Supply Chain Strategies Under the Impact of COVID-19 of Large American Companies Operating in China
1

Executive summary

Overview

- Two surveys were jointly conducted by AmCham China, AmCham Shanghai, and PwC China to study the supply chain impacts of recent events on American companies operating in China.

- The most recent, from March 2020, is presented first to provide a recent view of the impacts of the COVID-19 pandemic. The prior survey, from September-October 2019 is presented in Appendix A to serve as a point of comparison and also provide additional insight into the impacts of bilateral US-China tensions.

- The March 2020 respondents are a subset of the 2019 respondents; demographic data is presented in Appendix B. While the two survey populations are not identical and the survey questions from each survey are different, taken together these two surveys provide a picture of the current sentiment of large American companies operating in China.

- The October 2019 survey revealed that the supply chains of 90% of survey respondents have been affected by the US-China trade dispute. The impact is mainly being felt through diversification of their supply base, risk management, and cost control, however the adoption of “in China for China” strategies has mitigated some of the impact. Respondents indicate they remain hopeful for the continuing development of healthy commercial relations between the US and China and for improved enforcement to level the playing field between foreign and domestic companies in China.

- The March 2020 survey showed companies are focusing on a return to full production capacity in the aftermath the COVID-19 epidemic in China; Concerns are shifting away from factory closures and to logistics-related challenges. Approximately 68% respondents anticipate a return to normal activities in China within the next three months.
Key findings
(March 2020 Survey)

Background
The March 2020 mini-survey was designed to assess the impact of COVID-19 on the supply chain operations of American companies operating in China. The mini-survey included questions on production and import/export activities, supply chain strategies, and policy needs.

- The mini-survey was conducted between 6 March and 13 March 2020. It is a supplement to a survey performed in September/October 2019 regarding the impacts of bilateral trade tensions on US businesses operating in China. The survey respondents represent a subset of the respondents who participated in the 2019 supply chain survey. The 2019 survey results are included in Appendix A.

- We received responses from 25 companies, each with more than 10 years of experience operating in China; a majority have been in China for more than 20 years. The survey targeted senior executives from large US companies (defined as those with a global revenue of over US $500 million) in China from the industrial products, consumer business, healthcare, and information technology industries/sectors.

Key findings
Due to the rapid spread of COVID-19 and the ensuing operational constraints, around half of the respondents were running below normal capacity and 68% reported that demand for their company’s products and services was below normal.

- Logistics-related challenges were reported as the greatest anticipated challenge in the immediate term; suppliers unable to operate at full capacity was the next most critical challenge.

- With respect to government actions, accelerating government “return to work” approvals is seen as the most helpful action by 56% of respondents. All respondents reported that Chinese government support measures are available to foreign companies and domestic Chinese businesses.

- In the short term, over 70% of respondents have no plans yet to relocate production and supply chain operations or sourcing outside of China due to COVID-19. Twice as many (24% vs. 12%) reported they plan to shift sourcing activities as were planning to shift production.

- Around 40% of respondents say that their long-term supply chain strategy for China will remain the same regardless of the impact of COVID-19, while the 52% percent of companies believed it is too soon to tell.

- With respect to the impact of COVID-19 on their import and export activities, around one third of the companies believe the impact will be limited.

- 68% of respondents expect their China supply chain operations to return to normal in less than 3 months and 96% of respondents expect to return to normal within 3 to 6 months.

- Respondents indicated greater potential for economic decoupling between the US and China as compared with the 2019 survey, with one third fewer reporting they believe decoupling is not possible and one in five reporting they believe that decoupling will be accelerated by COVID-19.
Around half of the respondents have not yet reached 100% production capacity. Approximately 44% of the respondents anticipate reaching normal capacity by April 2020 while 48% of the companies have not yet confirmed when they will return to normal capacity.

Q. Are your company’s factories/manufacturing facilities running at normal capacity?

Sub Q. How soon do you anticipate reaching normal capacity?

- Yes, running at 100% capacity: 28%
- No, running at > 50% capacity: 16%
- No, running at < 50% capacity: 8%
- Not confirmed yet: 48%

N=25
68% of respondents expect their China supply chain operations to return to normal in less than 3 months and 96% of respondents expect their supply chain operations to return to normal within 3 to 6 months.

<table>
<thead>
<tr>
<th>When do you expect your China supply chain operations to return to normal?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3 months</td>
<td>68%</td>
</tr>
<tr>
<td>3–6 months</td>
<td>28%</td>
</tr>
<tr>
<td>6–12 months</td>
<td>4%</td>
</tr>
<tr>
<td>More than 18 months</td>
<td>0%</td>
</tr>
<tr>
<td>12–18 months</td>
<td>0%</td>
</tr>
</tbody>
</table>

N=25
36% of respondents say the COVID-19 epidemic has had a *limited impact on their import activities*, while 44% report a *limited impact on exports*. Only 16% percent report a strong impact on imports and 8% a strong impact on exports.

Q. How has the COVID-19 epidemic impacted your company’s **import activities** for its China supply chains?

<table>
<thead>
<tr>
<th>Impact</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not sure / Too soon to tell</td>
<td>20%</td>
</tr>
<tr>
<td>No impact on imports</td>
<td>24%</td>
</tr>
<tr>
<td>Limited impact on imports</td>
<td>36%</td>
</tr>
<tr>
<td>Strong impact on imports</td>
<td>16%</td>
</tr>
<tr>
<td>Severe impact on imports (&gt;50%)</td>
<td>4%</td>
</tr>
</tbody>
</table>

Q. How has the COVID-19 epidemic impacted your company’s **export activities** for its China supply chains?

<table>
<thead>
<tr>
<th>Impact</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not sure / Too soon to tell</td>
<td>20%</td>
</tr>
<tr>
<td>No impact on exports</td>
<td>24%</td>
</tr>
<tr>
<td>Limited impact on exports</td>
<td>44%</td>
</tr>
<tr>
<td>Strong impact on exports</td>
<td>8%</td>
</tr>
<tr>
<td>Severe impact on exports (&gt;50%)</td>
<td>4%</td>
</tr>
</tbody>
</table>

N=25
On the demand side, 68% of respondents say that demand for their company's products is lower than normal.

Q. Do you expect demand within the next 3 months for your company’s products to be:

- Lower than normal: 40%
- Significantly lower than normal: 28%
- Same as normal: 20%
- Higher than normal: 12%
- Significantly higher than normal: 0%

N=25

Logistics challenges represent the biggest challenge to supply chain operations over the next month; Reduced capacity among suppliers and insufficient labor availability are the next most commonly reported challenges.

Q. What will be your greatest supply chain challenges over the next month? (Please rank your top five challenges on a scale of 1-5, with 1 being the greatest)

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Rank 1</th>
<th>Rank 2</th>
<th>Rank 3</th>
<th>Rank 4</th>
<th>Rank 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistics (including transportation, warehousing, etc.)</td>
<td>40%</td>
<td>24%</td>
<td>16%</td>
<td>12%</td>
<td>4%</td>
</tr>
<tr>
<td>Suppliers not operating at a normal capacity</td>
<td>28%</td>
<td>40%</td>
<td>20%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Insufficient labor available</td>
<td>24%</td>
<td>8%</td>
<td>4%</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Impact on distributors/channel partners</td>
<td></td>
<td>8%</td>
<td>12%</td>
<td>36%</td>
<td>24%</td>
</tr>
<tr>
<td>Inventory management</td>
<td>16%</td>
<td>24%</td>
<td>20%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Insufficient cash flow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24%</td>
</tr>
<tr>
<td>Finding alternative suppliers</td>
<td>16%</td>
<td>16%</td>
<td>24%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
56% of respondents say accelerating government “return to work” approvals is the most helpful action taken by the Chinese government. All respondents report that government policies are available to foreign businesses to help relieve their supply chain pressure.

Q. Which central, provincial or local government actions or policies have been the most helpful?
(Please rank the five most helpful actions or policies on a scale of 1-5, with 1 being the most helpful)

<table>
<thead>
<tr>
<th>Action</th>
<th>Rank 1</th>
<th>Rank 2</th>
<th>Rank 3</th>
<th>Rank 4</th>
<th>Rank 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerating government “return to work” approvals</td>
<td>56%</td>
<td>12%</td>
<td>4%</td>
<td>4%</td>
<td>16%</td>
</tr>
<tr>
<td>Providing tax relief (Income Tax, VAT)</td>
<td>24%</td>
<td>20%</td>
<td>12%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Relaxing quarantine restrictions on healthy workers</td>
<td>12%</td>
<td>20%</td>
<td>12%</td>
<td>8%</td>
<td>20%</td>
</tr>
<tr>
<td>Accelerating customs clearance for imports and exports</td>
<td>4%</td>
<td>24%</td>
<td>8%</td>
<td>28%</td>
<td>12%</td>
</tr>
<tr>
<td>Resuming transport or providing chartered transport for workers and suppliers</td>
<td>4%</td>
<td>16%</td>
<td>28%</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td>Providing safety products/equipment</td>
<td>4%</td>
<td>28%</td>
<td>24%</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Providing relief for loans/credit (rate cuts, etc.)</td>
<td>4%</td>
<td>8%</td>
<td>4%</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Issuing of Force Majeure Certificates</td>
<td>4%</td>
<td>8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accelerating business registration and filings</td>
<td>12%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simplifying inventory write-offs</td>
<td>4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N=25

Q. Do you feel that the government's policies to help relieve supply chains affected by COVID-19 are available to foreign businesses?

- Yes: 100%
- No: 0%
Over 70% of respondents say their company has no plans to move production/supply chain operations or sourcing to other locations due to COVID-19, with twice as many planning to shift sourcing as shifting production to new geographies.

### Q. Do you have plans to move production and/or supply chain operations to other regions of China or outside China due to the COVID-19 epidemic?

<table>
<thead>
<tr>
<th>Plan Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>84%</td>
</tr>
<tr>
<td>Yes, adjusting production and/or supply both domestically and partially outside of China</td>
<td>12%</td>
</tr>
<tr>
<td>Yes, move production and/or supply operations out of China</td>
<td>4%</td>
</tr>
<tr>
<td>Yes, continue to produce and/or supply in different / additional provinces</td>
<td>0%</td>
</tr>
</tbody>
</table>

N=25

### Q. Do you have plans to move sourcing to other regions of China or outside China due to the COVID-19 epidemic?

<table>
<thead>
<tr>
<th>Plan Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>72%</td>
</tr>
<tr>
<td>Yes, adjusting sourcing both domestically and partially outside of China</td>
<td>24%</td>
</tr>
<tr>
<td>Yes, move source operations out of China</td>
<td>4%</td>
</tr>
<tr>
<td>Yes, continue to source in China but in different / additional provinces</td>
<td>0%</td>
</tr>
</tbody>
</table>
40% of the respondents say their long-term supply chain (3-5 year) strategy for China will remain the same despite COVID-19; while 52% companies believe it is too soon to tell.

Q. How has the COVID-19 epidemic impacted your long-term (3-5 year) supply chain strategy for China?

- Too soon to tell: 52%
- No change: 40%
- Reducing manufacturing and sourcing from China: 4%
- Increasing manufacturing and sourcing in China: 4%

N=25

With respect to the impact of COVID-19 on US-China economic decoupling, 44% of the respondents think it is impossible for the two economies to decouple (as compared with 66% in the 2019 survey*) with 20% expecting an acceleration. No respondents indicated a deceleration.

Q. How has the COVID-19 epidemic affected your company’s view on the extent and speed of potential US-China economic decoupling?

- It is not possible for the two economies to decouple: 44%
- No change: 36%
- It will accelerate the process of decoupling: 20%
- It will slow down the process of decoupling: 0%

* March 2020 responses represent relative changes in sentiment from October 2019 due to COVID-19 rather than an absolute measure of probability.
Executive Summary – October 2019 Survey

Research Background

- The supply chain survey was conducted jointly by AmCham China, AmCham Shanghai, and PwC China between September and October 2019 to better understand how bilateral tensions and the imposition of tariffs are impacting the supply chains and business decisions of US companies in China.

- The purpose of this survey was to:
  - Establish an understanding of the supply chain strategies of US companies operating in China,
  - Analyze how tensions in the bilateral economic relationship were impacting the supply chain decisions of US companies in China, and
  - Help foster a healthy commercial relationship between the US and China.

- Considering recent turbulence in the US-China economic relationship, we hope that the research findings provide an accurate and nuanced view of the experience US companies on the ground in China and help to inform the governments of both sides about the issues of the greatest importance to US companies in China.

Research Approach

- The survey received responses from representatives of 70 US companies in China. The survey targeted senior executives from large US companies in China, covering a number of industries including industrial products, consumer business, healthcare, and information technology.

- 96% of the companies surveyed have been active in China for over 10 years and 63% of the companies have active operations in 10+ provinces in China.

- 70% of companies surveyed manufacture in China for sale in the China market, with a portion of product being exported. A further 17% manufacture in China exclusively for sale in China (“in China, for China”), while 13% of companies are positioning China as their global supply base.

- In addition, we also conducted 6 face-to-face management interviews with senior executives of leading US companies in representative sectors to help verify and expand upon our survey findings.
Executive Summary –
October 2019 Survey

Key Findings in the Autumn of 2019

- US-China trade dispute has impacted the supply chain operations of 90% of respondents. Companies are diversifying their supply base, adopting additional risk management and cost control measures.
  - Nearly one half of respondents report that the imposition of tariffs has increased the costs associated with their supply chains by 10%, and an additional 16% seeing their costs increase by up to 30%.
  - At the same time, less than 20% of respondents have begun relocating manufacturing outside of China over the past two years to mitigate the impacts of tariffs imposed by China and the US.
  - Companies have increasingly adopted an “In China, for China” supply chain strategy with respect to manufacturing and sourcing to meet the demand in the China market.
- To improve overall competitiveness, most US companies have supply chain transformation needs over the next 1-3 years.
  - Over the next 1 to 3 years, the majority of respondents are focusing on improving the operation of their China-based supply chains or investing in a digital transformation and innovation to improve the competitiveness of their supply chains in China. Nearly one-third report that they are considering or planning a complete supply chain strategy transformation.
  - Nearly 63% of respondents are investing in new technologies to automate manufacturing and improve competitiveness.
- Most US companies remain hopeful for a continued healthy commercial relationship between the US and China, and report that further improvement in China’s regulatory environment would encourage them to invest more in China.
  - A slowdown in global economic growth stemming from US-China trade frictions and a deterioration of bilateral relations are the top concerns of 60% of survey respondents in China with respect to their supply chain operations over the next 3 years.
  - Approximately 93% of US companies surveyed feel that the US and Chinese economies are too large and too interconnected to decouple. Decoupling would harm their competitiveness and impose harm and greater uncertainty on the economies of both countries.
  - Survey respondents report that improved regulatory enforcement, stronger IP protection, preferential policies that support the manufacturing activities of foreign firms, and greater market access, would encourage them to invest more in China.
Data and Analysis

The US-China trade dispute has impacted the supply chains of 90% of survey respondents, forcing them to diversify their supply base choice, and adopt additional risk management and cost control measures.

Q. How is the US-China trade dispute impacting or affecting your company’s supply chain? (Multiple choices)

- Forcing us to diversify our supply base: 64%*
- Forcing us to add additional risk management protocols: 57%
- Forcing us to adopt cost control measures: 54%
- Forcing us to relocating manufacturing or sourcing capabilities out of China: 24%
- Others: 4%
- Negligible to no impact: 10%

N=70; *notes: stands for the number of responses from multiple choices
The level of impact varies across industries

Q. How is the US-China trade dispute impacting or affecting your company's supply chain? (Multiple choices)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Negligible to no impact</th>
<th>Forcing us to relocating manufacturing or sourcing capabilities out of China</th>
<th>Forcing us to adopt cost control measures</th>
<th>Forcing us to diversify our supply base</th>
<th>N=70; *notes: stands for the number of responses from multiple choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial products (energy, auto, chemicals, machinery, etc.)</td>
<td>4%</td>
<td>12%</td>
<td>27%</td>
<td>27%</td>
<td>29%</td>
</tr>
<tr>
<td>Healthcare (devices &amp; equipment, services, pharmaceuticals)</td>
<td>19%</td>
<td>6%</td>
<td>31%</td>
<td>25%</td>
<td>19%</td>
</tr>
<tr>
<td>Consumer products and retail</td>
<td>13%</td>
<td>7%</td>
<td>13%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>Information Technology (hardware, software and services, telecoms)</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
<td>40%</td>
<td>15</td>
</tr>
<tr>
<td>Other industries</td>
<td>8%</td>
<td>33%</td>
<td>25%</td>
<td>33%</td>
<td>12</td>
</tr>
</tbody>
</table>

Highlights in findings

Technology and industrial products industry sectors are more influenced:

- The key components of technology industry used in the manufacturing in China are largely dependent on import from the US, for example over 90% of chips in PC and mobile are imported

- Among the China Tariff List, goods in the categories related to technology and industrial products are tariffed, which accounts for 51% of the total amount of tariffs. Therefore, companies in technology and industrial products industries tend to diversify supplier base or relocate manufacturing out of China as their countermeasures

Consumer goods and healthcare industries are less influenced:

- The materials or products related to consumer goods are less tariffed, which only takes up 2% of the total amount of tariffs. Also, the relocation cost of manufacturing is huge for healthcare companies in terms of regulation, business opportunities, etc. and they are less concerned about the labor cost
With respect to costs, the imposition of tariffs by the US and China has increased supply chain costs of nearly half of survey respondents by 10%, with a further 16% reporting their costs have increased by up to 30%.

Q. How has the imposition of tariffs by the US and China affected costs associated with your supply chains?

<table>
<thead>
<tr>
<th>Cost Increase</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligible to no impact on cost</td>
<td>10%</td>
</tr>
<tr>
<td>Increase costs by up to 10%</td>
<td>47%</td>
</tr>
<tr>
<td>Increase costs by 11-20%</td>
<td>27%</td>
</tr>
<tr>
<td>Increase costs by 21-30%</td>
<td>16%</td>
</tr>
</tbody>
</table>

N=70

The imposition of tariffs has significantly increased supply chain cost of most US companies in industrial products and IT sectors.

Q. How has the imposition of tariffs by the US and China affected costs associated with your supply chains?

<table>
<thead>
<tr>
<th>Industry</th>
<th>Negligible to no impact on cost</th>
<th>Increase costs by up to 10%</th>
<th>Increase costs by 11-20%</th>
<th>Increase costs by 21-30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial products (energy, auto, chemicals, machinery, etc.)</td>
<td>7%</td>
<td>44%</td>
<td>27%</td>
<td>22%</td>
</tr>
<tr>
<td>Healthcare (devices &amp; equipment, services, pharmaceuticals)</td>
<td>11%</td>
<td>56%</td>
<td>22%</td>
<td>11%</td>
</tr>
<tr>
<td>Consumer products and retail</td>
<td>25%</td>
<td>63%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Information Technology (hardware, software and services, telecoms)</td>
<td>14%</td>
<td>43%</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Other industries</td>
<td>40%</td>
<td>40%</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

N=70
Only about 20% of survey respondents say they have relocated manufacturing outside of China to mitigate the impact of the increase in tariffs.

Q. Is your company considering, or has it already begun the process of relocating manufacturing or sourcing outside of China?

Sub Q1. How long has the process be on?

- Not at all: 61%
- Yes, but no actions yet: 19%
- Yes, and action has been taken: 20%

Sub Q2. If applicable, why is your company relocating manufacturing /sourcing outside of China?

- The imposition of tariffs is directly responsible for our decision to relocate manufacturing/sourcing outside of China: 67%
- We are relocating our supply chain outside China because the market is no longer cost competitive for our products and services due to market or other economic factors: 11%
- The imposition of tariffs is not directly responsible, but has played a role in our decision to move manufacturing/sourcing outside China: 7%
- We are relocating our supply chain outside China as a result of internal company decisions: 15%
A manufacturing in China for sale in China (“In China, for China”) strategy has been an important component of the supply chain strategy of US companies in China.

Q. Which of the following best describes your company’s operations in China?

- **70%** We manufacture in China for sale in China, with a percentage of product exported
- **17%** We manufacture in China exclusively for sales in China
- **13%** We only source or manufacture export products in China

### Key considerations behind manufacturing/sourcing “in China for China”

**Increasing China market demand and stable profitability:** Despite deteriorating US-China trade relations, companies mostly weathered the economic tumult in 2018. 76.8% members reported they were profitable in 2018, as compared with 76.5% in 2017 and 76.9% in 2016.

**Higher manufacturing efficiency in China:** A comparison of China’s labor productivity and that of 4 ASEAN countries finds that a Chinese laborer can manufacture (Manufacturing Value Added per capita: ~US $1850) goods that have approximately the same value as goods manufactured by 4 workers from 4 ASEAN countries combined.

**Better logistics services in China:** According to the World Bank, with respect to logistics performance, China’s is far ahead of all ASEAN manufacturing countries in terms of infrastructure, international shipping, quality and competence, tracking, and punctuality of logistics.

### Interview Feedback

- “We built our manufacturing capacity in Shanghai for two reasons: 1) it’s close to the customers despite the high cost; 2) high efficiency of supply chain. Also, we are investing more on manufacturing in China to meet the increasing demands.”
- “There are six suppliers in China as well as manufacturing bases. The products manufactured are mainly supplied to China, with limited volume for export.”
- “Everything that we produces in China are sold in China. We only import limited volume as required to support our production.”

N=70
To improve their overall competitiveness, survey respondents have supply chain are focusing on improving the operation of their supply chains or undertaking a digital transformation.

**Q. What supply chain strategy and/or operational support is your company considering, or planning undertake in the China market over the next 1-3 years? (Select all that apply)**

- Improving the operation of our China-based supply chains (e.g., cost control, profit margin improvements) - 70%
- Digital transformation and/or investing in innovation to improve competitiveness of our China-based supply chains - 49%
- A complete supply chain strategy transformation - 29%
- Others - 7%

**Q. Is your company investing in new technologies to upgrade and automate manufacturing to raise productivity and offset the impact of tariffs?**

- Yes, but our investments in technology and automation are part of our broader corporate strategy and the rate of investment is largely unaffected by the imposition of tariffs - 56%
- No, our company does not have in place a plan to make additional investments in technology and automation beyond what is required to produce our products and services - 33%
- Yes, the imposition of tariffs has accelerated our investments in technology and automation to offset their impact - 7%
- Others - 4%

*N=70; *notes: stands for the number of responses based on multiple selections*
A slowdown in global economic growth from US-China trade friction and a deterioration of bilateral relations are the top concerns of 60% of respondents with respect to their supply chain operations in China over the next 3 years.

Q. Which of the following is most concerning for your company’s supply chain operations in the China market over the next 1-3 years?

- Slowdown in global economic growth rates stemming from US-China trade frictions: 33%
- Deterioration of US-China relations: 26%
- A slowing Chinese economy: 24%
- Sustained imposition of tariffs on key products and inputs: 16%
- Others: 1%

N=70

93% of companies agree that the US and Chinese economies are too large and too interconnected to decouple.

Q. Please select the option which best aligns with your company’s views on the following statement: “The US and China can decouple their two economies.”

- Disagree. The process of decoupling is neither necessary nor desirable. The US and Chinese economies are too large and too interconnected to decouple. Such a process would harm our company’s competitiveness and impose harm (either short term or long term) to the US or Chinese economies. 66%
- Disagree. It is unclear, given the size and interconnectedness of the US and Chinese economies, what “decoupling” would entail, who would benefit from such a process, or what the outcomes would be for either the US or Chinese economies. 27%
- Agree. However, the process of decoupling such large and interconnected economies will harm our company’s competitiveness and result in harm (either short-term or long-term) to the US and Chinese economies. 7%
Respondents say that improvements in the regulatory environment in areas like enforcement, IP protection, preferential policies for foreign manufacturers, and market access would encourage them to invest more in China.

**Q. What actions by the Chinese government would encourage your company to maintain operations in China (if relocating), or invest more in the China market? (Select all that Apply)**

<table>
<thead>
<tr>
<th>Action</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve regulatory enforcement to ensure a level playing field for US companies in China</td>
<td>80%*</td>
</tr>
<tr>
<td>Improve IP protection regulations and implementation</td>
<td>74%</td>
</tr>
<tr>
<td>Develop more preferential government policies that support the manufacturing activities of foreign firms</td>
<td>67%</td>
</tr>
<tr>
<td>Provide greater market access to foreign companies operating in China</td>
<td>57%</td>
</tr>
<tr>
<td>Improve the transparency and efficiency of customs clearance procedures</td>
<td>47%</td>
</tr>
</tbody>
</table>

N=70; *notes: stands for the number of responses from multiple choices
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Appendix

Appendix B – Demographic Information of Survey Respondents

The October 2019 survey received responses from 70 US companies. The survey targeted senior executives from large US companies* in China, from industries like industrial products, consumer business, healthcare, and information technology.

**Q. Which is the core industry of your business in China?**

- Industrial products (auto, energy, chemicals, machinery, etc.) - 59%
- Healthcare (devices & equipment, pharmaceuticals) - 11%
- Consumer goods and retail - 13%
- Information technology (hardware, software, telecoms) - 7%
- Other industries (services, agriculture or others) - 10%

**Q. What is your position at your company?**

- Senior-level country manager (CEO, VP, GM, MD, chief representative) - 6%
- Director of government affairs or public relations department - 20%
- Director of operations, procurement, or supply chain management department - 14%
- Director/functional leader of other department - 60%

N=70
*Notes: global revenue of survey companies are typically more than USD1 billion
96% of the companies surveyed in October 2019 have been active in China for over 10 years and 63% have active operations in 10+ provinces in China

Q. How long has your company been operating in China?

- Over 20 years: 70%
- 11-20 years: 26%
- 6-10 years: 4%

Q. In how many provinces in China does your company have active operations?

- Over 10 provinces: 63%
- 6-10 provinces: 17%
- 2-5 provinces: 10%
- 1 province: 7%
- None: 3%

N=25
70% of respondents to the October 2019 survey are manufacturing in China for sale in China with a percentage of their product being exported. 17% manufacture in China exclusively for sale in China, while 13% of companies are positioning China as its global supply base.

Q. Which of the following best describes your company’s operations in China?

- We manufacture in China for sales in China, with some of them exported
- We manufacture in China exclusively for sales in China
- We only source or manufacture export products in China

N=70

Q. If your company has export business, which of the following are applicable?

- Remain current supply chain strategy in China
- Actively considering a China Plus One strategy, in which manufacture in China and at least one other country
- Realized supply chain was overly dependent/overweight on China after evaluation of the impact of tariffs on supply chains and hence diversifying manufacturing channels
- Shifting some of our export production out of China because of rising costs, regardless of tariffs
- Shifting some of our export production out of China because tariffs make pricing non-competitive
- No export business

N=70
The March 2020 respondents represent a subset of the October 2019 survey respondents. Companies from a broader range of industries responded, and a larger percentage of respondents were senior leadership.

Q. Your company's China operations are primarily categorized as:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare (devices &amp; equipment, services, pharmaceuticals)</td>
<td>20%</td>
</tr>
<tr>
<td>Oil &amp; gas, energy, chemicals, and other industrial goods</td>
<td>20%</td>
</tr>
<tr>
<td>Consumer products and retail</td>
<td>16%</td>
</tr>
<tr>
<td>Machinery, equipment, tools, systems and controls</td>
<td>16%</td>
</tr>
<tr>
<td>Automotive and auto parts</td>
<td>8%</td>
</tr>
<tr>
<td>Information Technology (hardware, software and services, telecommunications)</td>
<td>8%</td>
</tr>
<tr>
<td>Services (financial services, real estate, logistics, professional services, etc.)</td>
<td>4%</td>
</tr>
<tr>
<td>Agriculture and agribusiness</td>
<td>4%</td>
</tr>
<tr>
<td>Others</td>
<td>4%</td>
</tr>
</tbody>
</table>

N=25

Q. What is your position at your company?

<table>
<thead>
<tr>
<th>Position</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior-level country manager (CEO, VP, GM, Managing Director, Chief Representative)</td>
<td>72%</td>
</tr>
<tr>
<td>Director of government affairs or public relations department</td>
<td>20%</td>
</tr>
<tr>
<td>Director/functional leader of other department (e.g., HR Director, Finance Director, Sales Director)</td>
<td>4%</td>
</tr>
<tr>
<td>Director of operations, procurement, or supply chain management department</td>
<td>4%</td>
</tr>
</tbody>
</table>
All of the March 2020 respondents have more than 10 years of experience in China, with a majority having operated in China for over 20 years. Over 80% have active operations in multiple provinces in China.

Q. For how long has your company been active in the China market?

- 68% More than 20 years
- 32% Between 11 and 20 years

Q. In how many provinces in China does your company have active operations?

- 64% More than 10 provinces
- 16% 6-10 provinces
- 12% 2-5 provinces
- 4% 1 province
- 4% No operations in China

N=25
68% of the March 2020 respondents manufacture in China for sale in China with a percentage of product being exported; the majority of the respondents also own plants, factories or office in China.

Q. Which of the following is most representative of your company’s operations?

- We manufacture in China for sale in China, with a percentage of product being exported (68%)
- We manufacture in China exclusively for sale in China (20%)
- We only source or manufacture export products in China (12%)

Q. Which of the following best describes your company’s operations in China?

- We have both operations in China (e.g., plants, factories, or an office) AND generate revenue from the sale of products or services in the China market (88%)
- We do not have operations, but we generate revenue from the China market (e.g., from the sale of products or services into the China market) (4%)
- We have operations in China (e.g., plants, factories, or an office) but generate revenue from the sale of those goods or services into markets other than China (8%)
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