5. PRODUCT/SERVICE POSITIONING

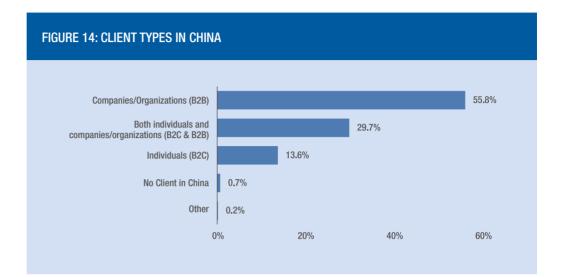
From Figure 13 we see that majority of the firms target the high-end spectrum of the market. 25.5% consider themselves as high-end and 35% target both high and middle-end. 17.7% cater to all range, and only 1.3% consider themselves as low-end. This observation echoes the unique characteristic that the firms in this survey are the leading players in their respective fields.



DATA DISPLAY: PRODUCT/SERVICE POSITIONING				
	Number	Percent		
High-end	303	25.5%		
Mid-end	166	14.0%		
Low-end	15	1.3%		
Both high-end & mid-end	416	35.0%		
Both mid-end & low-end	67	5.6%		
Both high-end & low-end	7	0.6%		
All range from low, middle to high	210	17.7%		
Other	4	0.3%		
Total	1,188	100.0%		

2.6. CLIENT TYPES IN CHINA

Figure 14 shows the distribution of client types in China.



DATA DISPLAY: CLIENT TYPES IN CHINA				
	Number	Percent		
Companies/Organizations (B2B)	663	55.8%		
Both individuals and companies/ organizations (B2C & B2B)	353	29.7%		
Individuals (B2C)	162	13.6%		
No Client in China	8	0.7%		
Other	2	0.2%		
Total	1,188	100.0%		



SECTION 3

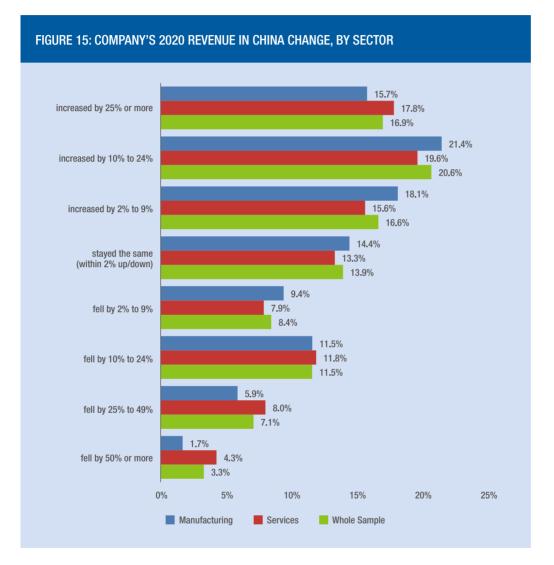
COMPARING THE IMPACT FROM COVID-19 PANDEMIC WITHIN-CHINA AND OUTSIDE-CHINA

This section gives a detailed analysis of the impact of COVID-19 pandemic in 2020. We draw comparison between within-China and outside-China from four important dimensions: revenue change compared to 2019, timing of maximum revenue drop, timing of business operation recovery, impact on supply chain operations.

3.1. IMPACT ON BUSINESS OPERATIONS REGION-WISE

3.1.A. BUSINESS-IN-CHINA

Figure 15 shows the revenue change in China from the impact of COVID-19 on manufacturing and services, and Figure 16 by ownership type. The figures are based on Question 9 "Compared to 2019, your company's 2020 revenue from business-in-China:"



Both manufacturing and services sector have approximately 15% of firms that have almost no change in revenue. As can be seen from Figure 15, there is more variation in the performance of the service sector: compared to manufacturing sector and the whole sample, more service sector firms are clustered at either an increase of 25% or more in revenue or a 50% or more drop in revenue. From Figure 16, 63.6% of SOEs reported an increase, while only 51.9% of private enterprises and 54.1% of foreign-owned firms stated that there was an increase in revenue from business-in-China.⁵ At the same time, only 21.8% of SOEs reported a drop in revenue, whereas 32.4% of private enterprises and 29.6% of foreign firms stated a revenue drop. Foreign firms had the smallest proportion with a reported of 25% or more.

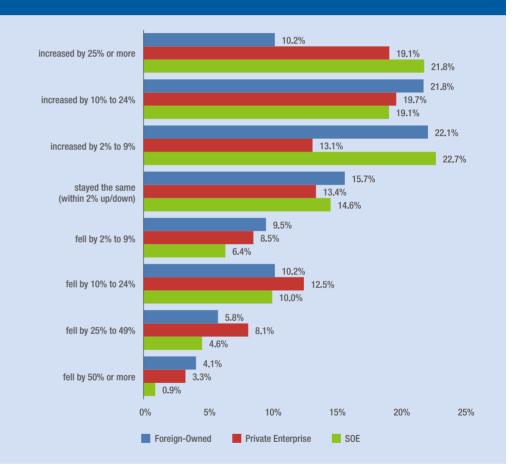


FIGURE 16: COMPANY'S 2020 REVENUE IN CHINA CHANGE, BY OWNERSHIP TYPE

Among the service sector, "Catering, Accommodation & Travel" have the greatest number of firms reporting a drop of 25% or more, followed by "Education" and "Logistics, Transportation & Storage". Whereas "Logistics, Transportation & Storage" also have the greatest number of firms reporting an increase of 25% or more, followed by "Telecommunications & Information Services", and "Culture, Entertainment & Recreation". For the manufacturing sector, "Agribusiness" has the biggest reported share for 25% or more revenue drop, followed by "Pharmaceutical Products" and "Consumer Products". "Pharmaceutical Products" was also the industry that have the biggest reported share in a 25% or more increase in revenue, followed by "Communications & Electronic Products", and "Automobile & Transportation Vehicles".

⁵ For Figures 17 and 18, we did not present results of sectors whose shares in the entire industry stay below 2%.

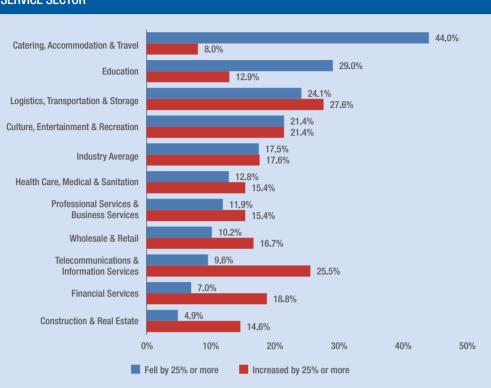
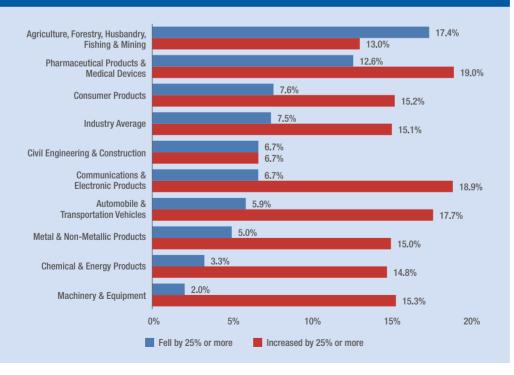


FIGURE 17: 2020 CHINA REVENUE, "FELL BY 25% OR MORE" VS. "INCREASE BY 25% OR MORE", SERVICE SECTOR

FIGURE 18: 2020 CHINA REVENUE, "FELL BY 25% OR MORE" VS. "INCREASED BY 25% OR MORE", MANUFACTURING SECTOR



3.1.B. BUSINESS-OUTSIDE-CHINA

The figures are based on Question 10 "Compared to 2019, your company's 2020 revenue from business-outside-China:" Note that firms who choose "100% operating only China" in Q8 skip Q10.

As can be seen from Figure 19, the manufacturing sector was less vulnerable compared to the service sector, with 11.4% of the sector reporting an increase of 25% or more (whereas 15.7% reported an increase of the same magnitude for business-in-China). 20.7% of the service sector reported almost no change in revenue from overseas business, however, 9.8% reported a drop of more than 50% from business-outside-China. From Figure 20⁶, we find that 58.2% of foreign-owned firms have a revenue drop in business-outside-China, whereas SOEs and private firms have similar share in revenue decline (41%). Private firms on average performed better than their counterparts, with 34.6% reporting an increase in revenue from overseas operations. SOEs and foreign firms performed similarly, with 29.5% and 28.2% reporting an increase, respectively.

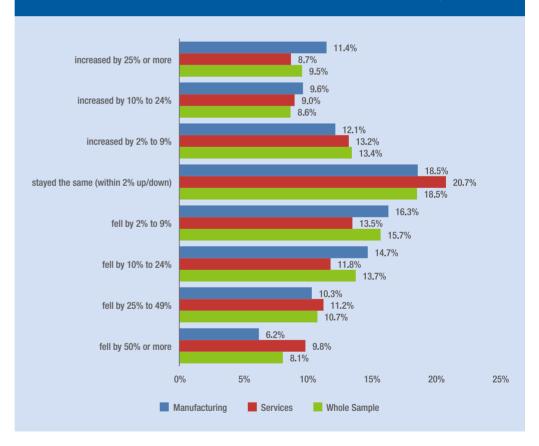
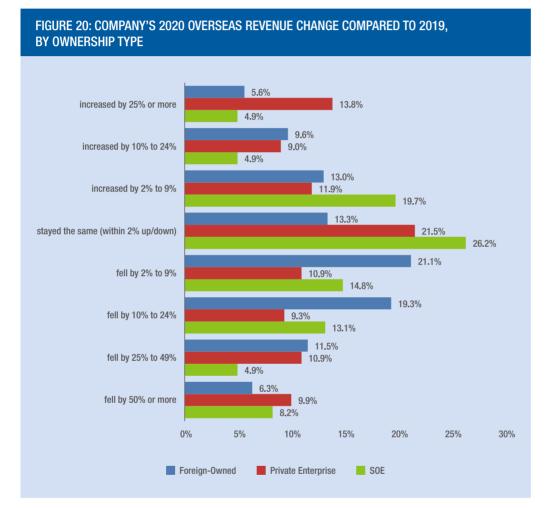


FIGURE 19: COMPANY'S 2020 OVERSEAS REVENUE CHANGE COMPARED TO 2019, BY SECTOR

⁶ For Figures 21 and 22, we did not present results of sectors whose shares in the entire industry stay below 2%.

Among the service sector, "Catering, Accommodation & Travel" have the greatest number of firms reporting a drop of 25% or more, followed by "Construction & Real Estate", and "Culture, Entertainment & Recreation". "Healthcare, Medical & Sanitation" have the greatest number of firms reporting an increase of 25% or more, followed by "Logistics, Transportation & Storage". For the manufacturing sector, "Machinery & Equipment" have the biggest reported share for 25% or more revenue drop, followed by "Consumer Products" and "Agribusiness". "Pharmaceutical Products & Medical Devices" was the industry that have the biggest reported share in a 25% or more increase in revenue, followed by "Agribusiness", and "Automobile & Transportation Vehicles".



26

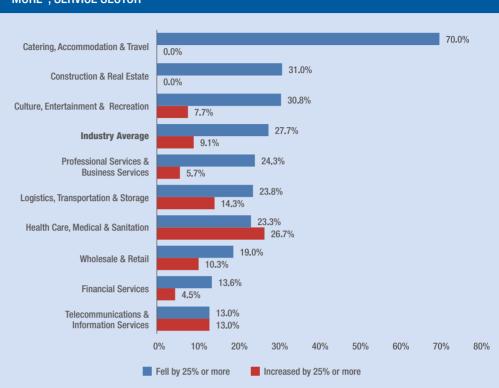
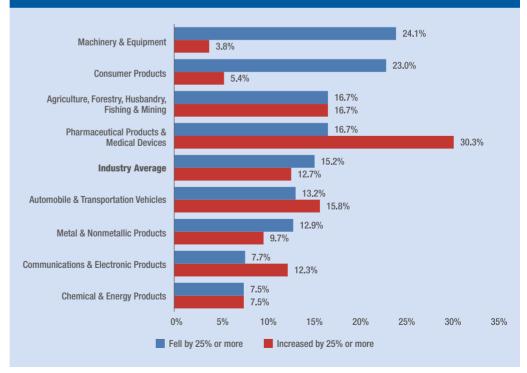


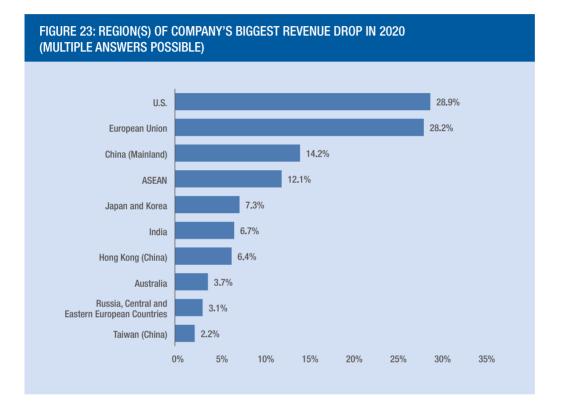
FIGURE 21: 2020 OVERSEAS REVENUE, "FELL BY 25% OR MORE" VS. "INCREASED BY 25% OR MORE", SERVICE SECTOR

FIGURE 22: 2020 OVERSEAS REVENUE "FELL BY 25% OR MORE" VS. "INCREASED BY 25% OR MORE", MANUFACTURING SECTOR



3.1.C. IMPACT FROM BUSINESS-OUTSIDE-CHINA BY REGION

Based on Question 11 "Compared to 2019, which region(s) did your company's revenue drop the most in 2020? (Multiple Answers Possible)". To avoid misleading results, we exclude firms whose choose the first option in Q8 (revenue contribution of China is 100).⁷ Among the firms that do not operate solely in China (671 firms), the biggest outside-China revenue drop occurred in U.S. and EU.



For service sector, more firms reported a drop in U.S. (29.9%) than in EU (24.6%). For both regions, "Catering, Accommodation & Travel" have the greatest number of firms reporting a drop. For manufacturing sector, slightly more firms reported a drop in EU (32.8%) than in U.S. (29.9%).

⁷ For Figures 24 and 25, we did not present results of sectors whose shares in the entire industry stay below 2% (Education, Technical Services, Environment & Public Utilities, Automobile in Services; Public Utilities, Papermaking & Printing, Rubber & Plastics, Civil Engineering & Construction, Textile & Clothing).

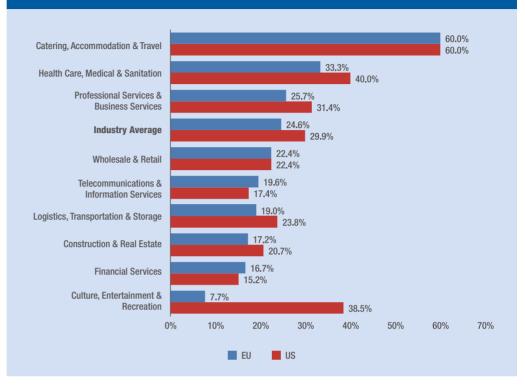
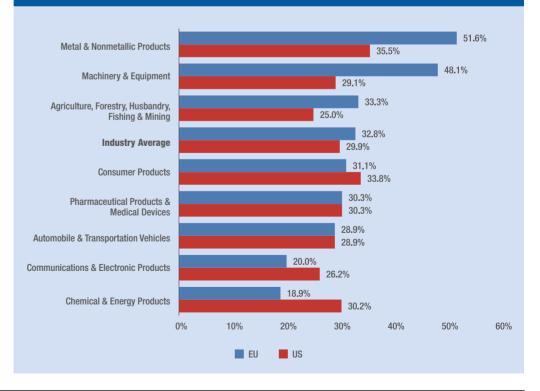


FIGURE 24: SHARE OF COMPANIES IN SERVICES CHOOSING EU/US AS THE REGION WHERE REVENUE DROPPED THE MOST IN 2020

FIGURE 25: SHARE OF COMPANIES IN MANUFACTURING CHOOSING EU/US AS THE REGION WHERE REVENUE DROPPED THE MOST IN 2020



3.2. IMPACT ON BUSINESS OPERATIONS TIMEWISE

3.2.A. BUSINESS-IN-CHINA

Based on Question 14 "In which quarter did your company's China operating revenue drop the most? (Multiple Answers Possible)" we observe that on average, the majority of companies felt the impact on revenue in China most sharply in 2020 Q1. This is true across manufacturing and service sectors, also across different ownership types. Regardless of business sector or ownership type, we find similar proportion that reported no drop in revenue.

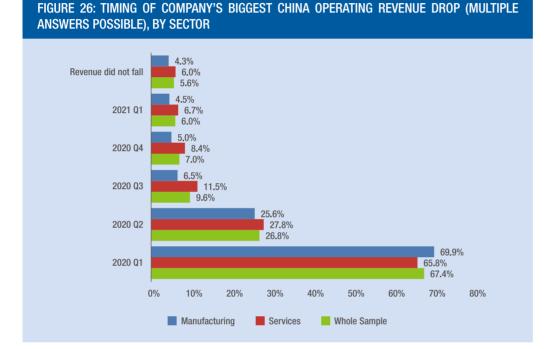
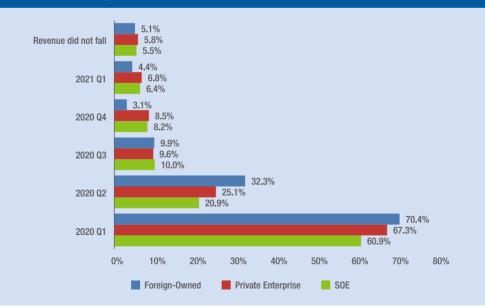


FIGURE 27: TIMING OF COMPANY'S BIGGEST CHINA OPERATING REVENUE DROP (MULTIPLE ANSWERS POSSIBLE), BY OWNERSHIP TYPE



3.2.B. BUSINESS-OUTSIDE-CHINA

Based on Question 15 "In which quarter did your company's outside-China operating revenue drop the most? (Multiple Answers Possible)"⁸ we observe that on average most companies felt the impact on overseas revenue in 2020 Q2. This is true across both manufacturing and service sectors. By examining across ownership types, we find that foreign firms also suffered greatly in 2020 Q3 and have a lower share of firms reporting no decline in revenue (4.1% compared to 7.7% of private enterprises and 8.2% of SOEs).

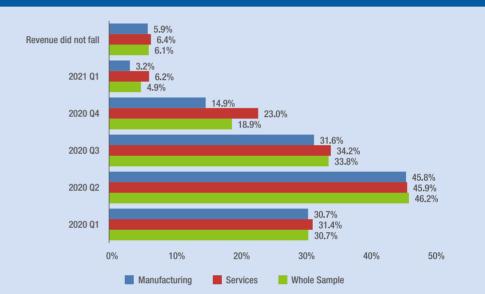
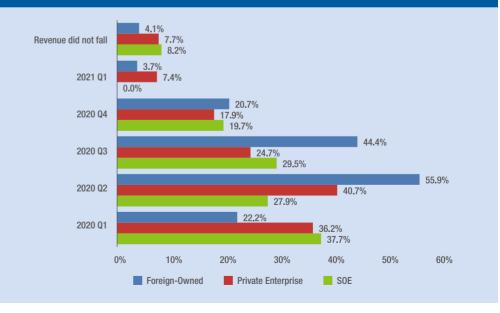


FIGURE 28: TIMING OF COMPANY'S BIGGEST OUTSIDE-CHINA OPERATING REVENUE DROP (MULTIPLE ANSWERS POSSIBLE), BY SECTOR

FIGURE 29: TIMING OF COMPANY'S BIGGEST OUTSIDE-CHINA OPERATING REVENUE DROP (MULTIPLE ANSWERS POSSIBLE), BY OWNERSHIP TYPE



⁸ Firms who choose "100% operating only China" in Q8 skip Q15.

3.3. RECOVERY ON BUSINESS OPERATIONS IN CHINA

Based on Question 16 "In which quarter did your company's China operations recover by 80% or more for the first time? ", 31.6% companies reported a recovery by 80% or more in the second quarter of 2020, and 29% in the thrid quarter. Only 7.5% stated that they still have not recovered by 80% or more. In Figure 30 we find that regardless of ownership type, companies mainly reported a recovery of 80% or more in the second and third quarter of 2020. Slightly more private firms (8.0%) and foreign firms (7.1%) reported not yet recovered, as compared to SOEs (6.4%).

On average, 9.6% of service sector still have not recovered by 80% or more, and 6.6% of the manufacturing sector. Among the service sector, firms in "Education" and "Catering, Accommodation & Travel" are struggling the most. For firms in manufacturing, "Agribusiness" and "Consumer Products" are the industries that are lagging behind.⁹

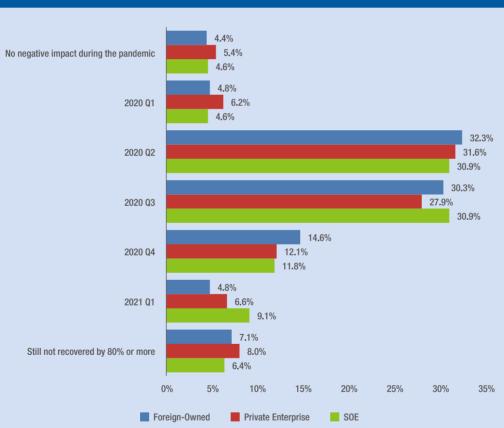


FIGURE 30: TIMING OF COMPANY'S CHINA OPERATIONS RECOVERED BY 80% OR MORE FOR THE FIRST TIME, BY OWNERSHIP TYPE

⁹ For Figures 31 and 32, we did not present results of sectors whose shares in the entire industry stay below 2%.

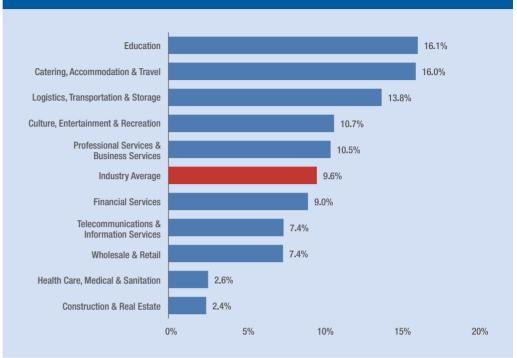
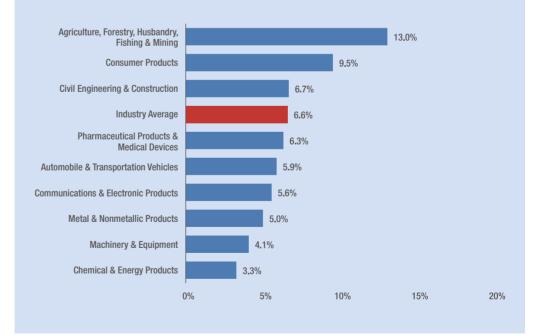


FIGURE 31: SHARE OF COMPANIES IN SERVICE SECTOR WHOSE CHINA OPERATIONS STILL HAVE NOT RECOVERED BY 80% OR MORE

FIGURE 32: SHARE OF COMPANIES IN MANUFACTURING SECTOR WHOSE CHINA OPERATIONS STILL HAVE NOT RECOVERED BY 80% OR MORE



3.4. SUPPLY CHAIN

Based on Question 18 "How did COVID-19 affect the within-China supply chain relied by your company?", Figure 33 shows that most of the firms have almost no impact or only moderate negative impact. For firms that experience a very large negative impact, we have 7.1% of private enterprises, compared to 4.1% of foreign firms, and only 1.8% of SOEs. Since more firms in the manufacturing sector rely on supply chains, we break down the sector by industry in Figure 34.¹⁰ On average, 60.0% of manufacturing firms experienced a negative impact to their domestic supply chain, with "Civil Engineering & Construction" reporting the biggest share of firms being affected.

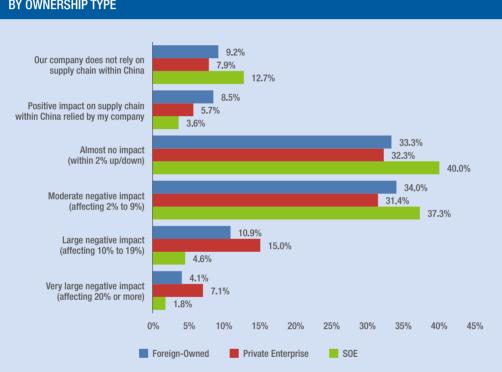


FIGURE 33: IMPACT OF COVID-19 ON THE WITHIN-CHINA SUPPLY CHAIN RELIED BY COMPANY, BY OWNERSHIP TYPE

¹⁰ For Figures 34 and 36, we did not present results of sectors whose shares in the entire industry stay below 2%.

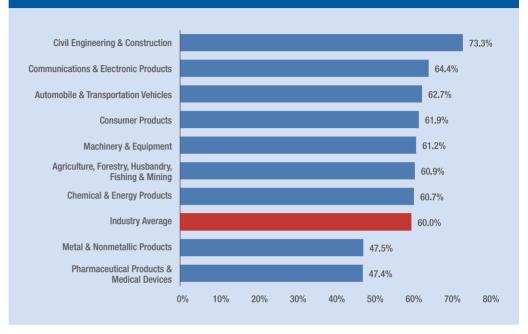


FIGURE 34: SHARE OF COMPANIES IN EACH MANUFACTURING INDUSTRY WITH DOMESTIC SUPPLY CHAIN NEGATIVELY AFFECTED BY COVID-19

Based on Question 19 "How did COVID-19 affect the overseas (outside China) supply chain relied by your company?", only 14.9% of the firms reported almost no impact, and 10% reported a negative impact of 20% or more. Foreign firms are affected more severely than their counterparts. In Figure 36, we see that on average, 64.1% of manufacturing firms experienced a negative impact to their overseas supply chain, with "Communications & Electronic Products" and "Automobile & Transportation Vehicles" having the biggest share of firms being affected.

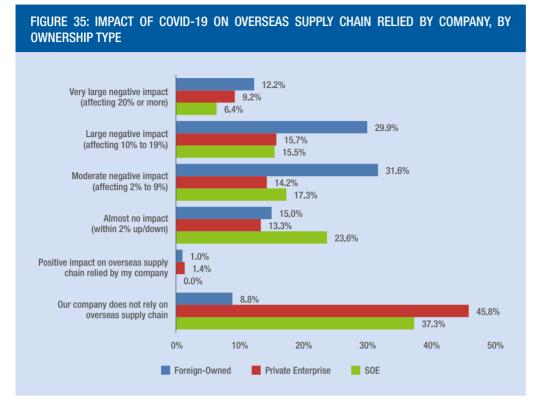
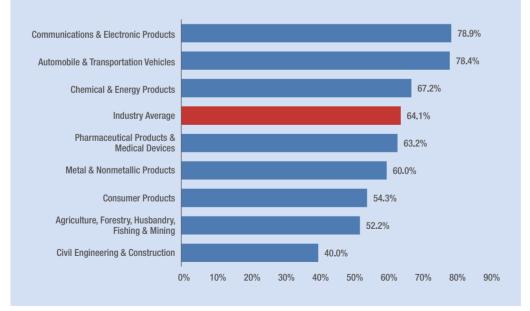


FIGURE 36: SHARE OF COMPANIES IN EACH MANUFACTURING INDUSTRY WITH OVERSEAS SUPPLY CHAIN NEGATIVELY AFFECTED BY COVID-19





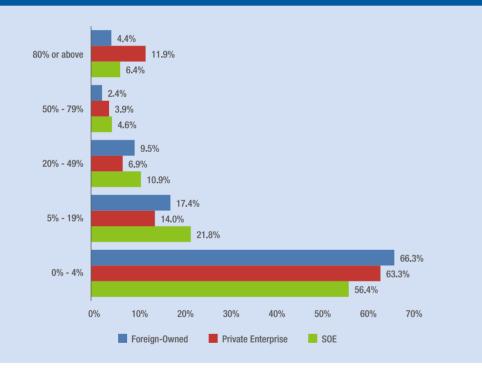
SECTION 4 ADJUSTMENTS TO THE IMPACT FROM COVID-19 PANDEMIC

This section discusses the adjustments taken by companies in response to the pandemic: adjustments to online business operations, adjustments in personnel management including hiring and salary decisions, and evaluation of government's support to firm.

4.1. ADJUSTMENTS TO ONLINE OPERATIONS

We find adjustments to online operations based on Question 12 "Looking back, in 2019 prior to the outbreak of COVID-19, what percentage of your China business was done online?" and Question 13 "As of today in 2021, what percentage of your China business is done online?". Before the outbreak, majority of the firms have less than 4% of business done online, regardless of ownership types. Private firms have a larger share of firms conducting 80% or more of their business online in 2019 already (11.9%) and increased slightly after the outbreak (12.5%). We find that the share of firms that have 4% or less business done online have dropped: 63.3% to 53.0% for private firms, 66.3% to 57.8% for foreign firms, and 56.4% to 43.6% for SOEs. For conducting 5% to 19% of businesses online, SOEs have increased significantly from 21.8% to 31.8%.

FIGURE 37: SHARE OF CHINA BUSINESS DONE ONLINE PRIOR TO THE OUTBREAK OF COVID-19, BY OWNERSHIP TYPE



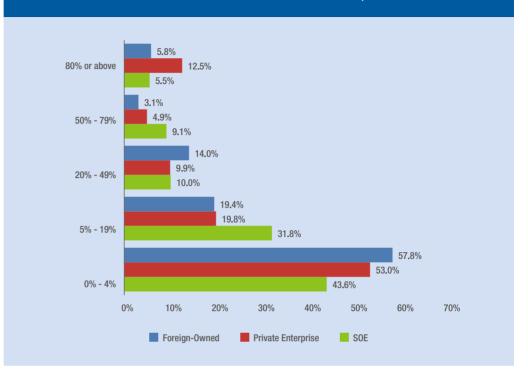


FIGURE 38: SHARE OF CHINA BUSINESS DONE ONLINE AS OF TODAY, BY OWNERSHIP TYPE

To draw implications of the decision of staying offline to going online, we compare the share of operating 4% or less businesses online between 2019 and 2021 by industries in Figures 39 and 40.¹¹ On average, 55.3% of the service sector had 4% or less online operations in 2019, whereas only 42.5% in 2021. For the manufacturing sector, 76.6% had 4% or less online operations in 2019, and dropped to 68.8% in 2021. All industries exhibited a migration to businesses online. Among the service sector, the biggest switch from offline to online is "Education" (64.5% had 4% or less online in 2019 compared to 41.9% in 2021), followed by "Culture, Entertainment & Recreation" (46.4% to 28.6%), and "Construction & Real Estate" (82.9% to 67.1%). Among the manufacturing sector, the biggest switch from offline to online is "Consumer Products" (51.4% to 33.3%), followed by" Agribusiness" (91.3% to 78.3%).

¹¹ For Figures 39 and 40, we did not present results of sectors whose shares in the entire industry stay below 2%.



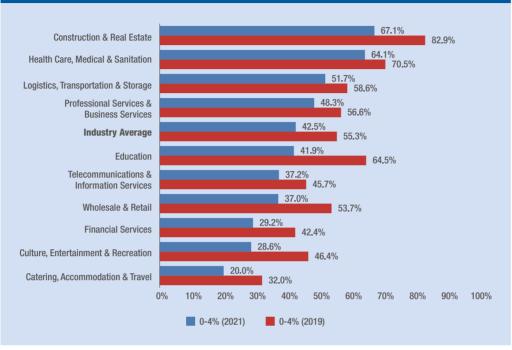
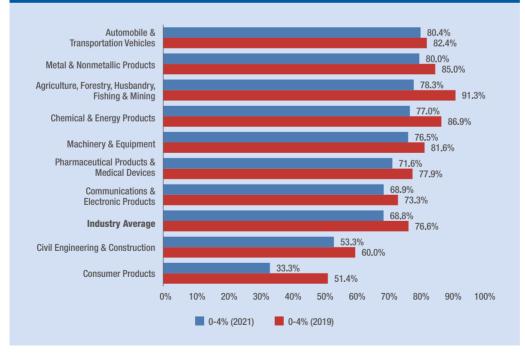


FIGURE 40: SHARE OF COMPANIES IN MANUFACTURING WITH CHINA BUSINESS DONE ONLINE FOR 4% OR LESS, 2019 VS. 2021



4.2. ADJUSTMENTS TO HUMAN RESOURCE (HR)

4.2.A. EMPLOYEE SIZE

Based on Question 21 "What has happened to your company's employee size since the outbreak of COVID-19?", Figure 41 ranks the proportion of companies in services and manufacturing, and Figure 42 ranks the companies by ownership. Both manufacturing and service sector have approximately 41% of firms reporting almost no change to employee size. Manufacturing sector was slightly more aggressive in recruiting (39.3% reported an increase) compared to service sector (38.1%). Across all ownership types, less than 10% reported significant reduction of employee size, while the majority of firms reported almost no change in human resource. We find 57.3% of SOEs chose to keep employee size constant, resulting in smaller reductions compared to private and foreign firms, but also less expansion as well. 41.7% of private firms reported to have increased hiring.

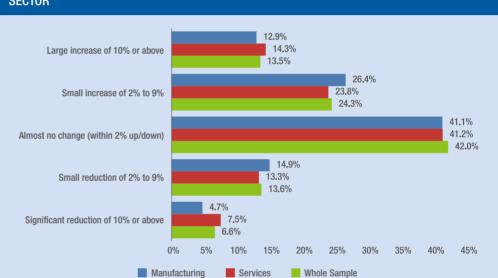
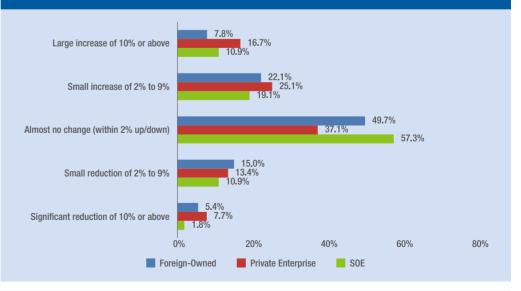


FIGURE 41: CHANGES TO COMPANY'S EMPLOYEE SIZE SINCE THE OUTBREAK OF COVID-19, BY SECTOR

FIGURE 42: CHANGES TO COMPANY'S EMPLOYEE SIZE SINCE THE OUTBREAK OF COVID-19, BY OWNERSHIP TYPE



4.2.B. EMPLOYEE SALARY

Based on Question 22 "What has happened to employee salary of your company since the outbreak of COVID-19?", Figure 43 ranks the proportion of companies in services and manufacturing, and Figure 44 ranks the companies by ownership. Majority of companies reported almost no change to salary, with 56.4 % of SOEs stating to hold salary within a 2% range. 38.1% of foreign firms reported an across-the-board salary increase of 2% to 9%, and 9.5% of private enterprise even reported an across-the-board salary increase of 10% or more.

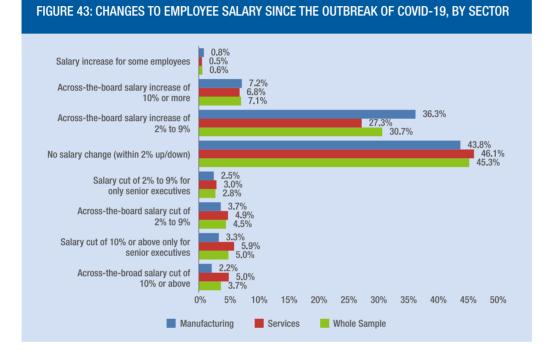
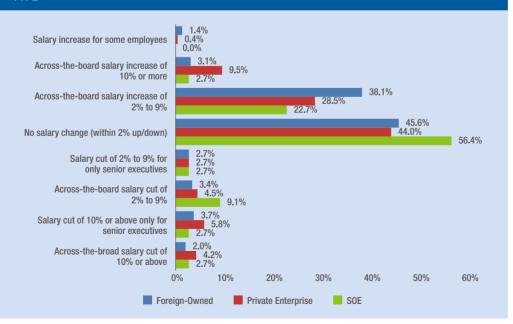


FIGURE 44: CHANGES TO EMPLOYEE SALARY SINCE THE OUTBREAK OF COVID-19, BY OWNERSHIP TYPE



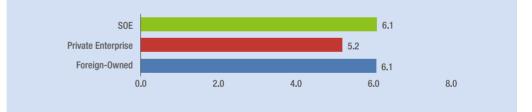
4.3. EVALUATION OF POLICY SUPPORT RECEIVED

Based on Question 24 "How do you rate the level of policy support (from the Chinese government) your company has received since the outbreak of COVID-19?", we find that the average rating is 5.5 for the whole sample, with manufacturing industry a higher rating of 5.8 and service industry a lower rating of 5.3. Figure 46 shows the rating of Chinese government's support to firms by state-owned enterprises, private companies and foreign-owned companies. The average score of the whole sample by registration types was 5.5 (slightly lower than the 5.72 rating we received from previous survey on the rating of policy support to industry conducted in April 2020). Both state-owned companies and foreign-owned companies gave a score of 6.1. Private companies assigned a score of 5.2 only. By firm size we find that rating of received policy support increases with firm size, reaching 6.7 for firms with 10,000 or more employees. However, micro firms with less than 10 employees reported a rating of only 4.3.

FIGURE 45: RATING OF POLICY SUPPORT RECEIVED BY COMPANY SINCE THE OUTBREAK OF COVID-19, BY SECTOR



FIGURE 46: RATING OF POLICY SUPPORT RECEIVED BY COMPANY SINCE THE OUTBREAK OF COVID-19, BY OWNERSHIP TYPE



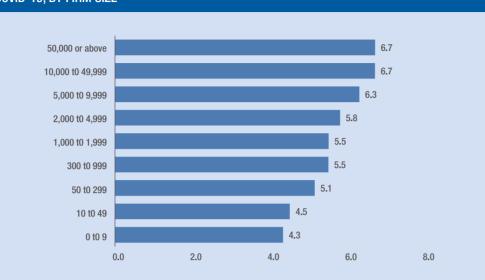


FIGURE 47: RATING OF POLICY SUPPORT RECEIVED BY COMPANY SINCE THE OUTBREAK OF COVID-19, BY FIRM SIZE



SECTION 5 CONFIDENCE IN BUSINESS OPERATIONS IN CHINA

5.1. MOST IMPORTANT FACTORS CONSIDERED FOR BUSINESS IN CHINA FOR 2021

Based on the first part of Question 26 "For this year (2021), what factors does your company care the most regarding China business operations? (Multiple answers possible)", Figure 48 shows the considerations of companies in service and manufacturing industries. For service sector, 45.8% is concerned with "Improving/worsening of China's government policy towards my company's business", followed by 38.7% concerned with "Tensions between China and the U.S. (and other Western countries)" and 31.9% with "Effectiveness of pandemic control outside China". For manufacturing sector, 44.6% is concerned with "Tensions between China and the U.S. (and other Western countries)", followed by 38.5% concerned with "Effectiveness of pandemic control outside China" and 35.1% with "Improving/worsening of China's government policy towards my company's business". Indicating that manufacturing sector is more affected by external conditions, whereas service sector focuses more on internal business-specific policies.

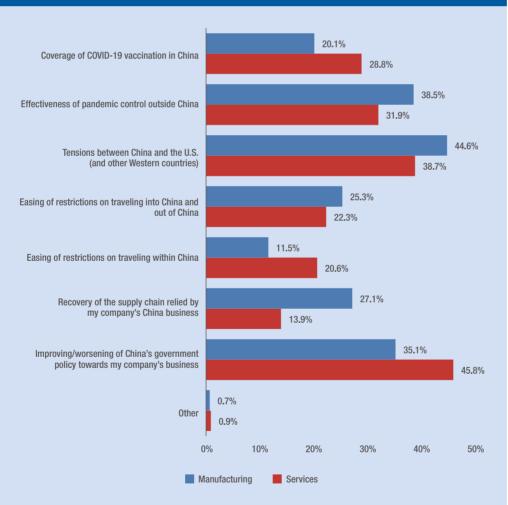


FIGURE 48: THE MOST CARED FACTORS REGARDING CHINA BUSINESS OPERATIONS IN 2021, BY SECTOR

Figure 49 shows the considerations of private and foreign firms. We find that private firms care the most about "Improving/worsening of China's government policy towards my company's business". The top three factors care by foreign firms are all related to external environment: "Tensions between China and the U.S. (and other Western countries)", "Effectiveness of pandemic control outside China", and "Easing of restrictions on traveling into China and out of China".

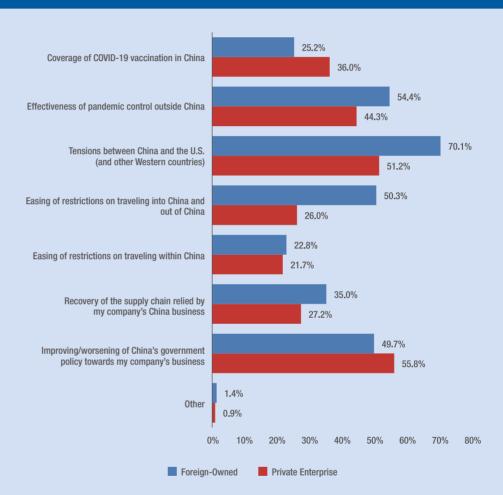
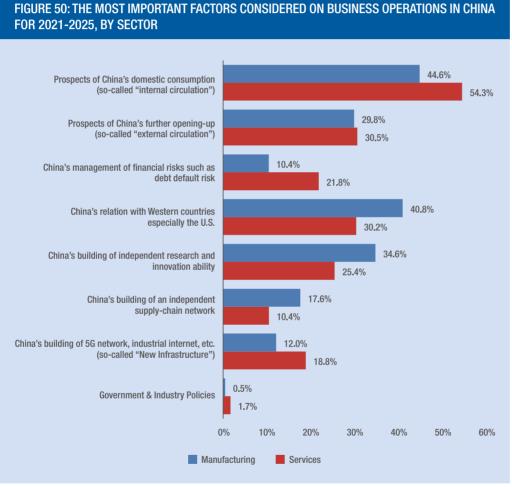


FIGURE 49: THE MOST CARED FACTORS REGARDING CHINA BUSINESS OPERATIONS IN 2021, BY OWNERSHIP TYPE

5.2. MOST IMPORTANT FACTORS CONSIDERED FOR BUSINESS IN CHINA FOR 2021-2025

Based on Question 29 "Looking forward, for the next 5 years (2021-2025), what aspects of China will have the most important impact on your company's business operations in China? (Multiple Answers Possible)", Figure 50 shows the considerations of companies in service and manufacturing industries. Both service and manufacturing sectors care the most about the internal circulation. Manufacturing sector also shows concern for China's relation with Western countries and China's independent innovation ability.



Note: 1 survey respondent in the service sector answered "other" to this question.

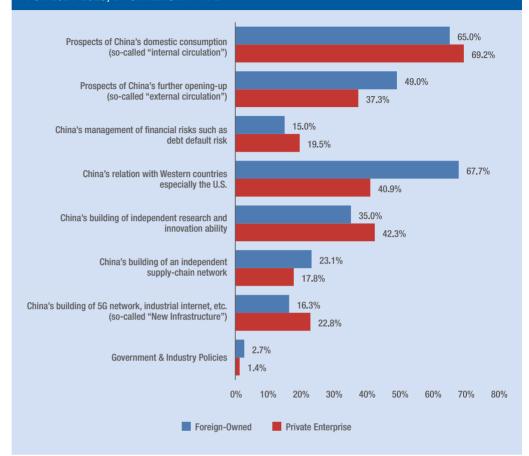


FIGURE 51: THE MOST IMPORTANT FACTORS CONSIDERED ON BUSINESS OPERATIONS IN CHINA FOR 2021-2025, BY OWNERSHIP TYPE

Note: 2 survey respondents of private enterprises answered "other" to this question.

5.3. EVALUATION OF CHINA'S DOMESTIC AND INTERNATIONAL BUSINESS ENVIRONMENT OVER THE PAST FIVE YEARS (2016-2020)

Based on Question 27 "Looking back, for the past 5 years (2016-2020), how would you describe China's domestic business environment for your company's operations in China?", Figure 52 displays the evaluation by ownership type. 70.8% of SOEs, 64.2% of private firms, and 60.5% of foreign firms responded that domestic business environment improved. Among that, 23.8% of private firms and 24.5% of SOEs felt that domestic business improved significantly, whereas only 18.7% of the foreign firms felt the same way. However, 3.3% of private firms also expressed that domestic business environment worsened significantly for them, whereas only 1.8% for SOEs and 1.4% for foreign firms.

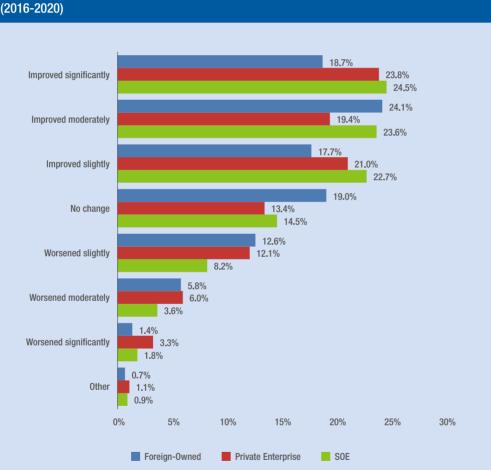


FIGURE 52: EVALUATION OF CHINA'S DOMESTIC BUSINESS ENVIRONMENT IN THE PAST 5 YEARS (2016-2020)

Based on Question 28 "Looking back, for the past 5 years (2016-2020), how would you describe the international business environment for your company's operations in China?", Figure 53 displays the evaluation by ownership type. 29.9% of private firms expressed no change, 28.2% of SOEs, and only 23.1% of foreign firms. 29.2% of foreign firms, 22.9% of private firms, and 24.6% of SOEs expressed that the overseas environment improved; 47.0% of foreign firms, 44.5% of private firms, and 41.8% of SOEs expressed that the overseas environment worsened. Private firms showed more extreme responses with only 5.4% feeling a significant improvement and 8.5% feeling a significant deterioration.

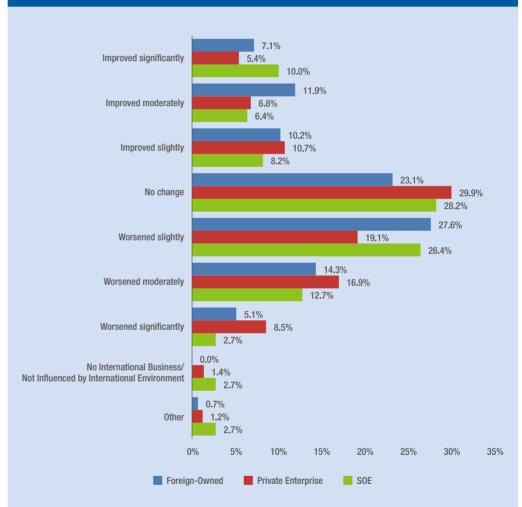
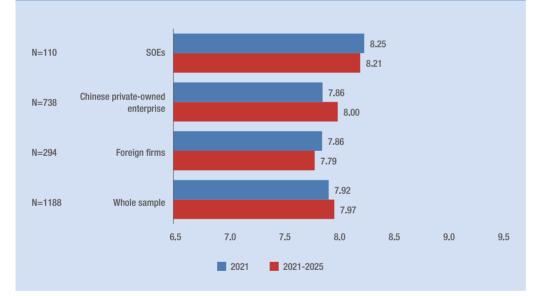


FIGURE 53: EVALUATOIN OF THE INTERNATIONAL BUSINESS ENVIRONMENT FOR OPERATIONS IN CHINA IN THE PAST 5 YEARS (2016-2020)

5.4. CONFIDENCE INDICES FOR BUSINESS OPERATIONS IN CHINA FOR 2021 AND 2021-2025

Based on Question 25 "How confident are you that your business operations in China will be successful this year (2021)? In the next 5 years (2021-2025)?", Figure 54 shows the confidence indices of state-owned enterprises, private companies and foreign-owned companies for this year and the next 5 years, respectively. Companies on average have higher confidence level in the long term. Compared to the average confidence level of our last survey (whole sample average of 7.15 for 2020 and 7.87 for 2020-2025), the companies are on average more confident going forward. However, by ownership type we find that private companies become more confident while foreign-owned companies become less when we move from short term projections to long term. When we again compare with the average confidence level of foreign companies from the survey conducted in our previous survey (6.78 for 2020 and 7.66 for 2020-2025), we find that the foreign companies on average are more confident than they were for both short and long term. The Chinese government should keep optimizing the investment and business environment for foreign companies and improve industrial policies to boost the confidence of foreign enterprises in Chinese economy and their recognition of business environment in China.

FIGURE 54: RATING OF CONFIDENCE LEVEL FOR SUCCESSFUL BUSINESS OPERATIONS IN CHINA, 2021 VS. 2021-2025 (LOWEST=0, HIGHEST=10)



By industry, we find that the manufacturing sector is on average more confident both in the short run and the long run. For the service sector, the most confident industry is "Environment & Public Facilities Management", reporting a confidence level of 9.00, even higher than the most confident industry "Textiles & Clothings" (8.67) in manufacturing. The least confident industry among both sectors is "Education", reporting only a level of only 6.87, much lower than the least confident industry "Papermaking & Printing" in manufacturing (7.40).

For the confidence level of the next five years, "Environment & Public Facilities Management" continue to be the most confident industry (9.20) and the most confident industry for manufacturing is instead "Textiles & Clothing" (9.00). The least confident industry among both sectors is "Education" (7.20), with "Scientific Research & Technical Services" being a close second (7.23). "Papermaking & Printing" remains to be the least confident industry in manufacturing (7.60).

9.00 **Environment &** Public Facilities Management 9,20 8.20 Telecommunications & Information Services 8.32 8.08 Catering, Accommodation & Travel 8.21 7.98 Professional Services & 8.00 **Business Services** 7.90 Health Care, Medical & Sanitation 7.98 7.86 Wholesale & Retail 7.97 7.79 **Construction & Real Estate** 7.83 7.77 Whole Sample of the Sector 7.82 7 75 Culture, Entertainment & Recreation 7.76 7.67 **Financial Services** 7.71 7.60 Automobile Related Services 7.61 7.48 Logistics, Transportation & Storage 7.60 7.40 Scientific Research & **Technical Services** 7.23 6.87 Education 7.20 6.5 7 7.5 8 8.5 9 9.5 2021 2021-2025

FIGURE 55: RATING OF CONFIDENCE LEVEL FOR SUCCESSFUL BUSINESS OPERATIONS IN CHINA, 2021 VS. 2021-2025, SERVICE SECTOR

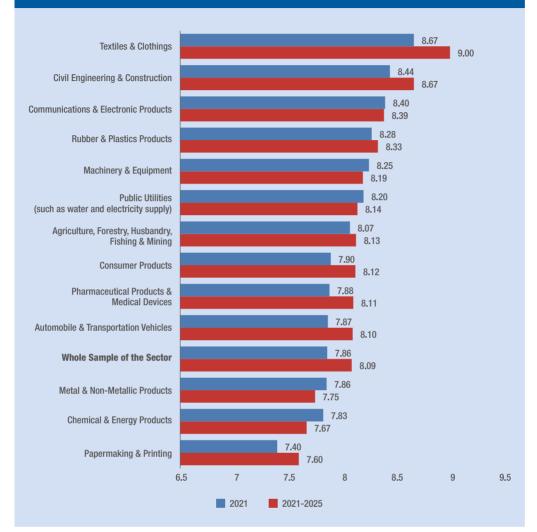


FIGURE 56: RATING OF CONFIDENCE LEVEL FOR SUCCESSFUL BUSINESS OPERATIONS IN CHINA, 2021 VS. 2021-2025, MANUFACTURING SECTOR



SECTION 6 HEALTHCARE RELATED COMPANY AND PERSONAL ADJUSTMENTS

6.1. ADJUSTMENTS TO BUSINESS AND EMPLOYEE BENEFITS

6.1.A. ADJUSTMENTS TO BUSINESS OPERATIONS

Based on Q17 "In 2020, what happened to your company and your company's health care products (pharmaceutical products, medical devices, etc.) or health care services (medical, sanitation, etc.)?", we find that most of the firms have no related businesses and have no intentions to enter (66.2%), some even shrank the existing health-related businesses (3.5%). On the other hand, 22.8% of the firms showed interest in health-related businesses (including those that expanded existing businesses, entered, and intended to enter). Figure 58 exhibits the adjustments by ownership type. There is a higher proportion of private enterprises that have no existing health-related businesses and no intention to enter (70.5%). SOEs and foreign firms seem to be more proactive in expanding health-related operations, with 20.1% of foreign firms and 18.2% of SOEs expanding existing related businesses.

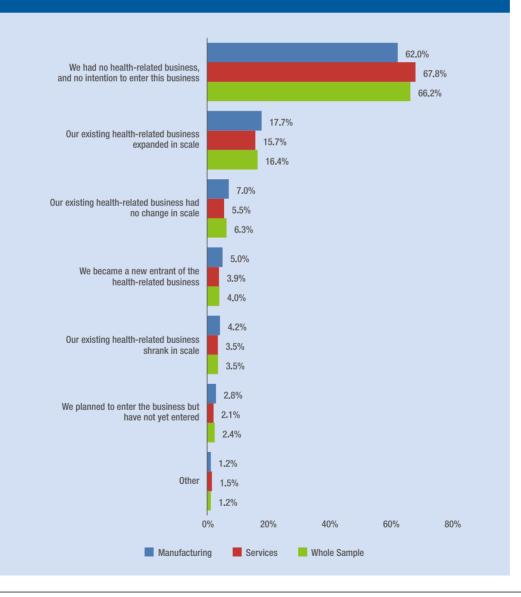


FIGURE 57: CHANGES TO COMPANY'S HEALTH CARE PRODUCTS OR SERVICES IN 2020

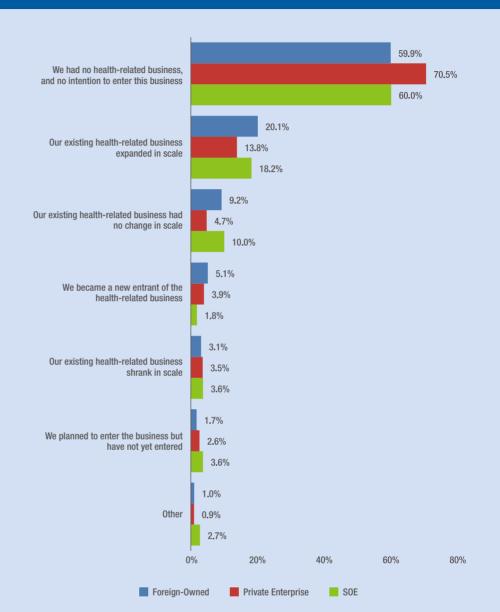


FIGURE 58: CHANGES TO COMPANY'S HEALTH CARE PRODUCTS OR SERVICES IN 2020, BY OWNERSHIP TYPE

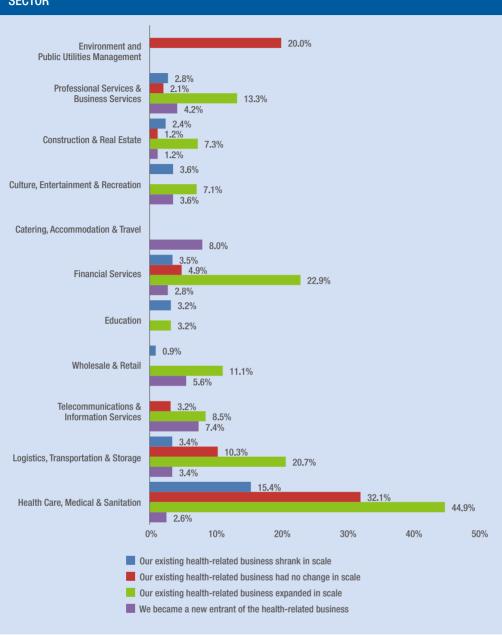


FIGURE 59: CHANGES TO COMPANY'S HEALTH CARE PRODUCTS OR SERVICES IN 2020, SERVICE SECTOR

From Figure 59 and 60, it is not surprising to see that the industries that are most active in expanding their health-related business were "Health Care, Medical & Sanitation" (44.9%) and "Pharmaceutical Products & Medical Devices" (48.4%). These two industries also showed the most variation with 15.4% and 21.1% respectively reporting a decline in scale. A high proportion of firms in "Financial Services" (22.9%) and "Logistics, Transportation & Storage" (20.7%) in service sector also expanded existing health-related businesses. For manufacturing sector, "Papermaking & Printing" (20.0%), "Chemical & Energy Products" (18.0%), and "Communications & Electronic Products" (15.6%) also exhibited noteworthy expansion. "Catering, Accommodation & Travel" exhibited the highest share of firms entering health-related business (8.0%), followed by "Telecommunications & Information Services" (7.4%). Among the manufacturing sector, 33.3% of "Rubber & Plastics" entered health-related business, followed by "Public Utilities" (14.3%).

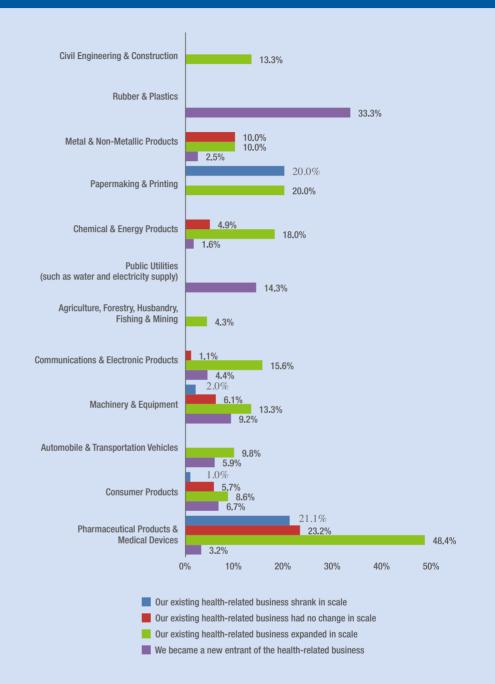
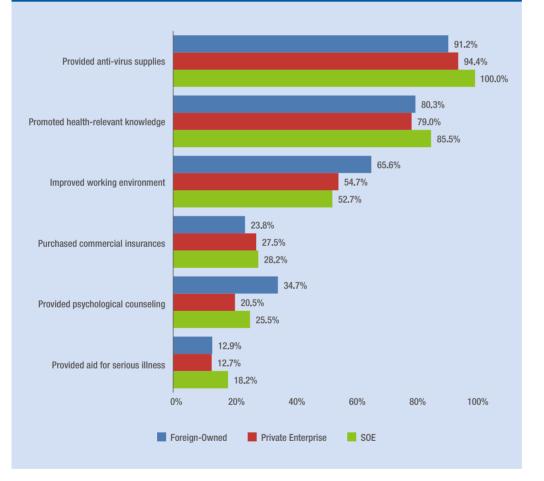


FIGURE 60: CHANGES TO COMPANY'S HEALTH CARE PRODUCTS OR HEALTH CARE SERVICES IN 2020, MANUFACTURING SECTOR

6.1.B. ADJUSTMENTS TO EMPLOYEE BENEFITS

Based on Question 23 "What new measures has your company taken to safeguard employees' health conditions? (Multiple Answers Possible)", we find that almost all firms provided antivirus supplies (94.3%), followed by promoting health-relevant knowledge (80.1%), and improved working environment (57.0%). Figure 61 exhibits the measures by ownership type. SOEs are more inclined to provide concrete assurances (such as providing anti-virus supplies, purchase insurances, and provide aid for serious illnesses), whereas foreign firms are more inclined to provide support for emotional well-being (such as improving working environment and provide psychological counseling). Some firms also provide other measures such as offering the option of flexible working location and purchase of insurances for family members.





6.2. PERSONAL CHANGES AND ADJUSTMENTS

6.2.A. CHANGES IN STRESS LEVEL

Based on Question 33 "How did your stress level change under COVID-19 as compared with pre-COVID time? Please move the cursor or tap on the scale. -5 = largest decrease in stress level; +5 = largest increase in stress level", we find that the average rating of stress level change is 2.38, with 85% expressing an increase in stress level (28.1% indicating an increase of 3 in stress level), and 9.8% indicating no change in stress level. Figure 62 and 63 exhibits stress level by managing experience and managing position in the company. We find that stress level increases with managing experience, a level of 2.45 for those with experience of 20 years or more compared to 1.83 for those with experience less than 5 years. Stress levels are the highest for HR executives (2.96) and R&D executives (2.83), even higher than those with the principal decision-making role.

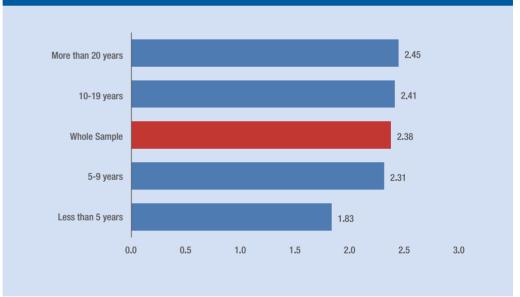
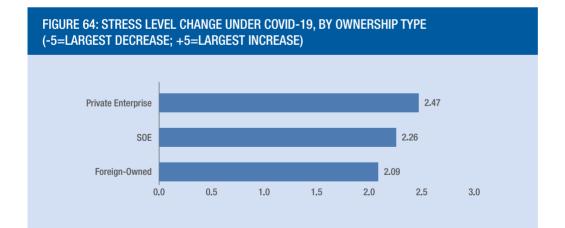


FIGURE 62: STRESS LEVEL CHANGE UNDER COVID-19, BY MANAGING EXPERIENCE (-5=LARGEST DECREASE; +5=LARGEST INCREASE)



FIGURE 63: STRESS LEVEL CHANGE UNDER COVID-19, BY MANAGING POSITION

By business operation characteristics, we find that private enterprises on average have a higher stress level (2.47), followed by SOEs (2.26) and foreign firms (2.09). By revenue change, stress



level does not necessarily increase with the magnitude of revenue drop.

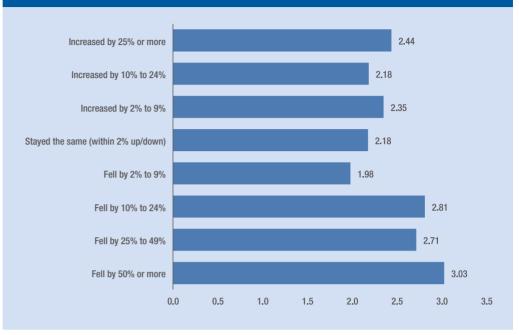
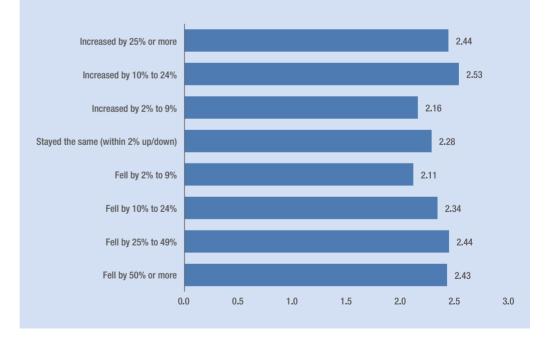


FIGURE 65: STRESS LEVEL CHANGE UNDER COVID-19, BY CHANGE IN CHINA REVENUE (-5=LARGEST DECREASE; +5=LARGEST INCREASE)

FIGURE 66: STRESS LEVEL CHANGE UNDER COVID-19, BY CHANGE IN OVERSEAS REVENUE (-5=LARGEST DECREASE; +5=LARGEST INCREASE)



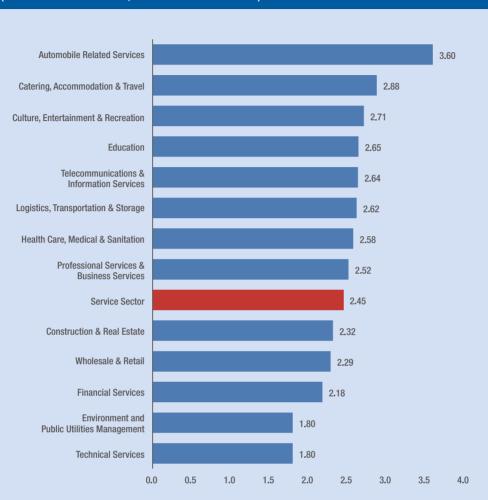


FIGURE 67: STRESS LEVEL CHANGE UNDER COVID-19, SERVICE SECTOR (-5=LARGEST DECREASE; +5=LARGEST INCREASE)

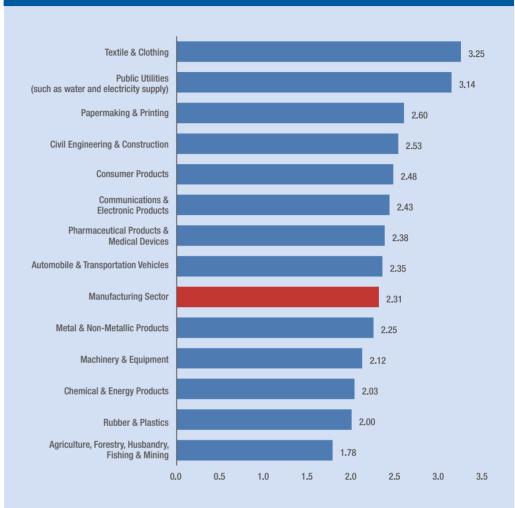
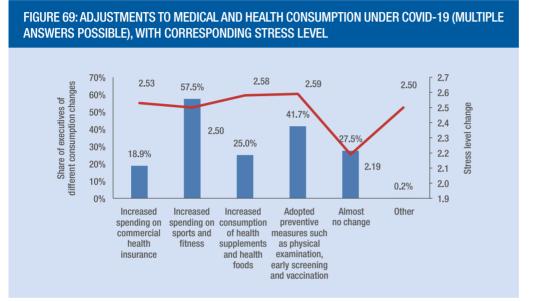


FIGURE 68: STRESS LEVEL CHANGE UNDER COVID-19, MANUFACTURING SECTOR (-5=LARGEST DECREASE; +5=LARGEST INCREASE)

6.2.B. PERSONAL MEDICAL AND HEALTH CONSUMPTION

Based on Question 34 "Under COVID-19, how did you adjust your medical and health consumption? (Multiple Answers Possible)", we find that most executives chose to increase spending on sports and fitness (57.5%), followed by adopting preventive measures (41.7%). 27.5% reported almost no change in medical and health consumption pattern. The executives that reported almost no change in their consumption patterns also are the ones that exhibit the lowest level of stress increase (2.19).





SECTION 7 CONCLUSION

Based on the online survey we conducted from April 1st to 14th 2021 among company executives (95% are CEIBS alumni or participants) and 1,188 unique responses received in total, we analyzed the adjustments made to accommodate the impacts from COVID-19 pandemic on business operations both within and outside China.

Our survey results continue to show that the pandemic gave a hard hit to the service sector, more than the impact on the manufacturing sector: 17.5% of service sector reported a 25% or more drop in revenue from business in China and only 7.5% of manufacturing sector. Among the service sector, "Catering, Accommodation & Travel" have the greatest number of firms reporting a drop of 25% or more, followed by "Education" and "Logistics, Transportation & Storage". For the manufacturing sector, the three industries with most companies reported a revenue drop are "Agribusiness", "Pharmaceutical Products" and "Consumer Products". On the other hand, 17.6% of service sector and 15.1% of manufacturing sector reported an increase of 25% or more in revenue, exhibiting a wide variation in performances one often observes under uncertainty. "Logistics, Transportation & Storage", "Telecommunications & Information Services", and "Culture, Entertainment & Recreation" are the three industries in service with the biggest share of reported companies of 25% or more revenue increase; "Pharmaceutical Products", "Communications & Electronic Products", and "Automobile & Transportation Vehicles" are the top three in manufacturing.

For revenue in China, most companies felt the impact most sharply in 2020 Q1. This is true across manufacturing and service sectors and different ownership types. Regardless of the business sector or ownership type, we find similar proportion that reported no drop in revenue. For overseas revenue, companies in both manufacturing and service sectors felt the impact the most in 2020 Q2. Foreign firms also suffer greatly in 2020 Q3 and have a lower share of firms reporting no decline in revenue (4.1% compared to 7.7% of private enterprises and 8.2% of SOEs). Among the firms that do not operate solely in China (671 firms), the biggest outside-China revenue drop occurred in U.S. and EU. For service sector, more firms reported a drop in U.S. (29.9%) than in EU (24.6%). For both regions, "Catering, Accommodation & Travel" have the greatest number of firms reporting a drop. For manufacturing sector, slightly more firms reported a drop in EU (32.8%) than in U.S. (29.9%).

As for the speed of recovery, companies mainly reported a recovery of 80% or more in the second and third quarter of 2020 regardless of ownership type. Slightly more private firms (8.0%) and foreign firms (7.1%) reported not yet recovered, as compared to SOEs (6.4%). A higher proportion of service sector still have not recovered by 80% or more (9.6%), compared to the manufacturing sector (6.6%). Among the service sector, firms in "Education" and "Catering, Accommodation & Travel" are struggling the most. For firms in manufacturing, "Agribusiness" and "Consumer Products" are the industries that are lagging behind. It is likely that the wider difference among service sectors in terms of their performance during the pandemic led to the heterogeneous recovery. The recovery of business activities in services mainly depends on business modes. Industries in which online business dominates were less affected by the pandemic, like financial and information services. Second, although the pandemic has been quickly brought under control in China and the economy has bounced back quickly, it still takes time for business activities to return to normal.

Recovery depends heavily on whether supply chain was affected and whether business models had the flexibility to expand to online operation during lockdown. Most of the firms have almost no impact or only moderate negative impact on domestic supply chain. For firms that experience a very large negative impact, we have 7.1% of private enterprises, compared to 4.1% of foreign firms, and only 1.8% of SOEs. On average, 60.0% of manufacturing firms experienced a negative impact to their domestic supply chain, with "Civil Engineering & Construction" reporting the biggest share of firms being affected. For overseas supply chain, only 14.9% of the firms reported almost no impact, and 10% reported a negative impact of 20% or more. Foreign firms are affected more severely than their counterparts. On average, 64.1% of manufacturing firms experienced a negative impact to their overseas supply chain, with "Communications & Electronic Products" and "Automobile & Transportation Vehicles" having the biggest share of firms being affected.

Before the outbreak, majority of the firms have less than 40% of business done online, regardless of ownership types. Private enterprises have a larger share of firms conducting 80% or more of their business online in 2019 already (11.9%) and increased slightly after the outbreak (12.5%). We find that the share of firms that have 4% or less business done online have dropped: 63.3% to 53.0% for private firms, 66.3% to 57.8% for foreign firms, and 56.4% to 43.6% for SOEs. For conducting 5% to 19% of businesses online, SOEs have increased significantly from 21.8% to 31.8%.

All industries exhibited a migration to businesses online. On average, 55.3% of the service sector had 4% or less online operations in 2019, whereas only 42.5% in 2021. For the manufacturing sector, 76.6% had 4% or less online operations in 2019, and dropped to 68.8% in 2021. Among the service sector, the biggest switch from offline to online is "Education" (64.5% had 4% or less online in 2019 compared to 41.9% in 2021), followed by "Culture, Entertainment & Recreation" (46.4% to 28.6%), and "Construction & Real Estate" (82.9% to 67.1%). Among the manufacturing sector, the biggest switch from offline to online is "Consumer Products" (51.4% to 33.3%), followed by "Agribusiness" (91.3% to 78.3%).

The unprecedented pandemic shock had huge impact on the labor market. We continue to follow how firms respond through changes in employee size and salary. As contrast to our survey conducted last April with widespread reduction in recruitment for 2020, less than 10% reported significant reduction of employee size across all ownership types in our survey this year. Majority of firms reported almost no change in human resource. We find 57.3% of SOEs chose to keep employee size constant, resulting in smaller reductions compared to private and foreign firms, but also less expansion as well. 41.7% of private firms reported to have increased hiring. Both manufacturing and service sector have approximately 41% of firms reporting almost no change to employee size. Manufacturing sector was slightly more aggressive in recruiting (39.3% reported an increase) compared to service sector (38.1%). The reasons might be that these companies still expect positive growth or have found new sources of growth amid the post-pandemic economy. Majority of companies reported almost no change to salary, with 56.4 % of SOEs stating to hold salary within a 2% range. 38.1% of foreign firms reported an across-the-board salary increase of 2% to 9%, and 9.5% of private enterprise even reported an across-the-board salary increase of 10% or more.

The rating figures to Chinese government's support to firms since the pandemic showed that the average of the whole sample by registration types was 5.5 (highest=10), slightly lower than the rating for government's support to industry in our previous survey (conducted in April 2020). Both state-owned companies and foreign-owned companies gave a score of 6.1, however, private companies only assigned a score of 5.2. Manufacturing industry gave a higher-than-average rating of 5.9, while service industry gave a rating of 5.3. By firm size we find that rating of received policy support increases with firm size, reaching 6.7 for firms with 10,000 or more employees. However, micro firms with less than 10 employees reported a rating of only 4.3.

The biggest concerns for business operations in China for 2021 by the service sector is China's government policy towards the company's business. Tensions between China and other Western countries and effectiveness of pandemic control outside China are also top factors concerned by the sector. The top three concerns for manufacturing sector are the same, however companies in manufacturing are most concerned with tensions between China and other Western countries. Indicating that manufacturing sector is more affected by external conditions, whereas service sector focuses more on internal business-specific policies. Private firms care the most about China's government policy towards the company's business. The top three factors care by foreign firms are all related to external environment, including easing of restrictions on traveling into China and out of China.

For business operations in China for 2021-2025, both service and manufacturing sectors care the most about the internal circulation. China's relation with Western countries is another top concern. Manufacturing sector also shows concern for China's independent innovation ability, whereas service sector considers the prospect of China's external circulation more. These factors are the top considerations for private firms and foreign firms as well: 69.2% of private firms care about China's internal circulation (65.0% of foreign firms), 67.7% of foreign firms consider China's relation with Western countries as an important factor for future business in China.

70.8% of SOEs, 64.2% of private firms, and 60.5% of foreign firms responded that domestic business environment improved. Among that, 23.8% of private firms and 24.5% of SOEs felt that domestic business improved significantly, whereas only 18.7% of the foreign firms felt the same way. However, 3.3% of private firms also expressed that domestic business environment worsened significantly for them, whereas only 1.8% for SOEs and 1.4% for foreign firms. For the international environment of business operation in China, 29.9% of private firms expressed no change, 28.2% of SOEs, and only 23.1% of foreign firms. 29.2% of foreign firms, 22.9% of private firms, and 24.6% of SOEs expressed that the overseas environment improved; 47.0% of foreign firms, 44.5% of private firms, and 41.8% of SOEs expressed that the overseas environment worsened. Private firms showed more extreme responses with only 5.4% feeling a significant improvement and 8.5% feeling a significant deterioration.

We composed the confidence indices for business operations in China in 2021 and in 2021-2025. The index ranges from 0 to 10, with 10 being the highest rating. Compared to the average confidence level of our last survey, the companies are more confident going forward. It is noteworthy that foreign companies have lower confidence indices than Chinese-owned companies, and their confidence index for the next 5 years is lower than that for this year's survey. Among Chinese-owned companies, state-owned enterprises are more confident than private companies. Private companies became more confident when we move from short term projections (7.86) to long term (8.00). The Chinese government should keep optimizing the investment and business environment for both private enterprises and foreign companies. Continue improving industrial policies to boost the confidence of foreign enterprises in Chinese economy and their recognition of business environment in China.

We also analyzed the confidence indices of service and manufacturing companies. We saw that the confidence index of service industry for business operations in China for 2021 is 7.77 on average, lower than 8.07 of manufacturing (both higher than the confidence level polled from last April). For the service sector, the most confident industry is "Environment & Public Facilities Management", reporting a confidence level of 9.00, even higher than the most confident industry "Textiles & Clothings" (8.67) in manufacturing. The least confident industry among both sectors is "Education", reporting only a level of only 6.87, much lower than the least confident industry "Papermaking & Printing" in manufacturing (7.40).

No matter in services or manufacturing, companies are more confident in medium and long-term than in short-term. The confidence level of the service industry for the next 5 years is 7.83 on average, higher than that for 2021. The confidence index of the manufacturing for the next 5 years is 8.09, higher than its index for 2021 as well as the long-run confidence level of services. "Environment & Public Facilities Management" continue to be the most confident industry (9.20) and the most confident industry for manufacturing is instead "Textiles & Clothing" (9.00). The least confident industry among both sectors is "Education" (7.20), with "Scientific Research & Technical Services" being a close second (7.23). "Papermaking & Printing" remains to be the least confident industry in manufacturing (7.60). We expect that Chinese economy will continue to expand and business operations will return to normal. In the medium to long term, China will remain the most economically active region in the world, and the survey results highly suggest companies' confidence.

Since the COVID-19 pandemic has a unique effect on the healthcare industry and personal healthcare consumption, we dedicated a section to discuss health-related business adjustments. Most of the firms have no related businesses and have no intentions to enter (66.2%), some even shrank the existing health-related businesses (3.5%). On the other hand, 22.8% of the firms showed interest in health-related businesses (including those that expanded existing businesses, entered, and intended to enter). The industries that are most active in expanding health-related business were "Health Care, Medical & Sanitation" (44.9%) and "Pharmaceutical Products & Medical Devices" (48.4%). These two industries also showed the most variation with 15.4% and 21.1% respectively reporting a decline in scale. There is a higher proportion of private enterprises that have no existing health-related businesses and no intention to enter (70.5%). SOEs and foreign firms seem to be more proactive in expanding health-related businesses.

The unprecedented pandemic and lockdown measures have brought abrupt and profound changes to life as we know it. The average rating of stress level change is 2.38, with 85% expressing an increase in stress level (28.1% indicating an increase of 3 in stress level), and 9.8% indicating no change in stress level. We find that stress level increases with managing experience, a level of 2.45 for those with experience of 20 years or more compared to 1.83 for those with experience less than 5 years. Stress levels are the highest for HR executives (2.96) and R&D executives (2.83), even higher than those with the principal decision-making role. Private enterprises on average have a higher stress level (2.47), followed by SOEs (2.26) and foreign firms (2.09). We find that stress level does not necessarily increase with the magnitude of revenue drop.

Almost all firms provided anti-virus supplies (94.3%), promoted health-relevant knowledge (80.1%), and improved working environment (57.0%). SOEs are more inclined to provide concrete assurances (such as providing anti-virus supplies, purchase insurances, and provide aid for serious illnesses), whereas foreign firms are more inclined to provide support for emotional well-being (such as improving working environment and provide psychological counseling). Some firms also provide measures such as offering the option of flexible working location and purchase of insurances for family members. For personal health-related consumptions, most executives chose to increase spending on sports and fitness (57.5%) and adopted preventive measures (41.7%). Executives that reported almost no change in their consumption patterns (27.5%) are also the ones that exhibit the lowest level of stress increase (2.19).



APPENDIX QUESTIONNAIRE

Attached is the full text of the online survey on the impact of COVID-19 pandemic on business operations in China.

Q0 Did you participate in last April's survey on COVID-19's impact on business in China?

Yes, I participated No, I did not I do not remember

Q1 What is the ownership structure of your company?

Wholly State-Owned Chinese Enterprise Wholly Private-Owned Chinese Enterprise Mixed-Ownership Chinese Enterprise (Majority State-Owned) Mixed-Ownership Chinese Enterprise (Majority Private-Owned) Wholly Foreign-Owned Enterprise Foreign Joint Venture (Majority Foreign-Owned) Foreign Joint Venture (Minority Foreign-Owned) Other (please specify): _____

Q2 Is your company listed?

Yes No

Q2.a What is your company's stock code?

Q2.b Where is your company listed?

Shanghai (China)
Shenzhen (China)
Hong Kong (China)
Taiwan (China)
Singapore
Japan
Australia
US
UK
Germany
Other (please specify):
Q3 Your company's biggest foreign ownership is from:
Hong Kong (China)
Taiwan (China)
Asia-Pacific (please type the country name):
Africa (please type the country name):
Europe (please type the country name) :
U.S.
Americas (excluding U.S.), please type the country name:
Other (please specify):

Q4 Which sector is your company's main business?

Services Manufacturing Both services and manufacturing

Q5a In which service industry?

Health Care, Medical & Sanitation Logistics, Transportation & Storage Telecommunications & Information Services Wholesale & Retail Education Financial Services Catering, Accommodation & Travel Culture, Entertainment & Recreation Construction & Real Estate Professional Services & Business Services Other services (please specify):

Q5b In which manufacturing industry?

Consumer Products Pharmaceutical Products & Medical Devices Automobile & Transportation Vehicles Machinery & Equipment Communications & Electronic Products Agriculture, Forestry, Husbandry, Fishing & Mining Public Utilities (such as water and electricity supply) Chemical & Energy Products Papermaking & Printing Metal & Non-Metallic Products Other manufacturing (please specify): _____

Q6 Compared with other companies in the same industry, your company's main products/ services belong to:

High-end Mid-end Low-end Both high-end & mid-end Both mid-end & low-end Both high-end & low-end All range from low, middle to high Other (please specify): ____

Q7 Your company's main clients in China are:

Individuals (B2C) Companies/Organizations (B2B) Both individuals (B2C) and companies/organizations (B2B) We do not have Chinese customers Other (please specify): _____

Q8 What is the contribution of business-in-China to your company's 2020 revenue?

100% (my company operates only in China) 75% to 99% 50% to 74% 25% to 49% 0% to 24% Other (please specify): _____

Q9 Compared to 2019, your company's 2020 revenue from business-in-China:

fell by 50% or more fell by 25% to 49% fell by 10% to 24% fell by 2% to 9% stayed the same (within 2% up/down) increased by 2% to 9% increased by 10% to 24% increased by 25% or more Other (please specify): _____

Q10 Compared to 2019, your company's 2020 revenue from business-outside-China:

fell by 50% or more fell by 25% to 49% fell by 10% to 24% fell by 2% to 9% stayed the same (within 2% up/down) increased by 2% to 9% increased by 10% to 24% increased by 25% or more Other (please specify): _____

 Q11 Compared to 2019, which region(s) did your company's revenue drop the most in 2020?

 (Multiple Answers Possible)

 U.S

 European Union

 China (Mainland)

 Hong Kong (China)

 Taiwan (China)

 ASEAN (Indonesia, Malaysia, Philippines, Thailand, Singapore, Brunei, Cambodia, Laos, Myanmar, Vietnam)

 Japan and Korea

 India

 Russia, Central and Eastern European Countries

 None of the above

Q12 Looking back, in 2019 prior to the outbreak of COVID-19, what percentage of your China business was done online?

0% to 4% 5% to 19% 20% to 49% 50% to 79% 80% or above

Q13 As of today in 2021, what percentage of your China business is done online?

0% to 4% 5% to 19% 20% to 49% 50% to 79% 80% or above

Q14 In which quarter did your company's China operating revenue drop the most? (Multiple Answers Possible)

Last year (2020) Quarter 1 Last year (2020) Quarter 2 Last year (2020) Quarter 3 Last year (2020) Quarter 4 2021 Quarter 1 Other (please specify):

Q15 In which quarter did your company's outside-China operating revenue drop the most? (Multiple Answers Possible)

Last year (2020) Quarter 1 Last year (2020) Quarter 2 Last year (2020) Quarter 3 Last year (2020) Quarter 4 2021 Quarter 1 Other (please specify): _____

Q16 In which quarter did your company's China operations recover by 80% or more for the first time?

Still not recovered by 80% or more 2021 Quarter 1 Last year (2020) Quarter 4 Last year (2020) Quarter 3 Last year (2020) Quarter 2 Last year (2020) Quarter 1 Other (please specify): _____

Q17 In 2020, what happened to your company and your company's health care products (pharmaceutical products, medical devices, etc) or health care services (medical, sanitation, etc)?

We had no health-related business, and no intention to enter this business

We planned to enter the business but have not yet entered

We became a new entrant of the health-related business

Our existing health-related business expanded in scale

Our existing health-related business had no change in scale

Our existing health-related business shrank in scale

Other (please specify): _

Q18 How did COVID-19 affect the within-China supply chain relied by your company?

Very large negative impact (affecting 20% or more) Large negative impact (affecting 10% to 19%) Moderate negative impact (affecting 2% to 9%) Almost no impact (within 2% up/down) Positive impact on supply chain within China relied by my company Our company does not rely on supply chain within China Other (please specify):

Q19 How did COVID-19 affect the overseas (outside China) supply chain relied by your company?

Very large negative impact (affecting 20% or more) Large negative impact (affecting 10% to 19%) Moderate negative impact (affecting 2% to 9%) Almost no impact (within 2% up/down) Positive impact on the overseas supply chain relied by my company Our company does not rely on overseas supply chain Other (please specify):

Q20 How many employees in China does your company hire at present?

0 to 9 10 to 49 50 to 299 300 to 999 1,000 to 1,999 2,000 to 4,999 5,000 to 9,999 10,000 to 49,999 50,000 or above

Q21 What has happened to your company's employee size since the outbreak of COVID-19?

Significant reduction of 10% or above Small reduction of 2% to 9% Almost no change (within 2% up/down) Small increase of 2% to 9% Large increase of 10% or above

Q22 What has happened to employee salary of your company since the outbreak of COVID-19?

Across-the-broad salary cut of 10% or above Salary cut of 10% or above only for senior executives Across-the-board salary cut of 2% to 9% Salary cut of 2% to 9% for only senior executives No salary change (within 2% up/down) Across-the-board salary increase of 2% to 9% Across-the-board salary increase of 10% or more Other (please specify):

Q23 What new measures has your company taken to safeguard employees' health conditions? (Multiple Answers Possible)

Provided anti-virus supplies Improved working environment Promoted health-relevant knowledge Provided psychological counseling Purchased commercial insurances Provided aid for serious illness Other (please specify): _____

Q24 How do you rate the level of policy support (from the Chinese government) your company has received since the outbreak of COVID-19? Please move the cursor or tap on the scale.

0=lowest support; 10=highest support 0 1 2 3 4 5 6 7 8 9 10 our

Level of policy support (from the Chinese government) your company has received since the outbreak of COVID-19 ()

Q25 How confident are you that your company's business operations in China will be successful this year (2021)? In the next 5 years (2021-2025)? Please move the cursor or tap on the scale.

0=lowest confidence; 10=highest confidence

this year (2021) () Confidence in my company's business operations in China within the next 5 years (2021-2025) ()

Confidence in my company's business operations in China

Q26 For this year (2021), what factors does your company care the most regarding China business operations? (Multiple Answers Possible)

Coverage of COVID-19 vaccination in China Effectiveness of pandemic control outside China Tensions between China and the U.S. (and other Western countries) Easing of restrictions on traveling within China Easing of restrictions on traveling into China and out of China Recovery of the supply chain relied by my company's China business Improving/worsening of China's government policy towards my company's business Other (please specify):

Q27 Looking back, for the past 5 years (2016-2020), how would you describe China's domestic business environment for your company's operations in China?

Improved significantly		
Improved moderately		
Improved slightly		
No change		
Worsened slightly		
Worsened moderately		
Worsened significantly		
Other (please specify):		

Q28 Looking back, for the past 5 years (2016-2020), how would you describe the international business environment for your company's operations in China?

Improved significantly Improved moderately Improved slightly No change Worsened slightly Worsened moderately Worsened significantly Our company operate in China only and is not affected by changes of international business environment Other (please specify):

Q29 Looking forward, for the next 5 years (2021-2025), what aspects of China will have the most important impact on your company's business operations in China? (Multiple Answers Possible)

Prospects of China's domestic consumption (so-called "internal circulation") Prospects of China's further opening-up (so-called "external circulation") China's management of financial risks such as debt default risk China's relation with Western countries especially the U.S. China's building of independent research and innovation ability China's building of an independent supply-chain network China's building of 5G network, industrial internet, etc. (so-called "New Infrastructure") National and industry policies Other (please specify):

Q30 What is your position in the company (please choose the closest to your position)?

Principal decision-making role (CEO/GM/Main Owner/Main Partner/Chief Representative) Deputy decision making role (VP/Vice GM/Director/Assistant of GM) Project Manager/ Business Development Manager/Product Manager HR Executive Manufacturing, Operations, Logistics or Engineering Executive Marketing Executive/Sales Executive Finance Executive R&D Executive Other (please specify):

Q31 What's your gender?

Female Male I do not want to disclose.

Q32 How many years of management experience do you have?

Less than 5 years 5-9 years 10-19 years More than 20 years

Q33 How did your stress level change under COVID-19 as compared with pre-COVID time? Please move the cursor or tap on the scale

-5=largest decrease in stress level; +5=largest increase in stress level

-5 -4 -3 -2 -1 0 1 2 3 4 5 d()

My stress level decreased or increased ()

Q34 Under COVID-19, how did you adjust your medical and health consumption? (Multiple Answers Possible)

Almost no change

Increased consumption of health supplements and health foods

Increased spending on sports and fitness

Increased spending on commercial health insurance

Adopted preventive measures such as physical examination, early screening and vaccination

Other (please specify):

Q35 Which CEIBS Program have you attended before or are attending currently?

Open Program (AMP/CEO/CFO/CHO/CMO etc.) or Company Specific Program (CSP) EMBA FMBA GEMBA HEMBA MBA I have not yet attended any CEIBS program