Chinese Supply Chains

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Over the past three decades, China's importance to global trade has grown significantly — as a primary producer of high value products and components, a large customer of global commodities and industrial products, and an attractive consumer marketplace. At the time of its accession into the World Trade Organization (WTO) in 2001, China generated only around half the real manufacturing value-added output of Japan and one-quarter that of the U.S.[1] Only eight years after joining the WTO, China passed Germany to become the world's largest exporter of goods. Now China accounts for 35% of global manufacturing output, and its factories generate more real manufacturing value added—$3.9 trillion in 2019—than the U.S., Germany, South Korea, and the U.K. combined.[2 3 4]

China is the World's Largest Exporter of Goods

35%
of global manufacturing output

$3.9 trillion
real manufacturing value added in 2019

Recently, however, geopolitical volatility and severe supply chain disruptions caused by the COVID-19 pandemic have raised questions over the future of China's dominant role in global production. Economic nationalism is on the rise around the world, due in part to the challenges many countries faced in securing shipments of critical medical supplies and other products during the pandemic. Manufacturers worldwide are facing greater political pressure to ramp up their domestic production, grow employment in their home

1 BCG, "China's Next Leap in Manufacturing", October 2018
2 McKinsey Global Institute, "China and the world: Inside the dynamics of a changing relationship", June 2019
3 Associated Press, "China Becomes World's No. 1 Exporter, Passing Germany", June 2010
4 The World Bank, Manufacturing Value Added Data, September 2020

countries, de-risk and diversify critical supply chains, and revise lean manufacturing strategies to increase the amount of inventory held in their global supply chains. The changes that result from these pressures could be significant, as McKinsey estimates that 16% to 26% of all exports – worth $2.9 trillion to $4.6 trillion in 2018 – could be "in play" for relocation in the next five years.[5]

As companies prepare for a post-pandemic world, it is crucial to recognize the significant advantages that China still possesses as a major center of production, despite the challenges posed by rising geopolitical tension. Complete relocation of supply chains out of China is both impractical for most companies and irrational from a cost-benefit perspective. Instead, companies should focus on increasing the resiliency of their supply chains by diversifying them. For many companies, this means hedging risks by keeping China as the largest hub of production but adding additional supply elsewhere for redundancy purposes – an approach often referred to as "China plus".[6]

Trade War Instabilities

Prior to the pandemic, a protracted trade war between the U.S. and China had already created challenges for companies reliant on China for production of goods. Tit-for-tat tariffs imposed by the U.S. and China cast a cloud of uncertainty over bilateral trade. Uncertainty over the outlook for negotiations between the two countries made it difficult for supply chain managers to plan. In late spring 2019, it appeared as though the two sides had achieved a breakthrough and were closing in on a comprehensive deal. But in a dramatic turn of events, after Chinese negotiators sent back a final document covered in a "sea of red" revisions that removed commitments to key structural issues core to U.S. concerns and the deal fell apart.[7] Both sides blamed each other for the deal's collapse, further eroding trust on both sides.

By the fall of 2019, tariffs were in place or planned for nearly all goods traded by U.S. and China. With average tariff rates reaching over 20% on both U.S. and Chinese exports, multinational companies faced pressure to find ways to offset the additional costs.

5 McKinsey Global Institute, "Risk, resilience, and rebalancing in global value chains", August 2020
6 AmCham China, "Supply Chain Challenges for U.S. Companies in China", April 2020
7 New York Times, "How Xi's Last-Minute Switch on U.S.-China Trade Deal Upended It", May 2019

Many companies explored alternative options for production in order to avoid tariffs. Some found ways to sidestep tariffs by tweaking assembly and shipping processes rather than relocating supply chains.[8] Most companies, however, had no choice but to absorb the higher production costs. Very few companies emerged from the trade tensions unscathed. According to an October 2019 survey by AmCham, 90% of respondents said that the U.S.-China trade dispute had impacted their supply chain operations.[9]

By the time that the U.S. and China finally signed a "phase-one" trade deal in January 2020, U.S. businesses and consumers had paid an estimated $46 billion in tariffs since the trade dispute began in 2018.[10] Along the way, China dropped from the largest trading partner for the U.S. prior to the trade war to its third largest.[11] Perhaps most importantly for the longer-term prospects of doing business in China, the conflict shook supply chain managers' and company executives' confidence that China could be a reliable source for manufacturing and production of goods.

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Over-dependence on China?

Despite the collapse of the May 2019 iteration of the Phase-1 deal and rising tariffs, Washington and Beijing were able to reach a "Phase-1 Lite" deal in January of 2020, focused primarily on Chinese purchases of U.S. goods and implementation of new intellectual property measures. However, just as the ink was drying on the phase-1 trade deal and it looked like the détente might quell fears of excessive reliance on China for production, the novel coronavirus pandemic began in Wuhan, China. The outbreak posed

[8] Wall Street Journal, "Companies Find Ways to Bypass Tariffs on Chinese Imports", February 2020
[9] AmCham China, "Supply Chain Strategies Under the Impact of COVID-19 of Large American Companies Operating in China (Appendix A)", April 2020
[10] Reuters, "Trump's tariffs cost U.S. companies $46 billion to date, data shows", January 2020
[11] U.S. Census Bureau, Foreign Trade Data, December 2019

a major threat to supply chains in China. Wuhan's crucial role in supply chains made the impact of shutdown measures particularly acute for many multinational companies.

A city of around 11 million people, Wuhan has been an important manufacturing base for decades. Known for its production of steel and automobiles, it has been referred to locally as "China's motor city." Efforts in recent years to transform the city into a high-tech modern manufacturing hub appear to be successful, as the output of Wuhan's high-tech industries exceeded RMB 1 trillion (U.S.D 143 billion) in 2018.[12] Additionally, Wuhan is a critical transportation hub for many industries. It has China's largest inland port which connects the city with Shanghai via the Yangtze River and handles close to 1.5 million containers a year.[13]

In the ensuing weeks and months, the stringent lockdown measures extended far beyond Wuhan. Production across many parts of the country was shut down as workers were unable to return to factories following the Lunar New Year holiday. Once workers were eventually able to return, they were subject to lengthy quarantines before they could resume work.

By mid-February, less than a quarter of companies (21.8%) reported having sufficient staff to run a full production line, according to an AmCham Shanghai survey.[14] The cumulative effects of factory closures, quarantine requirements for workers, and disruption of shipments caused shortages of products and components. Shipping volumes plummeted, as executives reported that large container ships were leaving Chinese ports with as little as 10% of their full capacity.[15] The impact of the virus was so severe that China's manufacturing activity contracted by a record magnitude in February and reported its first GDP contraction since 1992.[16]

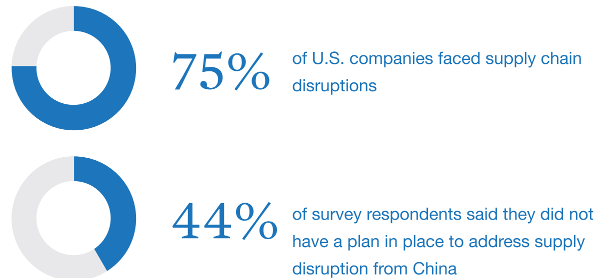
Similar to the trade war, the coronavirus outbreak exposed the risks of being overly dependent on one country for production. A survey conducted by the Institute for Supply Management (ISM) when production in China ground to a halt in January and February found

12 Xinhua News Agency, "Motor city rising as China's high-tech hub", December 2019
13 Wall Street Journal, "China Holds Back Some Ships from Calling at Wuhan", January 2020
14 AmCham Shanghai, "Supply Chains & Factory Openings: An AmCham Shanghai Mini-Survey", February 2020
15 Wall Street Journal, "China's Shipping Nears a Standstill Amid Coronavirus Disruption", February 2020
16 South China Morning Post, "China's factory activity plunges to all-time low, worse than global financial crisis, February data show", February 2020

that nearly 75% of U.S. companies were facing supply chain disruptions due to the virus. The ISM survey also found that more than 44% of respondents said they did not have a plan in place to address supply disruption from China.[17]

Survey Results from the Institute for Supply Management

When production in China stopped in January and February of 2020 due to COVID.



Delinking, Not Decoupling

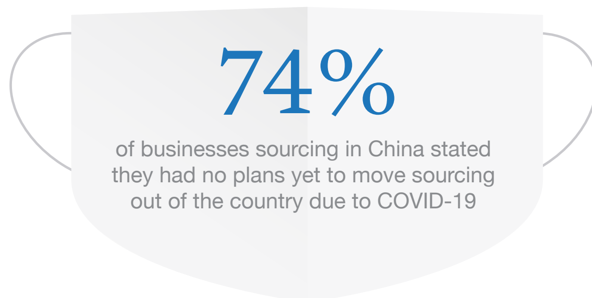
Escalating tensions between China and the U.S. over trade and other issues in the past several years have fueled speculation over whether the world's two largest economies are decoupling. Tit-for-tat actions on the closure of consulates in Houston and Chengdu, expulsions of journalists, and restrictions on visas and commercial flights are undoubtedly a cause for concern over the trajectory of U.S.-China relations on a diplomatic level.

Multinational companies, however, should not conflate the actions taken by both sides to "delink" the U.S. and China with full-scale economic decoupling. Despite the recent downturn in U.S.-China relations on many fronts, the two sides have proven they are at least capable of compartmentalizing trade relations. Both sides appear to recognize that maintaining a stable trading relationship is mutually beneficial, both for political reasons and in order to not exacerbate the economic damage already wrought by the pandemic.

U.S. companies are not fleeing from China due to COVID-19 disruptions, offering hope that commercial interdependence of the U.S. and China might once again serve as a ballast for otherwise tense bilateral relations past 2020. According to a joint survey conducted by the AmCham and PwC in March 2020, 74% of businesses sourcing in China stated they had no plans yet to move sourcing out of the country due to COVID-19.[18] In the months

[17] Institute for Supply Management, "COVID-19 Survey: Impacts On Global Supply Chains", March 2020
[18] AmCham China, "Supply Chain Strategies Under the Impact of COVID-19 of Large American Companies Operating in China", April 2020

following the survey, China also demonstrated the ability to effectively control the epidemic and manage resurgence of the virus. Especially when compared to other countries, China appears to be a comparatively stable supply hub.



Although it has fallen behind on commitments made to increase purchases of U.S. goods as part of the phase-1 trade deal, China has followed through on its promises to further open financial markets and remove non-tariff barriers. For example, the liberalization of China's financial services industry as a result of new policies announced in June 2020 by China's National Development and Reform Commission and the Ministry of Commerce has eliminated ownership limits on securities, fund management, futures, and life insurance companies.[19] In response to these changes, a number of American financial services companies have already taken advantage of the new opportunities to take full or majority ownership in these sectors.[20]

Cross-border capital flows are also a bright spot amidst the escalation of broader U.S.-China tensions, as both foreign direct investment and portfolio capital have increased over the past year.[21] Direct investment by American multinational firms increased to $14.1 billion in 2019, up from $12.9 billion in 2018.[22] Foreign ownership of Chinese stocks and bonds has increased steadily in recent years, from RMB 744 billion (U.S.D 122 billion) in 2013 to RMB 4.2 trillion (U.S.D 592 billion) by the end of the first quarter of 2020.[23]

19 Xinhua News Agency, "China releases new negative lists for foreign investment", June 2020
20 Wall Street Journal, "China Grants Approval for Goldman Sachs, Morgan Stanley to Control Securities Units", March 2020
21 Xinhua News Agency, "U.S.-China financial decoupling "not happening" despite rhetoric: veteran China watcher", July 2020
22 Rhodium Group, The U.S.-China Investment Hub, December 2019
23 Peterson Institute for International Economics, "Rising foreign investment in Chinese stocks and bonds shows deepening financial integration", July 2020

Mitigating Future Disruptions

In the near term, recovering from the global pandemic is of the utmost concern for the majority of company executives, while supply chain diversification is more of a longer-term priority. In the initial stages of the coronavirus outbreak, over one-third of CFOs surveyed by PwC named supply chain disruptions as a top-three concern. By the time the outbreak had become a full-blown global pandemic, however, that figure had dropped to only 17% as manufacturing activity rebounded in countries hit early by the virus.[24]

As CEOs and executives begin to formulate post-pandemic plans, it is important for companies to take steps in advance to soften the blow of future disruptions. Many different types of events can trigger shocks to supply chains, including natural disasters, pandemics, economic crises, and geopolitical conflict. One important lesson from COVID-19 is that while no company is immune to these events, those that prepare for shocks can at least mitigate the impacts of costly disruptions.

Prioritize resilience over short-term profits: Investments in building supply chain resiliency might be costly in the short term but frequently pay off in the long term when disruptions inevitably occur. If businesses evaluate the current situation strategically, they may be able to boost future growth, while also mitigating the impact of future disruptions.

Most companies have made improving supply chain resiliency a goal for the future. Following the disruptions caused by the U.S.-China trade war and COVID-19, 93% of supply chain executives surveyed by McKinsey in May 2020 reported that they plan to make their supply chains more resilient.[25] It is possible, however, that when push comes to shove and companies consider the financial costs required to build the resiliency of their supply chains, they might not follow through on these plans. Failure to do so will likely have consequences down the line.

Businesses cannot afford to be caught flat-footed when the next major shock occurs. McKinsey estimates that disruptions cause companies to lose 42% of one year's EBITDA every decade, adjusted for the probability and frequency of disruptions. If disruptions impact both production and distribution channels, losses can be significantly higher.[26]

24 PwC, "COVID-19 CFO Pulse", June 2020
25 McKinsey Global Institute, "China and the world: Inside the dynamics of a changing relationship", June 2019
26 Ibid.

“Adopting a ‘China plus’ approach to manufacturing goods might be the best option for many companies seeking to reduce risk exposure.”

Consider a “China plus” strategy: Over-reliance on a single country or individual supplier for components leaves companies vulnerable to disruptions. Building redundancy into supplier networks is one way to safeguard against shocks that could shut down production in entire countries or regions. Adopting a “China plus” approach to manufacturing goods might be the best option for many companies seeking to reduce risk exposure, as China still remains an attractive place to anchor supply chains. China’s large, highly flexible, and technically trained work force is unmatched by any other country in the region or the world.

Companies that retain supply chains in China will have to navigate a complex and often turbulent geopolitical landscape, but those that do so effectively will benefit. With its large domestic market, increasing productivity due to widespread integration of advanced manufacturing systems, and well-established local supply chains, China has the potential to boost its annual real manufacturing value added by another $2 trillion by 2030.[27] Recent decisions by companies such as Apple and Tesla to retain or even expand production in China despite the U.S.-China trade war and broader geopolitical tension is a testament to the critical role that China continues to play in the global supply chain.

“China has the potential to boost its annual real manufacturing value added by another $2 trillion by 2030.”

In order to reduce transportation costs, companies that produce goods only for China’s vast domestic market may prefer to keep much of their production in China. Many multinational companies in China that were initially attracted by China’s massive labor force and the ability to produce goods at low cost have ultimately ended up adopting an “in China, for China” approach, staying to serve the country’s large consumer market. These firms will not be inclined to relocate much of their supply chains outside of China, especially when taking into account that the Chinese market will continue to expand in the coming years.

[27] BCG, “China’s Next Leap in Manufacturing”, October 2018

For production that remains in China, multinational companies should carefully assess supply chain exposure to China's Xinjiang Uyghur Autonomous Region. Those that have direct or indirect exposure to the region should conduct sufficient due diligence to mitigate ethical and reputational risks. Even companies or sectors that source products through subcontractors need to determine where materials in the region come from and what the working condition standards are in factories where goods are manufactured. In many cases, companies may need to depend on third-party audits to assess working conditions, as travel restrictions in Xinjiang make factory visits difficult or impossible. Additionally, collaborating with industry groups and building strong relationships with Chinese suppliers are also important steps in mitigating associated risks.

Invest time and resources to ensure new supplier networks meet production needs: While changes to supply chains may be necessary to improve resiliency, they must be done gradually. For companies that have relied almost exclusively on China for production for decades, shifting labor-intensive portions of supply chains to other countries will not be an easy or quick process. It will take time to build relationships with new suppliers and to verify suppliers' manufacturing quality, capacity, delivery, cost, and their ability to respond to engineering or demand changes.

Establishing supply chains in other countries in the region will also require companies to develop different logistics strategies. Many ports in Southeast Asian countries do not have the capacity to handle ultra-large container ships that major hubs in China can. As a result, companies may need to consider options such as transshipment of goods to intermediate hubs such as Singapore or Hong Kong, which can increase transit times.[28]

Companies producing high-tech equipment may find it harder to find alternative sources for production than those that manufacture goods produced with basic materials such as fabrics, plastics, and lumber that are readily available in other countries besides China. Additionally, firms that specialize in advanced technologies such as microchips, telecommunications, and biotechnology also stand to face political pressure to relocate supply chains that manufacturers of many consumer goods are less likely to face.

[28] Harvard Business Review, "Global Supply Chains in a Post-Pandemic World", September 2020

Due to the hurdles high-tech producers will face in relocating their supply chains, the U.S. might use regulatory incentives similar to those used by Japan and South Korea to encourage reshoring of manufacturing.[29][30] Companies should evaluate the short- and long-term costs and risks of taking advantage of these incentives to re-shore manufacturing, considering strategies like the "China plus" approach when relevant.

"Due to the hurdles high-tech producers will face in relocating their supply chains, the U.S. might use regulatory incentives similar to those used by Japan and South Korea to encourage reshoring of manufacturing."

29 Bloomberg, "Japan to Fund Firms to Shift Production Out of China", April 2020
30 Korea Times, "Korea urged to promote manufacturing reshoring", May 2020