

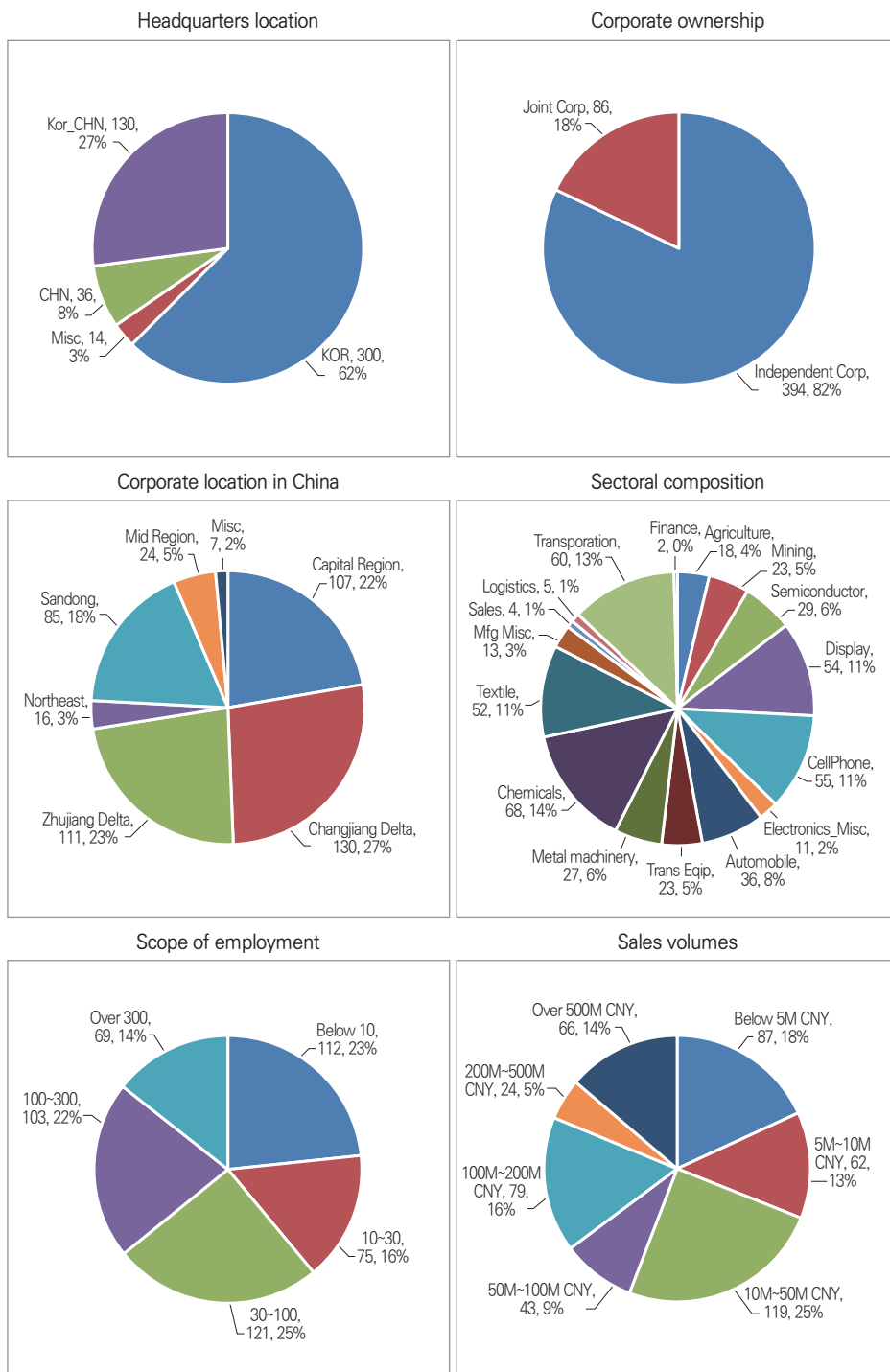
A Study of Supply Chains of Korean Firms in China Based on Business Survey Data

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1. Overview

The purpose of this study is to determine the business conditions of Korean companies in China. For this, a business survey was conducted from October to November 2020 by the Korean Institute for Industrial Economics and Trade (KIET) and the Korean Chamber of Commerce in China. The scale of Korean direct investment in China as well as Korea-China trade has increased rapidly over 28 years since the normalization of Sino-Korean diplomatic relations, but it is necessary to gather basic statistics on Korean enterprises in China in the mid- to long-term. This survey on the business environment and actual conditions of Korean enterprises shall be regularly conducted to establish basic facts and future changes in the business environment. The behavior of Korean companies shall also be studied. The Korea Institute of Industrial Economics and Trade organized a survey on the

Figure 1. Basic Data on Korean Firms in China



Source: KIET Business Survey on Korean Firms in China 2020.

business environment and actual conditions of Chinese enterprises; the Beijing office of the Korean Chamber of Commerce was in charge of the survey as co-organizer. KIET planned and conducted the survey together with the Korean Chamber of Commerce in China. The survey is divided into written surveys and in-depth telephone surveys.

Written responses were collected from 480 companies; in-depth telephone surveys were conducted with representatives from 20 companies. Out of the total 480 respondents, 300 (62 percent) were Korea-based companies. Thirty-six (eight percent) firms reported being headquartered in China. By corporate location, 364 firms (75.8 percent) were located in the provinces of Guangdong, Jiangsu, Shandong and the city of Beijing, representing the three largest metropolitan economies of China: the Capital Region (Beijing, Tianjin, Hebei), the Changjiang River Delta Triangle and the Zhujiang River Delta Triangle (Guangdong). By industrial sector, 18 firms were agricultural and fisheries companies (3.8 percent), 23 were mining concerns (4.8 percent), 368 were manufacturing companies (76.7 percent) and 71 were service outfits (14.8 percent).

In terms of employment, 121 companies (25 percent) employed between 30 to 100 workers; in terms of sales, 119 companies (24.8 percent) reported sales between 10 and 50 million CNY of sales in 2019.

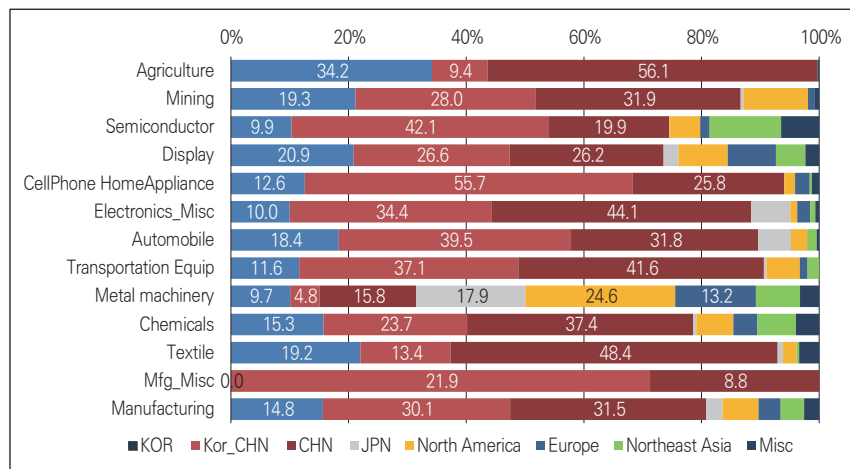
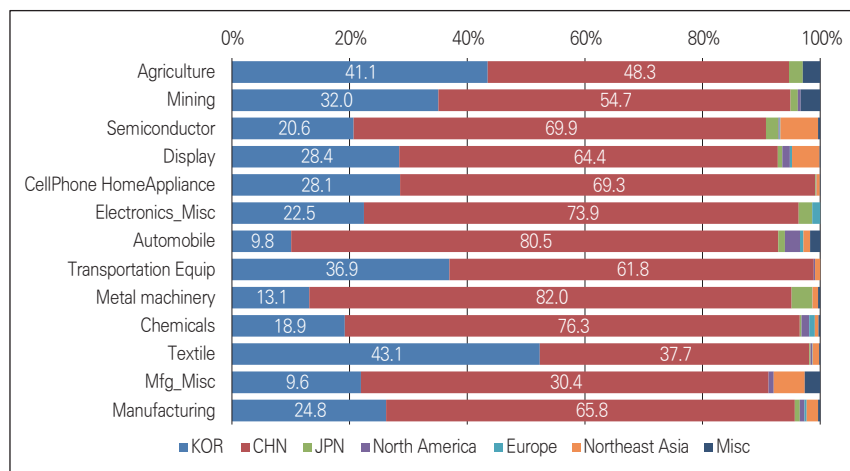
2. Supply Chains and Sales Networks

Figure 2 shows from where Korean enterprises in China obtain resources such as raw materials and parts, and to where and to whom they sell their products.

Most (65.8 percent) Korean manufacturing enterprises in China procure raw materials and parts from China; while some (24.8 percent) import inputs from Korea. Across industrial sector, the ratio of Chinese procurement from China varies a bit. Firms in the textile sector secures just 37.7 percent of intermediates from China, while companies in the metal and machinery sectors source 82 percent of raw materials and parts from China. The data reveals that an independent supply chain by Korean enterprises in China has been already established in the semiconductor and display sectors. Another surprising fact: Korean companies do not depend on Japan as much as expected.

Korean manufacturing firms' primary customers were Korean firms in Korea (30.1 percent) and Korean companies in China (31.5 percent). Cell phone and home appliance manufacturers in China sold 55.7 percent of their product to Korean companies in China and shipped 12.6 percent of their product back to Korea. Similarly, semiconductor companies in China sold 42.1 percent of their product to Korean enterprises in China and shipped 9.9 percent of their product back to Korea. On the other end of the spectrum, textile companies sold 48.4 percent of their products to Chinese customers. Enterprises in the metal and machinery sectors in China had more diversified sales to the Chinese (15.8 percent), Japanese (17.9 percent), North American (24.6 percent), and European markets (13.2 percent).

Figure 2. Supply Chains (Top) and Sales Networks (Bottom)



According to an interview with a manager at a Korean manufacturing company producing automobile components in Jiangsu province in China, a major obstacle to joining the local automobile manufacturing ecology is the lack of support from Chinese automakers in offsetting development costs for the transition to electric vehicle parts manufacturing, even though his company succeeded in diversifying its sales network to local Chinese automakers.

3. Business Conditions

An examination of business conditions shows that both profits and sales of Korean firms in China declined precipitously from 2019 to 2020. The profits and sales in 2020 are expected values by Korean firms in China. About 33.5 percent of respondents said 2020 profits decreased by 20 percent compared to 2019; only 21.5 percent of respondents reported increased profits in 2020.

The main reasons cited for the decline in sales were decreased local demand in China, intensified competition and COVID-19. Overwhelmingly, about 41.9 percent of respondents blamed decreased local demand in China as a main reason for the decline in sales and profits. On the other hand, reasons given for increased sales included increased local demand, product quality improvements, business diversification and increased demand due to the U.S.-China conflict. About 38.8 percent of respondents cited increased local demand in China as the main reason for increased sales and profits, suggesting that local demands in China is crucial to Korean companies. In addition, product quality is a very important factor in competing with Chinese companies. A manager of a Korean company in Jiangsu province in China producing components of home appliances reported explosive revenue growth due to increased demand from Europe, which was unanticipated given the COVID-19 outbreak.

Korean enterprises in China reported business difficulties in the form of decreasing local demand (29 percent), intensifying competition (20.5 percent), and a shortage of labor (18.6 percent), which is more an internal factor rather than an external one. Chinese government regulations did not register as fundamental business obstacle in China, contrary to our expectations, in contrast with the years 2018 and 2019, when the THAAD¹ issue complicated business

Figure 3. Sales and Profits

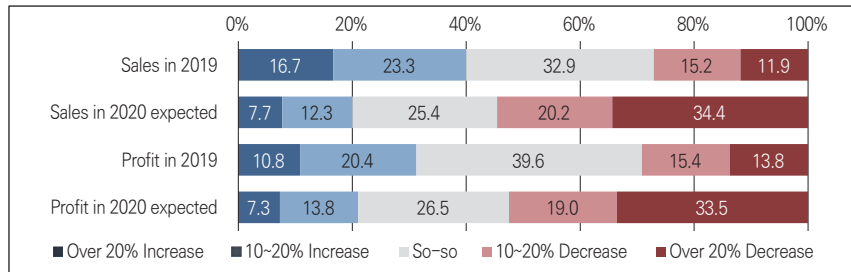


Figure 4. Reasons Cited for Decreased Sales and/or Profits

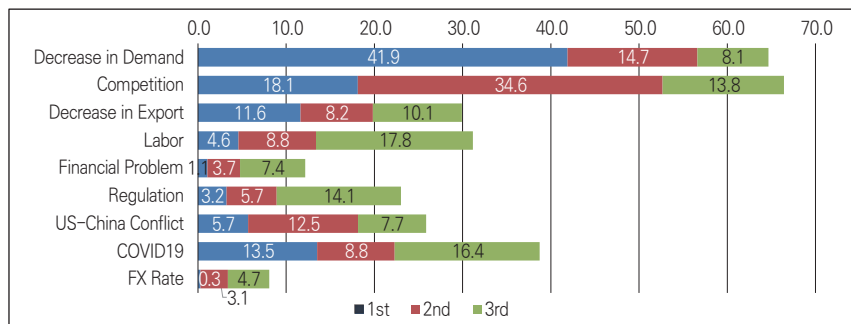
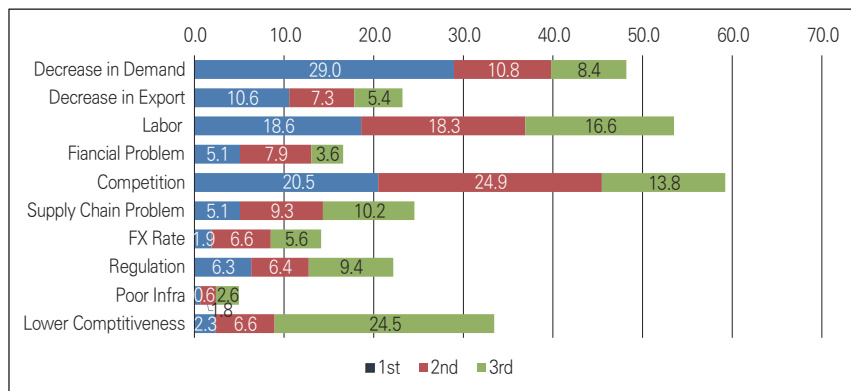


Figure 5. Business Difficulties



relations. In other words, competitiveness is fundamentally important for doing business in China. Furthermore, the most sensitive regulations for businesses in China are environmental, licensing, and fire safety regulations. In

1 The Korean government announced its intent to deploy the U.S.-made Terminal High Altitude Area Defense (THAAD) anti-ballistic missile system in 2017. In response, the Chinese government issued numerous complaints and there were invisible boycotts of Korean products in China.

particular, given serious air pollution in China, environmental regulations are rapidly strengthening. Korean companies in China expect this trend to continue into the future.

4. Business Outlook

Korean firms in China were surveyed on the operating rate of assets. Most respondents reported low rates: just over a quarter (25.6 percent) of companies recorded rates over 80 percent. Slightly more firms (31.9 percent) posted operating rates between 60 and 80 percent, and a good number of companies (28.5 percent) reported operating rates between 40 to 60 percent, which reflects the difficult business environment faced by some firms in China. In the manufacturing sector alone, 24.2 percent of respondents reported a current operating rate of 80 percent or more, while 33.4 percent of surveyed firms recorded rates between 60 to 80 percent. Despite current low operating rates due to COVID-19 pandemic and the U.S.-China dispute, regarding the overall mid-term business outlook in China, the largest proportion of respondents expect to maintain the status quo over the next two to three years, but the majority of respondents hope to expand rather than reduce, relocate or liquidate their businesses in China. Compared to the mid-term outlook, the overall business outlook over a longer term (five years) is not much different. About 43.5 percent of companies are willing to monitor the situation and maintain their businesses, while 26.7 percent of companies would like to expand their businesses in China.

The overwhelming majority of companies considering liquidation and/or relocation responded that they were considering doing so due to rising production costs and intensifying competition in China. And as expected, Southeast Asia was overwhelmingly selected as the target region for relocation. About 70 percent of respondents chose Southeast Asian countries including Vietnam, Indonesia and others as potential relocation targets, and about 25 percent of respondents said they would relocate their businesses back to Korea. On the other hand, for companies considering expanding their businesses in the future, China's market and/or purchasing power is an overwhelming factor. For these companies, existing facilities in China and the three large

metropolitan economies mentioned previously were targeted areas.

In the meantime, a representative of a Korean consulting firm in China said in an in-depth telephone interview that there is a great degree of heterogeneity in investment opportunities across provinces in China and among local governments' (provincial or municipal governments) desire or willingness to foster industries.

Figure 6. Operating Rates by Sector

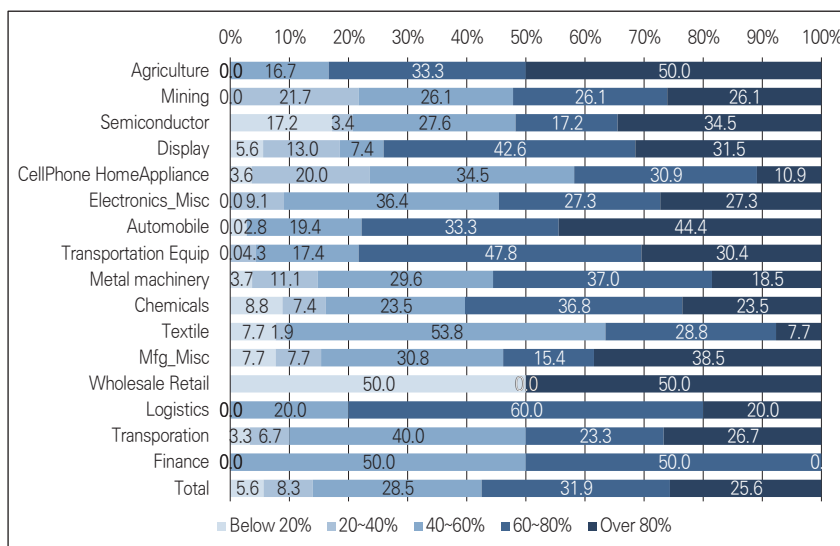
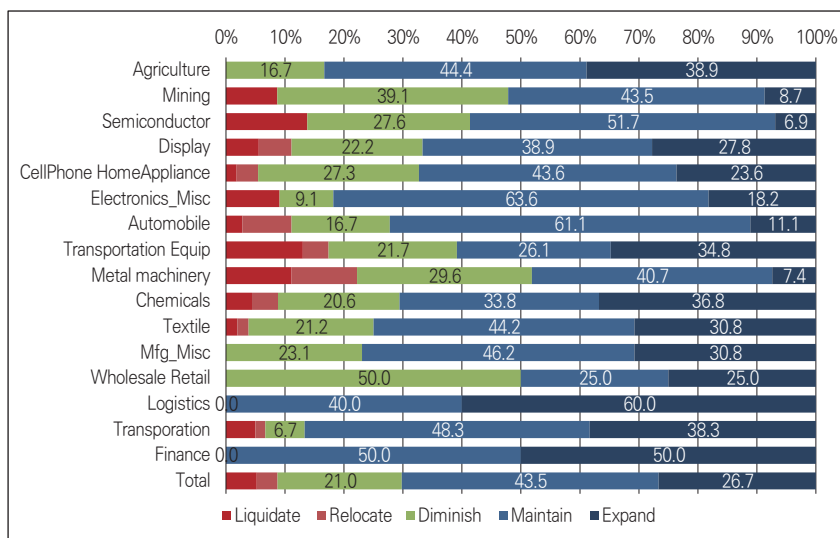


Figure 7. Five-year Business Outlook by Sector



5. Business Environment in China and Response

The number of companies that reported a worsening internal business environment in China was clearly higher than the number of firms that described an improving environment. About 58.6 percent of companies said that China's internal business environment was in a state of either deterioration (49.8 percent) or rapid deterioration (8.8 percent); only 12.8 percent responded that the business environment was either improving (11.5 percent) or rapidly improving (1.3 percent). In the manufacturing industry, the transportation equipment, cell phone and home appliance manufacturing sectors were pessimistic. In the service industry, both the wholesale and retail sectors were pessimistic about the internal business environment in China. Among the most important factors cited with regards to China's worsening internal business environment were the Chinese government's policies, rising production costs, changing demand markets and unfair competition.

A manager of a chemical packaging material producer in Tianjin cited the lack of consistency in regulation by government officers rather than the high government standards of environmental or fire safety regulations, even though market prospects are relatively bright with the growth of Chinese chemical market.

The questionnaire asked companies how they were responding to China's worsening internal business environment. Most respondents answered: unwilling acceptance. In all aspects of responses to changes in China's internal business environment, most Korean companies in China chose "acceptance," followed by joint responses with related companies such as subsidiaries and/or vendors, and then relocation, liquidation and petition, as shown in Figure 9. The internal environmental factors, which account for the largest portion of joint responses, were unfair competition and changes in the demand market.

A manager of a Korean company in Jiangsu producing cell phone and washing machine components said that his company will maintain its Chinese business at the current level but also open and expand a Southeast Asian business in the long term. He also answered that tougher environmental policy is the most crucial internal business factor in China, and that his company copes with it along with other Korean vendor companies and larger Korean purchasing companies in China.

Figure 8. Ongoing Business Sentiment

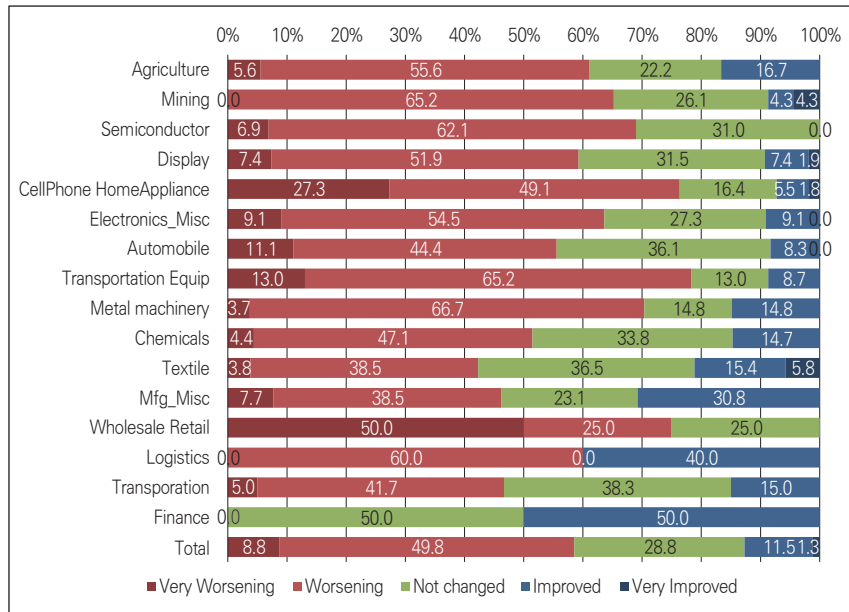
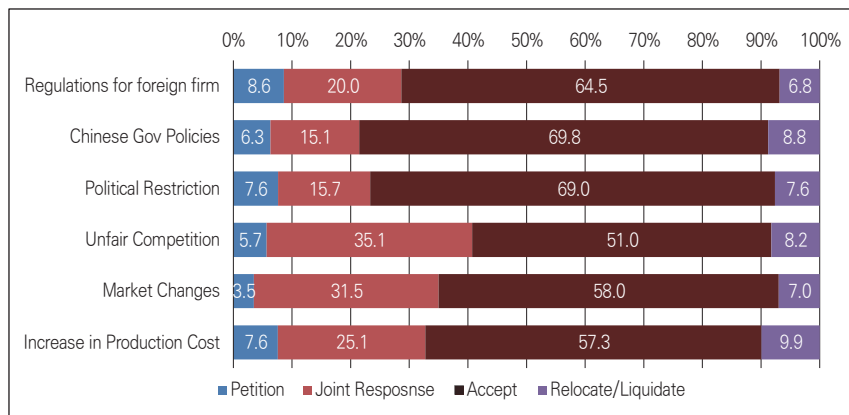


Figure 9. Responses to the Business Environment in China



6. Global Business Environment and Responses

Korean companies in China reported that COVID-19, the U.S.-China conflict and Sino Korean cultural and political risks² (in that order) were among the

2 Such as boycotts by Chinese consumers and/or the Chinese government of Korean products due to international political reasons surrounding the Korean Peninsula.

most sensitive factors in the global external business environment. The survey results indicated that most firms (51.5 percent) ranked the COVID-19 pandemic as more important than any other factor. A majority of respondents cited changes in demand in the most affected areas of the global external business environment; a similar proportion of respondents cited supply chain or production issues.

Overall, surveyed firms responded that changes in the global external environment negatively affects business in China. They reported that many external factors, including the U.S.-China dispute, a shift toward remote work and play due to COVID-19, Sino-Korean cultural-political risks, emergent trade protectionism, exchange rate fluctuations, transformations in the global value chain (including a U.S.-China decoupling) and changes in technology standards are negatively affecting business in China. A small number of respondents reported that changes in technology standards, the fallout of the COVID-19 pandemic and changes to GVC may carry positive implications to their businesses in China from a long-term perspective.

Overwhelmingly, most Korean enterprises in China are continuously monitoring the global external environment and are actively trying to address it or considering reducing their businesses based on external environmental factors. A manager of a Korean company which produces export packaging materials said that his company is experiencing a decrease in volume due to the U.S.-China conflict and is considering a relocation to Southeast Asia, but

Figure 10. Sensitivity to (left) and Effect of (right) of Global Business Environment Factors

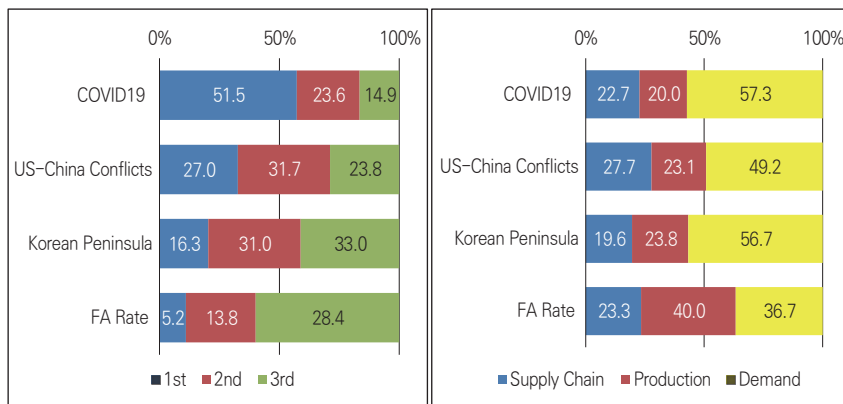
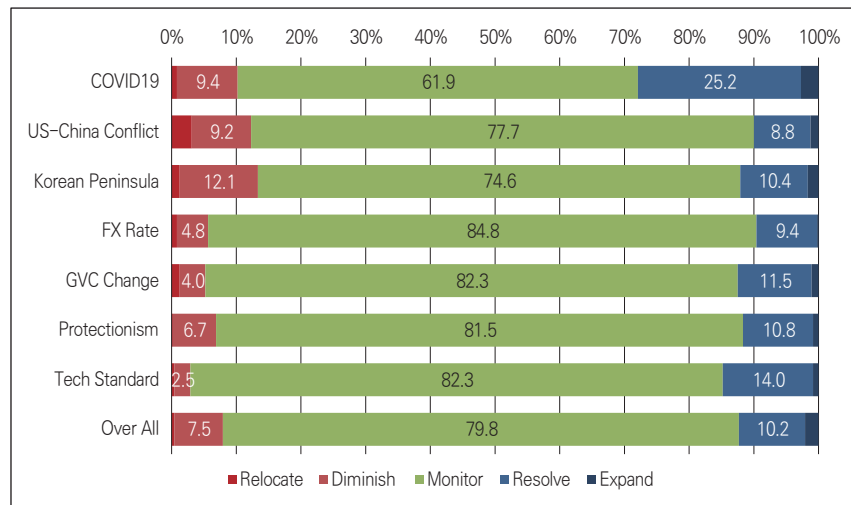


Figure 11. Responses to the for Global Business Environment



like other small companies, his company cannot afford high relocation costs.

The representative responded that the most important global external business environment risks in the future are the U.S.-China conflict, new contactless living patterns³, exchange rate fluctuations, and issues on the Korean Peninsula.

7. Conclusion

The results of the survey on the business environment faced by Korean enterprises in China carries three main implications. First, it represents the first attempt to investigate Korean enterprises in China; its analysis of firms' intent to expand or relocate their businesses and supply chains and the economic outlook for and business difficulties faced by Korean companies operating in China is the first of its kind. Second, about 480 Korean enterprises responded to the survey, a strong sample size compared to previous surveys, and representatives from 20 participated in in-depth telephone surveys. Third, carried out annually, this survey has significant implications for policy, as similar surveys could also help build out an information database on the supply chain and business environment of Korean companies that have entered other

3 Also referred to as "untact" (un+contact) culture in Korea.

overseas markets (such as Southeast Asian countries).

The main results of this survey are summarized by the following six points. First, contrary to expectations, the supply chain of Korean companies operating in China is a relatively independent, two-country series of links between Korea and China, and not a multi-prong supply-sales network structure (for example, Japan-Korea-China, Korea-Southeast Asia-China, or South Korea-China-North America). Second, the sales and profits of Korean companies operating in China in 2020 decreased year-on-year, with significant deviation between each company. Third, the operating rate of Korean manufacturers in China was very low, with decreased local demand being the most important reason. Fourth, Korean companies' business medium-term (5-year) outlook in China is relatively optimistic. However, if considering relocation of production facilities, most companies chose Southeast Asia as an alternative production location. Fifth, most Korean companies in China anticipated that the business environment in China will worsen. In particular, strengthening environmental protection policies will affect their businesses the most, which Korean companies may just accept. Sixth and finally, COVID-19 was found to be more important than the conflict between the U.S. and China in terms of global external risk.

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