

Analysis of the Impact of the US-China Trade War on the China's Macro Economy

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Abstract. The US-China trade war started in 2018 by Trump's administration, which has had a lasting influence on trade between China and US. Both countries have broken the initial trade agreement and raised tariffs to counter other country's products. It has a further impact on the US and China's macro-economy and small firms' business. The trade war has not only decreased the economy's efficiency but also make the extra cost during the normal production process. Eventually, it has a bi-directional impact on both US and China. This essay has discussed the reason why the US started trade sanction on China and how China fights it back, which is the starting of the trade war. During trade war, tariff has been an important method to sanction other countries' exports and limit their imports, and further protects their domestic goods. Focusing on soybean trading between US and China, the trade war has a significant impact on both country's economy and related industries. Both China and US have suffered from economic inefficiency and also confronted precarious relationships due to the trade war's further effects.

Keywords: US-China trade war, Tariff, China, Macro-economy.

1. Introduction

1.1 Research Background

On March 23, Trump's administration signed a trade memorandum against China at the White House that will not only impose tariffs on \$60 billion of Chinese imports but also limit some certain Chinese companies' investment in the USA. Because Trump's administration asserted that China's exports have damaged the US's domestic companies in certain industries, such as solar panels, steel, and aluminum. In order to protect domestic companies' profits, the Trump administration has applied tariffs and quotas while trading with China [1]. Furthermore, the US has concerned about patent rights protection while trading with China. And the continuously increasing trading deficit has also made President Trump concerned about trade with China. Thus, the US has applied strict trading policies while facing China's imports. For China's administration, China has also applied countermeasure methods to confront US sanctions for China's good. The first move is to impose an additional tariff on certain goods, like pork, fruits, and wine, with a total value of \$30 billion. This stands for the first shot of the US and China's trade war. Furthermore, the US escalated the trade spat in August 2018 when it stated that it will increase the tax rate on \$200 billion worth of Chinese imports from 10% to 25%. And China has hit back by announcing raising tariffs from 5% to 10%, which totals about \$60 billion of goods [2]. Since then, the China and U.S. have formally started a trade war, which has had an influential effect on both countries' economies and is harmful to globalization.

1.2 Research Significance

Trade friction normally happens in international trade between countries in the process of trade transactions with imbalance. The major reasons the continuous surplus of one country, the continuous deficit of another country, or the trade activities of one country hurting the industry of another country. Most research on US-China trade has focused on the US and China's reactions to each trading policy during the trade war. In this essay, the author has focused on the background information before the trade war to analyze how the trade war starts and whether it is avoidable. By analyzing the US-China trade war's causation and its impact on both countries' economies. This research on the US-China trade war focuses on the world's largest and second-largest economy's conflict and describes the

beginning background of this trade war. And further analysis the impact on both U.S. and China. It will better help readers understand the damage that the trade war has caused to both countries' economies. It indicates the international trading's complexity and country's trading policy's impact on the domestic economy. It can help reduce future trading conflicts while more people understand how trade works. This essay is hoping to prompt a more peaceful and fair-trading environment for international trading, which leads to the global economic growth.

2. Background Analysis of the US-China Trade War

2.1 Reasons for the U.S. Trade War

The former President of the USA, Donald Trump's decision to start the strict trading policy with China, has mostly been based on property rights, trade deficits, and concerns about the second superpower rising. Because since the 1980's open policy in China, China has developed at such a rapid speed. "Up till 2018, China became the leader in commodity exports in 2015 and became a dominant player in international trade. China's absolute nominal GDP reaches \$ 14,092 million with a share of 16.1% of world GDP, second place lower than the US, whose GDP is \$20,412 million with a 23.3% share of world GDP. However, in comparison to the US (\$19,390 million), China has a greater absolute GDP measured by purchasing power parity (\$23,159 million). [3]. After considering the rising power of China and conflicting with the US's dominance power in the economy, President Trump has been concerned about China as a threat to US economic development. The huge comparison between US's trade deficit and China's surplus makes the US administration concerned about China's exports to domestic companies. Especially for former President Trump, believes that trading is more like the companies' balance sheet in the normal business model. Like if "Other countries buy goods from the US, US wins. But the US buys goods from other countries, US loses". With this typical mercantilism, President Trump's administration believed that it is time to make sanctions on China's goods and make the US great again. Whereas mercantilism cannot replace the economist's minds in global trading [4]. Because from the economists' side, trade deficits do not simply indicate the terrible consequences. Because imports are also vital in global trading. If only considering numerically, trade deficits seem to provide negative results from international trade. However, it will just ignore the benefits from imports, which bring better goods at a relatively cheaper price. Proper imports will make the US even richer, especially in the modern economy. Globalization has made countries all around the world get closer than it is in previous time. It activates countries from all over the world to participate in production instead of producing on their own. It not only largely increases efficiency but also decreases the costs during production. Many imports to the USA have made production cheaper and quicker. Because many imported goods are still "intermediate goods", which are still needed in future production. Furthermore, these "intermediate goods" imported from other countries like China are cheaper or better than domestically produced alternatives. Thus, these imports from China do not harm the US economy but even boost the economy's prosperity by lowering costs and improving efficiency. Thus, the trade deficit is not always a bad thing for the US economy. However, Trump's administration has overthought the trade deficit's impact and started a trade war with China. As a result, tariffs have risen and added to these "intermediate goods". It has made production more expensive. Furthermore, in China's reactions to the rising tariff, China's customs have also raised tariffs for USA goods. It will also worsen the US goods exports to China. Since then, the trade war's impact is bi-directional to both China and US.

2.2 Analysis of the Reasons for Tariffs to Protect the Economy

During the trade, one country is trying to apply tariffs on other countries' goods to protect the local goods. The price of initial goods will be increased by the tariff, which will be more expensive than other goods. In a free market, the demand principle explains that while the prices of goods increase, the demand quantity will be decreased. Thus, it has left enough demanded quantity for domestic goods. While more home country's goods are needed, domestic countries and factories can be protected.

Generally, applying tariffs will be more beneficial for domestic economic growth by limiting the imports of foreign goods. Thus, tariff has been applied more frequently in international trade when one country wants to protect domestic business. To conclude, the previous description of tariffs just appeals to protectionism in trade, which will exclude global trade and protect domestic goods.

If saying win-win cooperation will be the most beneficial method for both countries in international trade, the trade war between China and US will be the worst result for both countries, which destroys industries in China and US. Because the tariff will not become the one side key to sanction but two sides. Once one country rises the tariff, the other country will be highly possible to raise the tariff to react. And it happens with the US and China trade war. As the below graph shows, before the trade, China and US's tariffs are still at a relatively low and stable level. But immediately, the trade war forced tariffs to rise about 6 times higher than the previous level. It means that the goods with certain tariffs will be 6 times higher than their initial prices. According to the law of demand, consumers' demand for goods will be decreased when the price rises. Thus, the declined demand quantity will influence the supply quantity. Eventually, the equilibrium in the free market will shift to a lower level, which further influences suppliers' production. The production-possibility frontier indicates that in this situation the PPP curve will shift inward, which further decreases the initial production. And eventually, it has influenced economic efficiency. Thus, the trade war between China and US has made to double-failure damage to both countries' economies [5].

US-China trade war tariffs: An up-to-date chart

a. US-China tariff rates toward each other and rest of world (ROW)

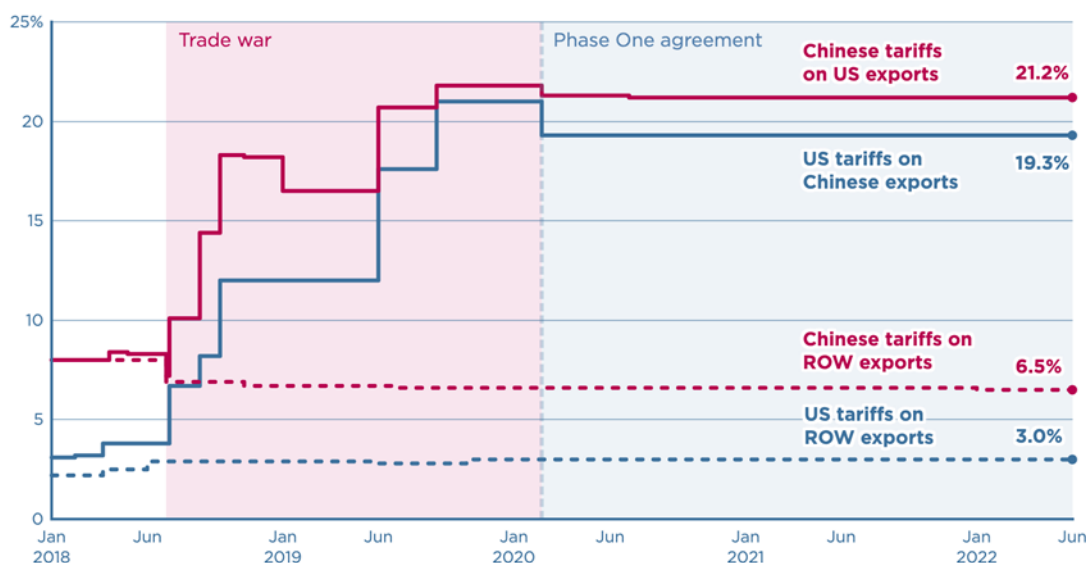


Fig. 1 US-China trade war tariffs: An up-to-date chart

3. Trade War's effect to US and China's soybean related industries

Trade War's influence is bi-directional, which is both harmful for US and China. On China's part, President Trump's decision to raise the tariff happens suddenly, which cannot transfer the damage in a short time. Trade War's most direct and influential impact on China is the loss of net exports. Because China is one of the big exporters in the world due to its special labor-intense industries. "Customs records show that the overall value of China's imports and exports in 2018 was around RMB 30.51 trillion, an increase of 9.7% over 2017. It ranked first in the world, occupying 11.75% of the total global trade. Among them, China's exports ranked first in the world, at 16.42 trillion yuan, up 7.1%, accounting for 12.8% of the total global exports" [6]. Besides, the US is the target country that China's goods and service exports. The US has developed an economy based on technology and services, which has a lot of room in the US market. China exports far more goods to the US than other

countries. These goods are concentrated in labor-intensive industries such as furniture, textiles, and toys, and China's exports to the US account for almost one-third of the total exports of these industries [7]. Thus, it harms China's net exports. As the chart shows, the export proportion of GDP has decreased since 2016, and the trade war has further made the exports worse. According to the GDP calculation, while the exports decrease, the net exports will decrease, which further blocks GDP growth.

Exports are one of the important factors that influence GDP Growth. Once the trade war happens, the bilateral raising of tariffs worsens China's exports, which also depresses China's imports, especially for imported agriculture products. As a reaction to US's tariff on China's goods, China has also risen the tariff for US exports, like soybeans. As one of the most soybean exporters, the US is the major player in the soybean industry, which takes a lot in exporting proportions in the US. According to Shanglinyuan reports, Soybean exports are of great significance to the U.S. economy. In 2017, U.S. soybean exports amounted to 53.13 million tons, accounting for 44% of its total soybean production, of which 32.86 million tons were exported to China, accounting for 62% of total U.S. soybean exports. The value of soybean exports accounted for 11% of U.S. exports to China and 58% of the value of agricultural exports to China [8]. Meanwhile, China is the largest soybean importing country in the world, which has a huge demand for soybean. According to Shanglinyuan reports, China consumed 103 million tons of soybeans in 2018, accounting for 29.7% of global soybean consumption. In contrast, China's soybean production was 15.9 million tons, accounting for only 4.38% of total global soybean production. Imports were as high as 85 million tons (imports amounted to about 82.4% of consumption), compared with 85% in 2017[9]. Before the trade war happens, China and US have a closely interdependent relationship in soybean trading fields. China is the largest importer of US soybeans. However, the trade war ruined this close trading due to the increasing tariffs. As a reaction to US's tariff on China's exports, China has risen the tariff to 25% on US exports of soybeans. The soybean's price has increased quite a lot from the initial price, which made the US's soybean costs increase by 700 to 800 yuan per ton, about 300 yuan per ton higher than Brazilian soybeans. Considering the price of soybean with extra tariffs, consumers will be more likely to decrease their purchase of US soybeans. And Substitute effects on US soybeans, Brazil soybeans will replace some US soybeans. Further, it will make an impact on US soybean producers. According to SINA Finance, total soybean acreage in 2018 was about 5.4 billion acres, producing 138 million tons of soybeans; 2018-2019 soybean exports to China are down an estimated 53%, and at \$9 per bushel, U.S. soybean farmers have reduced their turnover in the export market by \$4.9 billion over the past year [10]. This huge gap is harmful to US soybean farmers since the 2018 trade war. To reduce loss, many farmers have to find other buyers and plant other crops. However, it takes time and the loss during the trade war has no one to compensate. On the other hand, although China has successfully raised tariffs on soybean to resist US tariffs, China still needs to cover its domestic huge demand for soybean. Thus, China is also required to find other countries to import soybeans. However, China cannot find enough soybeans suppliers in such a quick time because the minimum time for soybean to ripen needs three months. Thus, China has also got some shortages in the domestic soybeans market, which has a further impact on soybeans-related industries. Meanwhile, other suppliers in south America also rose the price of soybeans after the US and China trade war to gain more profit. To conclude, the trade war has a two-way injury to the US and China's economies.

4. Conclusion

With the rise of my country's economy, integration with the world economy has become a trend, and the ties between countries are getting closer and closer. However, the weakening of the economy and the escalation of trade frictions has led to the renewed US-China trade war. The impact of the trade war on the trade between the two sides is incalculable. Therefore, the opening of the US-China trade war is both an opportunity and a challenge for my country's trade market. Based on this, this article explores the impact of the event on China and the US in the context of the development of the

US-China trade war. Overall, the US-China trade war has brought a more negative impact on both countries' economies, which lead to the backwardness of the global economy. The two-sides rising tariff will make more international trading borders, which enhance protectionism against domestic goods. However, the worsening trading conditions will discourage trading between two countries and lead to economic inefficiency during production. The continuous tariff will stunt the corporation and development of the US and China. The invisible borders of trading will make the two countries' relations worse. Globalization has kept prompting countries corporation instead of maliciously attacking each other by the rising tariff. It is still full of hope that both US and China have recovered from the previous close trading partnership. And this research has focused on the causation and impact of the US-China trade war. For future research, it keeps researching the lasting trade war's impact and its future direction. This essay has based on previous research and makes further analysis to explain the US-China trade war. It will need further data and other research to make the analysis more persuasive and visual to readers.

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