

To what extent did US-China trade war affect the global economy

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Abstract. This research paper discusses the impacts on the global economy and international market affected by the US and China trade war, which started in 2018-19. Led by the previous president of the US, Donald Trump, succeeded by the current president Joe Biden, trade protectionism was brought out to restrict Chinese exports to the US. Due to political, social, economic, and many other factors, both US and China ended up imposing additional tariffs on each other's imports and setting up more and more restrictions on the international market. These imposed trade barriers between the two major economies in the world significantly influenced the two countries themselves, other bystander economies, and the international market balance. The paper discusses and reveals how the economic conflict affects US and China, both consequences and benefits, and how some countries found opportunities from this conflict, and some resulted in losses. Suggestions for possible solutions which each government can take are also being explained.

1 Introduction

The US-China trade war, or the economic conflict started in the January of 2018. As Donald Trump, the 45th US President, was elected in 2017, he has promoted trade protectionism and imposed higher tariffs on many exporters including Mexico, European Union, Canada, and China. Focusing on the economic conflict between the US and China which was initiated by President Trump, in the year of 2018, from January 22nd to March 22nd, he announced additional tariffs on Chinese imported goods: Solar panels, steel, washing machines, batteries, aluminum, aircraft parts, and so on. He stated that the actions taken were in response to trade practices that are unfair, such as theft of the US intellectual property. Over 1,300 Chinese imported goods were listed for the additional tariffs [1]. The Chinese government then took action in April of the same year in response and announced the plan of adding 25% tariffs on 128 imports from America, such as soybeans, pork, airplanes, and cars, which is the top US agricultural export to China [1].

After rounds and rounds of actions taken by both sides, from canceling orders of exports to negotiations of truce and trade agreements, the conflict still lasted even when confronting the COVID-19 pandemic started in 2020. By the end of 2020, according to the analyzed data by the Peterson Institute of International Economics, China only fulfilled 58% of its purchasing target of US exports [2].

In 2021, Joe Biden, the current President of the US succeeded Trump's chair, but he did not immediately remove the tariffs on Chinese imports. Throughout the year, the Chinese government called out to Biden to relax the trade protections imposed by Trump to fix the conflict. Although discussions continued among both sides, further negotiations are needed as no apparent relaxes on the tariffs are being made. In the meantime, President Biden maintained Trump's former plans, and he introduced new restrictions on Chinese cotton and tomato exports originating in Xinjiang under the accusation of abusing labor rights, also the US's export of computer chips to China to restrict China's manufacturing industry [3].

As most economies started to recover from the economic regression caused by the COVID-19 pandemic, the global economy has already experienced its bottom and showing a slowly improving trend. The conflict between US and China however is still ongoing and affecting the two of the world's largest economies in many different aspects. Some other economies that have close trading relations with these two economies are being affected, which I will discuss in the following sections.

2 The impacts on U.S. and China

2.1 Impacts on the U.S.

The trade war was launched by President Trump not long after he started his administration at the start of 2018. Between July 2018 and August 2019, the US tariff on

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Chinese exports was planned to impose more than \$550 billion, and China made retaliation with tariffs on more than \$185 billion worth of US exports [4]. Trump argued that the enhanced trade protections can reduce the US trade deficit and bring increase domestic manufacturing jobs to further improve employment, also refrain the Chinese trade practices such as technology transfer and intellectual property theft from the US to China through exports.

The trade war has caused economic loss on all sides. As illustrated using a trade diagram shown below (Figure 1), the D and A curve shows US's domestic market for certain goods, without international import. However, producing certain goods has opportunity costs, and

foreign countries may have lower opportunity costs for producing this particular type of good than the US. This is shown by the S(world) line which lies horizontally below the market equilibrium where domestic Demand and Supply intersects. This shows that the world supply which can be imported to the US can be sold at a lower price so that consumer surplus would increase because they will have access to cheaper goods and a wider variety of choices. Nonetheless, the S(world) + T line which is located above the S(world) line on the diagram shows the effects of imposed tariffs on this particular import. The price moved from P2 to P1 as shown in Figure 1, indicating a higher consumer price, less consumer choices, and a smaller consumer surplus.

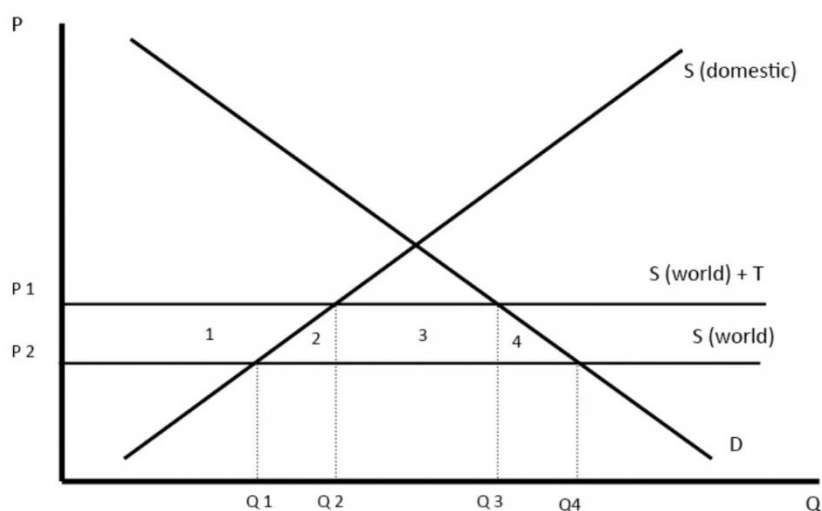


Fig. 1. Diagram for trade and tariffs.

The tariffs imposed has a significant impact on the market by limiting consumer access to goods and general price level increase. According to the researchers from NBER (the National Bureau of Economic Research), real income was reduced by \$1.4 billion every month due to the influence of the US and China trade war that started in 2018, where foreign competition was reduced, and domestic prices increased [5]. Reduced real income indicates less tax revenue collected by the federal government and less consumption in the market. These two indexes all contribute to the GDP calculation, according to Moody's Analytics in September 2019, almost 300,000 jobs and an estimated 0.3% of the real GDP were lost by the imposed trade protections on imports [4].

However, speaking theoretically, trade protectionism is set by governments to protect domestic industry and fix the budget deficit. As shown in Figure 1, the move from Q1 to Q2 indicates that domestic producers are producing more of this product and selling it at a higher price (from P2 to P1). This indicates more revenue generated and more employment. Moreover, as the number of imports reduced from Q4 to Q3 in Figure 1, US's budget is showing a reducing trend. Based on the data from the US Bureau of Economic Analysis, the deficit decreased from

\$627.7 billion to \$616.8 billion from 2018 to 2019, contributing to the GDP growth of the US [6].

2.2 Impacts on China

Similar to the US, China also imposed trade tariffs in retaliation to US's trade protections on their export. By September 2019, tariffs on both economies had covered most of the goods and services traded internationally between them, significantly influencing the bilateral relationship politically, socially, and economically. What is different from the impacts on China and the US which the trade war had brought is that China is a big exporter of goods with a budget surplus, while the US is an importer of Chinese goods. This explains why it was the US consumers who received the most losses after the tariffs, but it was the Chinese producers who were negatively influenced by the trade protections.

Firstly, the profitability dropped for Chinese exporters. Based on a research study conducted by Stanford research institution, the profit margin, which is the measure of to what degree can a firm make profits, dropped by an average of 0.35 points for Chinese export producers [7]. Chinese exporters also face other obstacles which are factors limiting their sales. The research team's survey results show that about 59.3% of the exporters who

participated in the survey are lacking the channels and platforms to diversify their sales markets [7]. This restricts the producer's source of profit to be the US market only, as trade protectionism is being imposed, these firms are going through a hard time.

Other than the exports' profit losses, the unemployment in China, especially in the manufacturing sector experienced an unpleasant decrease. According to a working paper authored by an associate professor at Dartmouth College, about 2.5% of China's population was exposed to US tariffs and reduced on average 2.52% of their income [8]. In general, the employment in manufacturing sector decreased by 1.62% [8]. These statistics stated by the professor reveal the consequence to China's domestic market under the influence of the US tariffs on their exports. The impact on employment rate and income level to the economy reduces tax revenue received by the government, and consumption by individuals, which will then affect the GDP formula negatively. As the economic dilemma between US and China continued after 2019 and is happening along with the COVID-19 pandemic. The negative influence on the demand chain of the Chinese economy will make it harder for society to recover from the recession.

3 Benefits to bystander economies

As two of the world's largest economies, the trade war between US and China has influenced other countries that were also a part of international trade. Some of these economies are being called 'bystander' nations. According to the NBER (National Bureau of Economic Research), the trade war between US and China where both exports are being limited by the tariffs imposed on each side, actually improved global trade by 3% [9]. This was achieved as bystander economies traded more of the products targeted tariffs specifically. Many countries and be used as examples to illustrate the situation. France, Spain, the Philippines, and South Africa, these economies all increased their exports of certain goods or services to the US [9]. This is because the tariffs imposed by the US on Chinese exports increased their prices, and demand for Chinese export decreased, thus products from other countries became more price competitive, and the US will demand cheaper exports in this case.

Additionally, some of the Asian countries, Malaysia, and Taiwan benefited from the conflict between US and China. As shown in Figure 2, Taiwan and Malaysia are showing the top increase in their GDP compared to baseline GDP.

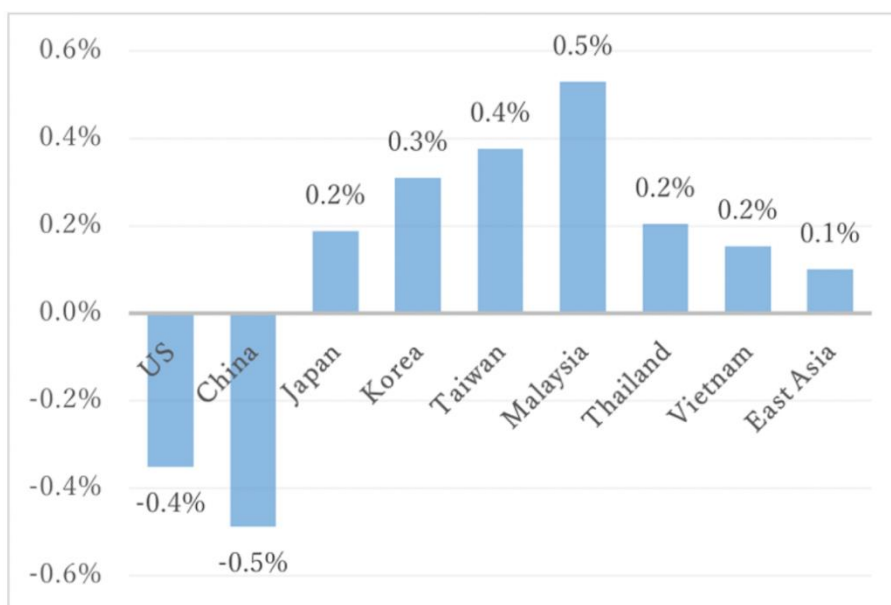


Fig. 2. Diagram for countries' % comparison. To the baseline GDP.

Malaysia, Taiwan, Japan, and many other East Asian economies benefited from the US tariff on Chinese products. One of the major imports the US bought from China is the electric chips and labor for manufacture. As the US kept looking for Chinese substitute export to buy without that specific number of tariffs, the economies from East Asia stood out due to their cheap labor and abundant resources for raw materials. Relating to the Carnegie Endowment for international peace, Vietnam's export to the US showed a significant rise of 35% of 17.5 billion dollars for himself [10].

While the US had a harsh situation with Chinese exports, other exporter counties from Europe and East Asia have been obtaining benefits and some economic gains.

4 Consequences to bystander economies

As some East Asian economies may have benefited from the reduced demand for Chinese exports by the US, some countries, like the African countries, are big exporters of oil and fossil fuels. As the US tariffs imposed on Chinese exports, it is starting to weaken the commodity prices in the global market. While reducing access to China's machine parts and electric chips, the demand for energy and commodities decreased. This caused the African Development Bank to warn that the trade can came 2.7%

reduction in GDP and businesses exiting the commodity market [11].

5 Possible solutions and suggested government actions

The solution suggested will be separated into two sections, for the economy with a current account deficit, and the one with a current account surplus, respectively are the US and China.

A current account deficit is when an economy imports more than what they export, buying goods and services from foreign countries. The US is a perfect example of this case. As mentioned earlier in the paper, Trump initiate trade protectionism to protect domestic businesses and fix the budget deficit. However, the tariffs imposed on Chinese exports raised the general price level and reduces consumer surplus. One possible solution to resolve this problem is that the government can give subsidies to domestic firms to promote their production and reduce their production cost. They will then be able to improve supply and reduce the price of their product, encouraging both producers and consumers. Considering that President Trump also mentioned intellectual property theft and manufacturing employment, the government can therefore raise awareness on protecting intellectual property and provide more education for labor to improve their skill.

A current account surplus is when an economy exports more than it imports so that the budget has a positive value. China is a big exporter and known for manufactory and cheap labor. One of the most important problems for China's situation with the US tariffs is that local export producers are struggling due to many reasons. The government can maybe reach out to those firms and help them to construct a network and find alternative export methods and diversify the products' market. In this case, export producers will be able to sell their products and earn profits again, contribute to the GDP formula and the employment rate will remain stable and low.

6 Conclusion

In conclusion, the trade war between US and China has influenced both US and China negatively and there were never any winners or losers to this game. It's a lose-lose situation in any aspect of this case. Not only between US and China, the bystander economies, countries from all over the globe can be influenced by the cold war between the two massive economies. This reflects the interconnectedness of the global market, also the power of economic weapons. Some media and press called this trade war 'the third world war'. Although without any firearms, ammunition, or physical violence, the war did cause devastating harm similar to what an actual war may have caused to many parties.

Neglecting political factors and human greed; to satisfy all parties and reach a consensus, further resolutions should be made. Leading by the US government, politicians should take careful consideration of every economic movement they take. International alliances can be formed

if the trade war goes too far and cause irretrievable damage to the global economy.

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