



The Relocation of Global Supply Chains

Alec L. Boron

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The Relocation of Global Supply Chains

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Abstract

This article addresses the unfair and unethical business practices China has been implementing on other countries as a part of their Made in China 2025 plan. Exposing these issues can bring to light the severity of the issue, and the urgency for government and companies worldwide to take action. With China growing at a booming rate, there are serious concerns to have about them taking place in the economic pedestal. By first examining what the Made in China 2025 plan is, valuable insights on what China's motives are and what that could mean for future economies. China's theft of intellectual property, unjust allocation of resources, and manipulation of foreign relations are an introduction to their economic wrongdoings. These problems, however, can highlight solutions that would otherwise mean the downfall of lesser, more pressured countries in the Asian marketplace. The most feasible solution moving forward is the relocation of global supply chains out of China for all of the world's nations. This solution could have lasting consequences, but given the circumstances there is a call to action that needs answered.

Keywords: Made in China, China, Technology Transfers, Global Supply Chains, WTO

The Relocation of Global Supply Chains

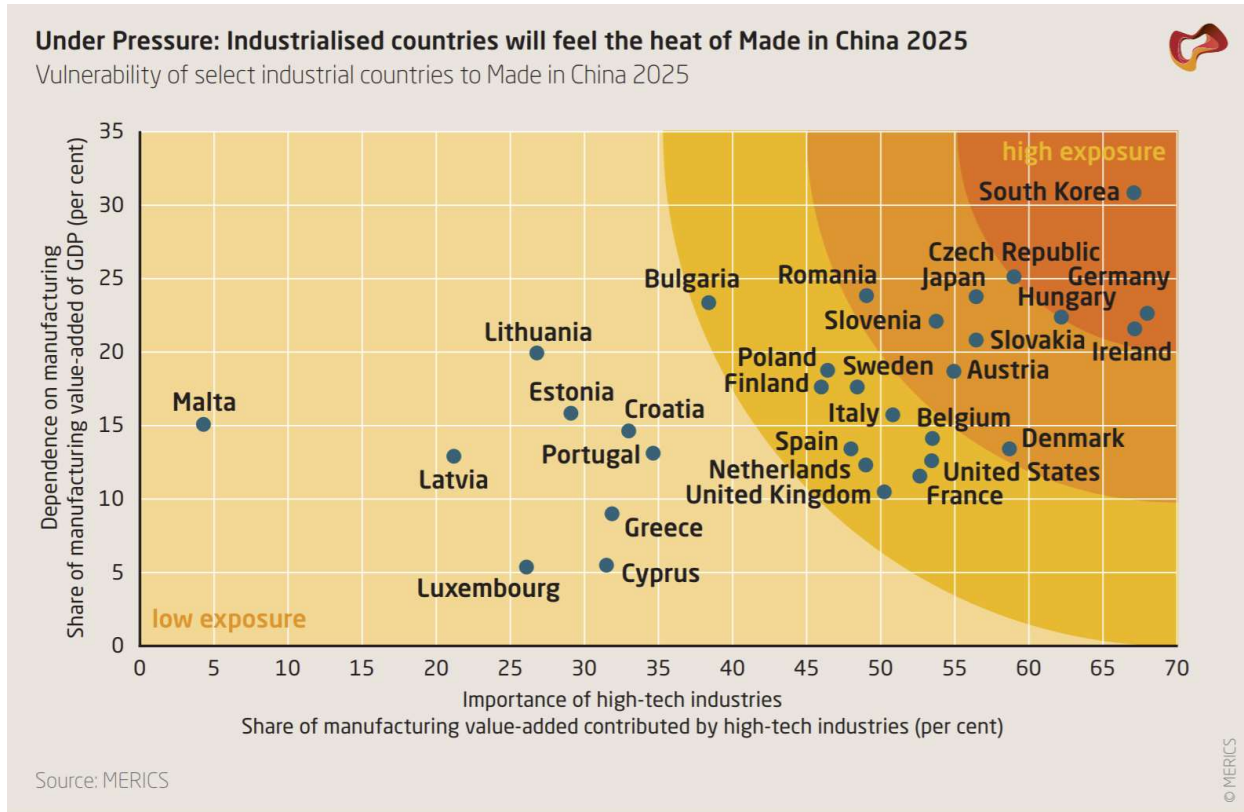
Before the COVID-19 pandemic shocked the planet, the world economy was booming. The world's GDP (Gross Domestic Product), a measure of how much a country is producing and trading with other countries, has been growing each year for more than a century. For the past decade, however, there have been increasing tensions between major economic powers in the world which could negatively impact global trading. For example, the US and China are currently locked into a trade war, China is trying to self-isolate themselves from most of the world's economy, and there is a global competition for technological domination with another Industrial Revolution on the rise. In 2015, the Chinese government released a plan, called 'Made in China 2025', which outlined a ten-year process to revamp their domestic manufacturing sector with modern technology. What most don't know is that this plan involves the Chinese government requiring all foreign companies to hand over intellectual property to do business in China. With this intellectual property, China is manipulating the marketplace in favor of domestic companies to get an unfair advantage over other nations. Their decision has caused outrage and distrust in China across the globe, forcing other economic superpowers like the US, Germany, Mexico, and Canada to consider looking elsewhere to trade. Here, I will research what the 'Made in China 2025' plan is, what China has done to become an issue, and what solutions there are to this situation. By researching these topics, I can help provide valuable insights to both companies looking for business and governments looking to trade with other countries. With this being said, the US and other global economies should relocate their global supply chains as a result of Chinas unfair trading practices and treatment of other nations.

To get a better understanding of China's unfair treatment of other nations, one must look at China's motivation and reasoning. Earlier this year, economic researchers Thuy

Duong Oesterreich and Frank Teuteburg wrote an article about the 4th Industrial Revolution, which the world is currently going through. In this revolution, they highlight the importance of the “digitization and automation of the manufacturing environment” (2020, p. 122). With technologies such as Artificial Intelligence and the Internet of Things, the world economy is becoming more efficient and productive than ever. As a result countries like China are creating plans to harness these technologies. China’s current manufacturing reform is known as their ‘Made in China 2025’ plan (MIC). This plan, as stated above, highlights a ten-year revamping of China’s manufacturing sector using cutting-edge technology. According to Lorand Laskai at the Council of Foreign Relations, China is attempting to gain control over markets in “robotics, advanced information technology, aviation, and new energy vehicles” (2018). This, in turn, will increase China’s “productivity, efficiency, and precision” as well as help move away from China’s “labor-intensive industries” image (2018). However, China’s MIC plan has significant impacts for both China and their surrounding countries.

There is no doubt that China benefits the most from their MIC plan, but this plan has severe consequences that may or may not be intended. By increasing their own manufacturing sector, China is driving out foreign competition and making it harder for these pressured countries to succeed in today’s economy. Merics, a European research institute that focuses on questioning today’s China, released an article outlining the ‘Made in China 2025’ plan and its’ effects: “If China’s industrial policy is successful, these [industrialized] countries will experience lower GDP growth rates, job losses and a decrease in industrial output” (Wübbecke, 2016, p. 59). They further elaborated, “Countries in which high-tech industries contribute a large share to the industrial output are most exposed to Made in

China 2025 (See Figure)” (Wübbecke, 2016, p. 59).



Looking at the figure, Wübbecke is validated in saying that industrialized countries focusing on manufacturing high-tech are exposed. The majority of the countries that are the most exposed are also Asian countries near or bordering China. These countries are being forced to come up with solutions to combat this pressure under a limited amount of time. These solutions can come from domestic and foreign sources, including preventative policy levers, international organizations, and formalized plans to further industrialize an exposed country.

While many countries around the world are adopting plans and policies to keep up with global competitors, few have formalized plans outlined. For example, Germany has their ‘Industry 4.0’ plan which served as the inspiration for China’s MIC plan. Industry 4.0 is an initiative to increase Germany’s productivity and efficiency in the manufacturing sector through modern technology. While Germany’s and China’s plans have similar goals

and objectives, the process in which they achieve these goals differ. Germany uses their Industry 4.0 plan ethically and in good faith which shows that plans such as these can work. China, however, has been dealing with poor ethics and in bad faith, creating a poor image for plans like Industry 4.0.

Over the past 3 decades, China has taken unjust steps to ensure their dominance in the economy. The first of these steps is stealing intellectual property of other countries and companies. According to Derek Levine, a political science professor at the City University of New York, “Another tactic the Chinese government uses to get secret data and technology is purchasing American companies. In 1996, the Chinese purchased Sunbase Asia, an American company that produces ball bearings for the U.S. military...with the purchase of high-tech companies, China could easily gain technology that could strengthen its economy and military.” (2020, p. 9). By purchasing and investing in high-tech companies, the Chinese Government can own or hold partial ownership, making them entitled to confidential company information. At that point, there is no one to stop the Chinese Government from taking that sensitive information and using it to make their own products. This is seen in everyday life, commonly known as ‘knockoffs’ that look eerily close to an American product but isn’t.

Secondly, the Chinese Government has been unjustly allocating resources and providing subsidies to domestic companies. These domestic companies, known as SIE’s or SOE’s (State Invested/Owned Enterprises), are companies that deal in commercial markets on behalf of the Chinese Government. In comparison with other more commonly known companies, private companies are run by CEO’s and have their own agenda of making profit and promoting their business. SOE’s and SIE’s on the other hand operate under a government and their objectives align. This can be helpful as they get financial backing from their government and can get

access to “tax breaks on certain products and lower interest rates on loans from state-owned banks” (Kahn, 2013). However, many experts agree that China has gone too far in using their SOE’s and SIE’s as their policy levers in the economy. For example, Ting-Wei Chiang wrote an article in the Georgetown International Law Journal outlining the Chinese State-Owned Enterprises and the World Trade Organization (WTO) anti-subsidy regime. In this journal Chiang stated:

Many concerns about the rise of China are related to the fact that the Chinese government plays a dominant role in its economy... As the study of U.S. CVD practices illustrates, the Chinese government often provides raw materials at non-commercial prices through SOEs and gives loans at low interests through SOCBs (State-Owned Commercial Banks) and policy banks. (2018, p. 877)

This gives the state-backed companies in China an unfair advantage over foreign investors in the commercial marketplace. Additionally, since SOE’s and SIE’s operate within the commercial market, they are also purchasing stock and ownership into American companies. By doing this, the Chinese Government is indirectly gaining knowledge and power from American companies on American soil.

Lastly, China has been manipulating relationships with foreign countries to gain power in the economy. The abuse of power through SOE’s and SIE’s act as an example, but so does China’s current involvement in the US-China Trade War. Since President Trump took office in 2016, he has been an advocate for reducing the US trade deficit with China. According to the Office of the United States Trade Representative, “the U.S. goods trade deficit with China was \$345.0 billion in 2019” (2019). This means that in the amount of goods traded between the US and China, China had \$345.0 billion more exports going into the US than

the US did into China. Normally, this would balance out because the US would increase its' exports into China, but this is not the case due to China's forced joint ventures. China's forced joint ventures, also known as technology transfers, are a Chinese regulation that states any foreign company wishing to do business in China must hand over their intellectual property. This includes blueprints and patents for existing products and future products, which are similar to China's other strategies for gaining confidential information. This behavior shows China is dealing in bad faith because the US and other countries are allowing China to freely do business in their country but not vice versa.

In retaliation to China's unfair trading practices, the Trump Administration has been "implementing specific investment restrictions and enhanced export controls for Chinese persons and entities related to the acquisition of industrially significant technology" (2018, p. 91). These restrictions have been seen in the increase of US tariffs on Chinese goods, discouraging trade between the two countries. China has been following these tariffs by implementing some of their own onto US exports in China. Hence, a trade war is born. The implementation of tariffs is a proposed 'solution' to the issue with China, but not a very effective one. But there are feasible and practical solutions that can prove helpful, such as: WTO reform, domestic reform within China, and the relocation of global supply chains.

To find a solution, the first place to look is WTO reform. The WTO is meant to be an international organization that has authority over each member country, but lately they have become oblivious and negligent in some of their duties. According to the WTO, China is still considered a 'developing country' despite having the second largest economy on the planet (Levine, 2020, p. 13). This is an issue because when a country is classified as 'developing', they get certain benefits like tax breaks, easier access to loans, and can lower the prices on products

for domestic companies. This is a direct cause of the unjust allocation of resources mentioned earlier. Henry Gao at the IPI Global Observatory, a group of analysts that report on peace and security issues, concluded:

Rather than seeking to rewrite the rules completely, WTO members should review existing rule books, including both the general WTO rules and China's accession commitments. There are a number of China-specific rules that have long been overlooked, such as China's commitments to ensure SOEs and state-invested enterprises (SIEs) 'make purchases and sales based solely on commercial considerations' and that prices for traded goods and services in every sector should 'be determined by market forces.' (2019, Conclusion)

China refuses to conform to WTO rules, seeing as the WTO lacks authority over China. But with WTO reform, they can finally take initiative against China and level the playing field for foreign companies.

Another solution that could be explored is domestic reform within China. This is the most unrealistic solution, due to the fact that they've already crossed numerous ethical lines and showed patterns of isolation from the rest of the world. To start, the goal of the Trump Administration tariffs on China were to force a diplomatic solution but instead China retaliated with their own tariffs. On top of that, the MIC plan is meant to further industrialize China, making other ally countries like South Korea, Japan, Hungary, and Germany obsolete in China's manufacturing sector (Wübbecke, 2016, See Figure). When China eventually isolated completely from the rest of the world, there will be no motive for them to change domestically. This means that tensions are still relatively low, and other nations or organizations like the WTO need to reach out and attempt a diplomatic solution.

The last solution, and possibly the most impactful, is the relocation of global supply chains. This comes as a result of two countries separating relations with each other, also known as decoupling. Currently the US and China are decoupling as a result of China's MIC plan and the US China trade war. The biggest question that needs asked after two countries decouple is where will global supply chains go? According to the United States Trade Representative (2009), the following figure shows the top five countries the US trades with as of August 2020:

Year-to-Date Total Trade

Rank	Country	Exports	Imports	Total Trade	Percent of Total Trade
---	Total, All Countries	918.0	1,482.5	2,400.5	100.0%
---	Total, Top 15 Countries	643.1	1,160.9	1,804.0	75.1%
1	Mexico	134.5	203.0	337.5	14.1%
2	Canada	163.1	172.2	335.3	14.0%
3	China	69.6	262.7	332.2	13.8%
4	Japan	43.2	75.1	118.4	4.9%
5	Germany	37.3	73.1	110.4	4.6%

This year alone, China is not the United States' top trading country as a consequence of the decoupling. However, the US still trades with many other global superpowers, and some are even traded with more than China. This can present many opportunities, as other countries may equally share business and help the US grow even more than they are now. However, completely relocating global supply chains out of China can be costly and timely.

Relocating global supply chains may sound like a good idea at first, and it still might be, but there are serious drawbacks that need to be taken into consideration. Rey Mashayekhi, a finance reporter for *Fortune* magazine, argued that "it would cost for all foreign, non-Chinese firms to repatriate their manufacturing operations currently in China: \$1 trillion over a five-year period" (2020 paras 3-4). This is estimate of five years, but due to how intertwined the US and China are it could take up to 8 years, costing the US even more money than they are spending now (Pamuk, 2020). Although, in that same article Mashayekhi countered his previous statement:

[W]hile free cash flow margins and return on equity would take a hit in the near term, there would be positive “multiplier effects on the broader economy”—including new jobs and higher wages for domestic workers, greater spending on research and development, more tax revenues, and the development of new “industrial clusters” within developed countries. (2020, paras 4-5)

As with any big change in the economy, it usually bounces back and for the better after a short-term dip. With this being said, taking into consideration the downsides to relocating supply chains, it would be worth the trouble to relocate business out of China.

After analyzing China’s motives, future economic plans, and international misdoings, there are big decisions to be made by the US and other countries around the globe. In my personal recommendation, the US and any country working with China should attempt to decouple with them and find business elsewhere. Regardless of their status in the world economy, risking the safety of one’s country is not worth the trouble to have any kind of relationship with China. I would personally prefer to deal with a country in good faith, and to deeply invest in each other to allow for economic growth on both sides than to allow such unjust and unethical actions. Personal opinion aside, countries and governments around the world need to reconsider their standards for trading practices and need to at least consider the possibility of relocating global supply chains. To reiterate, China’s future economic plans and global wrongdoings are enough to create a plan of action for both governments of the world and international organizations such as the WTO. Furthermore, companies and governments aren’t the only ones who should be acting on this matter. For anyone in the general public, just educating yourself on issues such as these is enough to bring to

light such injustices. By educating yourself, you open the possibility that others will be educated too, which will spread change to communities around the globe.

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1106 Research Paper

Assignment

For this assignment, you will write an 8-10 page research paper that makes an original argument about a current, relevant research question. Be creative with your line of inquiry. Choose question that interests you because you will focus on this question with your writing and research throughout the semester.

To begin your essay, you will need to start with a research question about your topic. Your research question must be complex enough that it doesn't have a "yes" or "no" answer, but not so broad that you need to write 20 pages to explore all of the nuances of that topic. In other words, narrower is better.

The purpose of this paper is to join a conversation that is happening about your topic. Obviously, this means that you need to find a topic that is relevant to a conversation happening now. Your job as a researcher is to **find your place in that discussion. In other words, say something unique and convincing about a topic that other scholars are exploring with their own research.**

As you research and explore your topic, think about academic arguments. Your paper should not argue that something is "bad" or "good," "positive" or "negative," or "why people should or should not do something." In other words, avoid topics that you see as having clear, distinct "sides." Moreover, your paper shouldn't be a collection of sources or an echo other people's opinions or ideas. It should not read like a Wikipedia page, i.e. an overview or a collection of facts.

In addition to your essay, you will also write a proposal, adapt your essay into a creative, digital adaptation, and present your research.

Secondary Sources

Start with research. Once you have your question, you will begin your research. Don't find sources that confirm ideas you already have. Instead, learn something by doing the research. You can use encyclopedias, Wikipedia, and other such sources to get background information for yourself, but you need to dig deeper. *Don't use these types of overview sources in your essay.*

You will need 8-10 **credible** sources related to your topic/question. At least 4 of your sources must come from scholarly journals. The others can come from books, newspapers, websites, etc. (as long as the source is credible). You should be looking for expert opinions, studies, and academic research, not blog posts or websites that give general information like history.com, websites that are selling something, or, in general, websites with unknown authors. We'll talk more about primary and secondary sources as you work on your Brooke notes.

Thesis

Once you find your place in the argument, you will fashion a clear, arguable thesis. You can't write a good paper without a complex and original thesis. Moreover, as you are coming up with

a thesis consider that you aren't trying to host a debate or start a fight. You are attempting to educate the reader and persuade them. Then you will use your sources to set up your topic, agree with you, disagree with you, build your credibility, and to help you convince your reader. The overall goal of the paper is to find a critical conversation and to add you own unique take on the topic.

Purpose

- To continue practicing academic argument
- To learn how to enter into a conversation through research
- To continue practice process writing (prewriting, drafting, revising, drafting, revising, etc.)
- To learn how to evaluate secondary sources
- To learn how to incorporate secondary sources into your writing

Requirements:

- 8-10 pages, double-spaced, 12pt font (Times New Roman, Garamond, or Georgia), 1 inch margins
- Use APA citation style. Incorrect citations and/or misquoting your sources will lose you major points on this essay.
- For this paper, you will need an abstract with key words. The cover page, abstract, and references page is not included the page count. (You need at least 8 full pages of writing.)
- You should have a clear and focused thesis.
- You should use the conventions of argument. See the assignment description above.
- Well-structured—all of your paragraphs work to argue your position. Each paragraph should also give examples and provide evidence in order to persuade your reader.
- Transitions between paragraphs and ideas
- Concise writing (no extra words, sentences, or paragraphs)
- Free of mechanical, spelling, or grammar errors
- Carefully revised for content, meaning, and style

Topics I don't want to read about because they are too broad: Should we pay college athletes? Should abortion be legal? Should marijuana be legalized? Is global warming real? Is Adderall bad? What are the effects of stress? Should we lower the drinking age? Reason why steroids are bad for you. Why video games are good or bad for you.

These topics are too broad, and your response to these questions would be lists of reasons. It won't allow you to dig into the more interesting problems or questions related to these topics. Moreover, you shouldn't choose a topic that has a clear, obvious answer.

Possible categories to consider: Race/gender issues. For example, you might look at any of the topics above from an economic or social standpoint. Instead of "should marijuana be legal?" you might explore whether or not policy around a marijuana growing license is classist.

You can also look at emerging issues in science, medicine, or technology. We will talk more about possible topics or ideas for topics. But, what I'm most interested in is you attempting to answer a question that hasn't been fully answered.

Grading
Worth 25% of your grade

An "A" paper

Your topic is narrow and focused. Your paper convinces your audience through good use of evidence, reason, and credible sources. You demonstrate critical and creative thinking. All your sources are credible. Your paper is concise (no extra paragraphs, sentences, or extra words). Each paragraph works to prove your argument. Your paper conforms to the conventions of academic writing and APA citation style. Free of grammatical errors and awkward wording. Meets all assignment requirements. Is revised, revised, revised.