The Impact of the Sino-US Trade War on the Chinese Economy

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Abstract. In recent years, the world economy has seemed to improve; however, economic underpinnings such as trade wars seem to undermine the steps toward economic progression. Generally, trade wars have no winners because the parties involved experience declined exports and GDP, which are integral to international trade. To this effect, this paper and its entirety embarked on an exploration of the implications of trade wars with a particular focus on China in the China-U.S. trade wars. Upon successful completion, this paper concludes that the trade wars negatively impacted China's GDP due to decreased exports. This paper also concludes that the Sino-U.S. trade wars negatively impacted China's level of competitiveness, given that the rise in taxes/tariffs pushed up the prices of exports. The other conclusion this analysis makes is that Chinese consumers had it rough as they had to pay more for US-based products. The other conclusion that this analysis makes is that China's economic growth and financial capability have deteriorated due to declining labor productivity. The other conclusion is that the trade wars have negatively affected trade inflows to China, an outcome that has negatively affected the country's economy. Lastly, this paper concludes that China experienced high trade deficits during and after the trade wars with the U.S.

Keywords: Sino-US Trade War, World Economy, GDP, Trade Deficits, Tariffs and Competitiveness.

1 INTRODUCTION

Ideally, in recent years, world economic trends have progressed and improved, with the negative implications of the financial crisis decreasing. However, it is quite unfortunate that some countries lack confidence in sustained economic growth. Along these lines, while globalization has created an excellent opportunity for international trade, it has also created some challenges that push countries to engage in trade wars. Generally, trade wars begin when a government is confident that another country has engaged in prejudicial trading practices that hurt the first country's economy. To defend their internal markets, the first country imposes similar or almost similar barriers. In other words, trade wars emerge when countries impose trade protectionist policies against each other to retaliate with each other's policies or rather trade barriers. This retaliation

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in trade barriers results in a tit-for-tat game, ultimately escalating into a trade war. An excellent example of a long-standing trade war was the Sino-US Trade War, which significantly impacted the Chinese and U.S. economies.

The Sino-US trade war kicked off in July 2018 after the US levied a 25% retaliatory tax on about $50 billion worth of Chinese exports in June 2018. Within the same period, China hit back by increasing a 25% tariff on 545 US goods costing $34 billion, particularly farming products, autos, and marine products. In August 2018, the U.S. further imposed a 25% increase in tariffs on an additional $16 billion worth of Chinese goods, including iron and steel products, machine parts, and railroad products, alongside other related products. The Chinese retaliated with increased tariffs on $16 billion worth of goods. Further, in September 2018, the U.S. increased 10% tariffs on $200 billion worth of Chinese goods, while the Chinese responded by increasing customs duties on $60 billion worth of U.S. goods. After these trade wars negatively affected the economies of both countries, President Xi Jinping and President Donald Trump agreed on a 90-day trade agreement to facilitate further discussions in addressing the underlying concerns in December 2018. Unfortunately, the talks did not bear any permanent solutions as the U.S. raised tariffs on $200 billion in Chinese goods, a 25% increase from 10%. On the other hand, the Chinese responded by announcing that it would upsurge tariffs on the $60 billion cost of U.S. goods on June 1st, 2019. Again, in August 2019, the U.S. declared planned levies on the $455 billion cost of Chinese goods while China announced planned increased tariffs from 5% to 10% on the $ 75 billion cost of U.S. goods. In October 2019, the U.S. announced that it would postpone the premeditated tariff raise of 25% to 30% on the $250 billion cost of Chinese goods, while in January 2020, both China and the U.S. signed stage one of the trade deal. While this signified the beginning of ending trade wars between the two countries, trade wars alongside talks extended from the Trump administration to the Biden administration resulted in more tax/tariff exemption on products from both countries [1].

Ideally, the implications or rather impact of the trade wars on both economies is far more than what was documented. Most specifically, the Chinese economy experienced considerable implications, which negatively affected its economy. Because this study aims to explore the implications of the China-U.S. trade wars, the objectives of this analysis will be tied to how these trade wars impacted the Chinese economy. Most specifically, the objectives of this research will be drawn from several outcomes, including how the trade wars impacted Chinese GDP, level of competitiveness, price of consumer goods, labor productivity, trade flows, and trade deficits.

2 THE IMPACT OF THE SINO-US TRADE WAR ON THE CHINESE ECONOMY

2.1 Impact on Chinese GDP

As highlighted by the Organization for Economic Co-operation and Development (OECD), Gross Domestic Product (GDP) is the ordinary analysis of the supplementary value emanating from the creation of goods in a country within a certain period [2].

Similarly, GDP comprises four components, including consumption of goods and services, government expenditure/spending, business investments, and net exports. Most specifically, in the Sino-US trade wars, both economies were negatively impacted. In this case, despite experiencing partial growth, the Chinese GDP experienced a downward growth compared to other years outside the trade wars. For instance, as illustrated in Figure 1 below by the World Bank, 2017 recorded a GDP of $12.31 trillion, while 2018 recorded $13.89 trillion, an increase of $1.58 trillion. Unfortunately, 2019 was a great indication of the impact of the China-U.S. trade wars on the Chinese economy, considering that 2019 recorded a GDP of $ 14.28, only recording an increase of $ 0.39 trillion, a GDP drop of 25%. Again, 2020 recorded a GDP of $14.69 trillion, an increase of $ 0.41 trillion, and a GDP drop of 21%. Fortunately, in 2021, China recorded an immense increase in its GDP, recording $17.82 trillion on its GDP, an increase of $3.13 trillion [3].

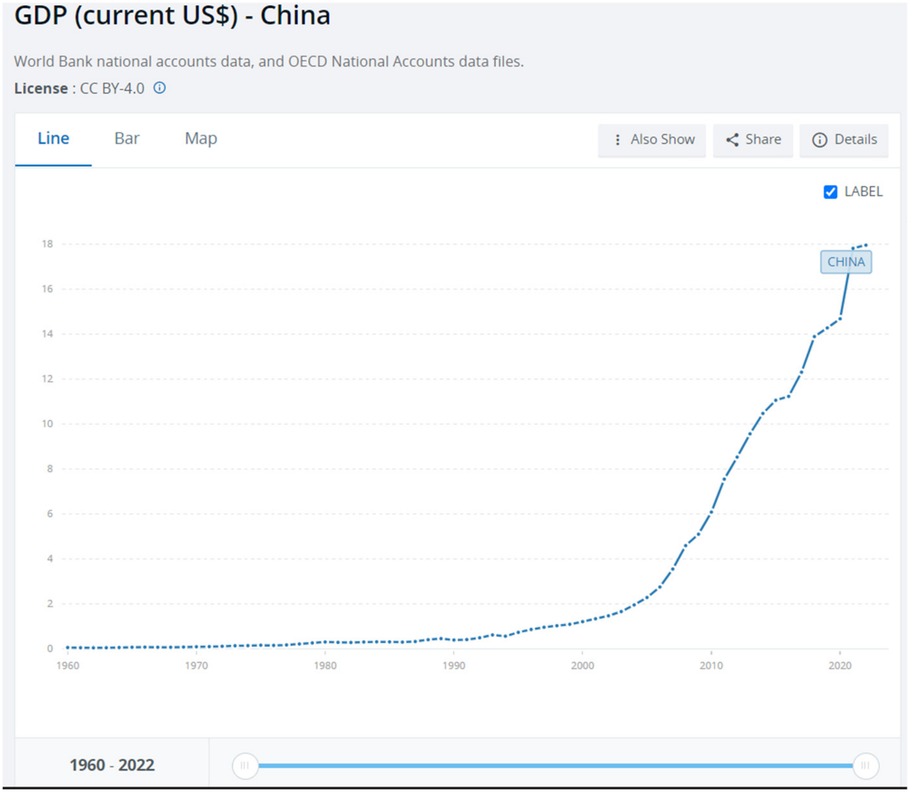

Fig. 1. China's GDP 1960-2022 (Data from World Bank).

As earlier stated by the OECD, net exports are a vital element of GDP. In this case, because exports were negatively affected during the China-U.S. trade wars, it is apparent that the deteriorating GDP growth experienced between 2018 and 2020 was a result of the underlying trade wars. Again, earlier, Kalsie & Arora stated that when a country's economy experiences negative growth in its GDP over a certain period, it might result in a decline in business cycles. The United States is a significant export market for the Chinese; however, between 2018 and 2020, the Chinese experienced a decrease in exports to the U.S., negatively affecting the country's GDP. For instance, as earlier stated by the World Bank, China's exports to the U.S. in 2018 were 19.28%, a 6% increase from the previous year; in 2019, China recorded 6.5% exports, which was a 34% decrease, 2020 recorded 3.6% exports which was a 39% decrease but in 2021, China started to experience an increase in exports to the U.S. recording a 30.19 increase from the previous years. Overall, by exploring the negative growth of China's GDP, it is quite apparent that the Sino-U.S. trade wars negatively impacted China's economy as it recorded a deteriorating GDP between 2018 and 2020. As an integral element of GDP, China recorded declining exports, and as a result, its GDP declined.

2.2 Trade Wars and Level of Competitiveness

Firstly, as highlighted by Dang et al., China and the U.S. are considered among the world's biggest economies; however, due to their long-existing trade wars, they both became less competitive [4]. Most specifically, as highlighted above, the Sino-U.S. trade wars damaged China's economy, particularly by reversing the country's positive growth trajectories, outcomes that have significantly weighed on the country's level of competitiveness. In addition to creating inefficient markets, trade wars made the Chinese market less competitive because the U.S. had increased taxes/tariffs on Chinese products, thus limiting the market size for Chinese products. Similarly, during these trade wars, China had increased its taxes/tariffs on U.S. products, including fertilizers, leather parts, and accessories, among other products, an outcome that made Chinese industries and companies that depend on these raw materials less competitive.

For instance, in a report by the World Bank, China's economy increased by 6.5% in 2018, the lowest pace to be recorded since 28 years ago, an outcome mainly attributable to the Sino-U.S. trade wars [5]. From a global perspective, China has ranked 28th out of 144 economies, a drop from the 15th rank. This is a strong signal that the Sino-U.S. trade wars largely affected China's level of competition, an outcome that is considerably seen in its GDP, as illustrated above. Collectively, Sino-U.S. trade wars impacted China's level of competitiveness given the fact that a rise in taxes or tariffs pushes up the prices of exports and pushes down the prices of imports, specifically from and to the U.S., respectively, thus making the Chinese economy less competitive.

2.3 Trade Wars and Prices on Consumer Goods/Services

Generally, when governments make it more inflated for imports, some of these costs are conceded on to consumers. In this case, despite domestic industries being protected, they face less competition while at the same time, they are not producing at a lesser cost as compared to before the protective policies were implemented. An excellent example is the Sino-U.S. trade wars, where both China and the U.S. increased taxes and tariffs for goods/services being exported from both countries. To this effect, as the Chinese companies need to stay afloat, they are forced to increase prices on their goods and services given that they have to source their raw materials from other countries or even from the U.S. at a higher cost. Thus, these inefficiently high costs are passed on to consumers, which ultimately leads to deteriorated consumption and, ultimately, a slowdown of China's economic growth. According to Simon, the economy is a cause-and-effect process where one outcome triggers another, ultimately leading to another outcome [6]. In this case, the China-U.S. trade wars have largely impacted the prices of consumer goods/services without forgetting the fact that it has also raised the standards of living, an outcome which has considerably affected the company's level of income in turn, standards of living and unemployment. As earlier demonstrated, during the period in which the Sino-U.S. trade wars persisted, China experienced a dropdown in its economic growth; thus, this meant that prices of consumer goods increased, an outcome that resulted in a slowdown in consumer consumption rates and eventually a drop in the country's economic growth.

Theoretically, when tariffs/taxes are imposed, they automatically increase a nation's welfare or, rather, standards of living owing to the swing to less competent market outcomes as consumers are involuntarily pushed to spend more on consumption. Similarly, in the same scenario, businesses are pushed to waste or underutilize resources, an outcome that creates a heavier burden on consumers due to increased prices as businesses are forced to find alternative ways to minimize waste. In the same way, as demonstrated above, when consumers are spending more on consumption, it means that the prices of goods are higher, and thus, this results in slow economic growth as consumers are only minimizing their consumption to what they can afford or, rather, what is essential. According to the World Bank, between the periods when China and the U.S. were engaging in trade wars, prices of consumer goods and services increased by 8%, an outcome that negatively affected the economy's growth rate. Thus, it is quite apparent that while consumers from both countries were the ultimate losers of these trade wars, Chinese consumers had it rough as they had to pay more for US-based products. Again, while Chinese-based companies might absorb some of the imposed tariffs and taxes by the U.S., consumers bear the costs through increased prices.

2.4 Trade Wars and Labor Productivity

As Ernst et al. highlighted, intense trade protectionism, such as those by China and the U.S. during the Sino-U.S. trade wars, negatively impacts labor productivity, particularly in the respective country's economy [7]. In a separate study by Ahmed, the impacts of tariffs considerably depend on several economic factors, and one of these factors is labor productivity [8]. As a result of the China-U.S. trade wars, China experienced a decrease in its domestic output, an outcome that is directly linked to the level of labor productivity. Generally, labor productivity can be viewed as the level of output per worker and is significantly driven by capital investment, technological advancement, and physical capital development. Most importantly, businesses and governments can positively or negatively impact workers' productivity because they directly invest by either increasing technology or human/physical capital.

Most precisely, the government of China has negatively impacted its level of labor productivity by engaging in the China-U.S. trade wars. For instance, the Chinese government is responsible for creating conducive environments for businesses to prevail and support labor productivity. Unfortunately, through these trade wars, the Chinese economy is experiencing a deterioration which directly impacts the level of labor productivity. In this way, Ahmed further states that due to the constraints brought about by the Sino-U.S. trade wars, wages and employment declined in China because most companies were dependent on exports from the U.S.; thus, as a result, they had to lay off some employees a move that negatively impacted labor productivity. Along these lines, it is imperative to state that higher tariffs/taxes are bound to push investors towards more efficient and friendlier markets, and as a result, the level of productivity is bound to reduce in the first economy, which is the case in the account of China. Again, while tariffs/taxes escalate, they trigger downward pressures on wages, and as a result, they create uncertainty around the path of economic policy. Due to the negative effect these trade wars have on labor productivity, China's economic growth and financial capability have deteriorated, thus negatively affecting labor productivity.

2.5 Trade Wars and Trade Flows

As stated earlier by Kalsie & Arora, the significant consequences of trade wars emanate from the indirect effects of macroeconomic adjustments as they largely affect the level or, rather, the amount of trade flowing within an economy. Generally, supply and demand are quite essential when it comes to international trade, as one exists as a result of the other. In this case, the Sino-U.S. trade wars hindered the movement of goods and services between the two countries, given the fact that they both imposed taxes and tariffs that hindered the easy flow of goods/services. According to Zemaityte and Urbsiene, the free movement of goods and services upsurges competition and innovation and maximizes resources and inputs [9]. Unfortunately, trade wars provoke retaliation, as in the case of China and the U.S., and as a result, this leads to elevated prices and reduced output as well as a substantial shock on supply chains because traders tend to avoid the imposed tariffs. To this effect, as earlier demonstrated by the World Bank, in the period China and the U.S. were engaging in trade wars, China experienced a considerable dropdown in its exports given the fact that the Chinese economy was not conducive for investors as well as the flow of goods from the U.S. and as a result, the economy experienced a reduction in its economic growth. Thus, the trade wars have negatively affected trade inflows to China, an outcome that has negatively affected the country's economy.

2.6 Trade Wars and Resulting Trade Deficits

According to Ding, trade deficits occur when imports surpass the amount of exports [10]. In this case, when trade deficits occur, it means that a country's balance of trade is disrupted. When this occurs, it means that all factors that influence international trade are in play. China and the U.S. largely depend on each other when it comes to international trade; thus, as an effect of the Sino-U.S. trade wars, the country's trade deficits increased considerably. China recorded a trade surplus in 2018 of $351.76 billion, with exports rising from the previous year at 9.9% while imports rose at 15.8% over the same period. Further, Ding, demonstrates that trade levels between China and the U.S. decreased considerably, with a decrease of over 10%. Most specifically, U.S. exports to China were recorded at $106.6 billion, which was an 11.3% decrease of $13.5 billion, while U.S. imports from China were recorded at $452.2 billion, a 16.2% decrease of $87.4 billion, thus reporting a total trade deficit of $345.6 billion standing at 17.6% compared to the previous year. Again, in 2021, China recorded a trade deficit of 14.5%, an increase from 2020's 12.5%. Based on these figures, it is quite apparent that the trade wars between China and the U.S. considerably resulted in an increased trade deficit in the Chinese economy.

Similarly, trade war that begins with one sector might seemingly affect another sector because trade wars are a game of tit-for-tat. Different sectors were largely affected by the trade wars between China and the U.S. an outcome that strongly affected the country's overall economic growth. Most precisely, while China's exports to the U.S. range from machinery to kids' toys and electronics, their respective industries were largely affected by the trade wars between the two countries. For instance, between 2018 and 2020, the World Bank notes that China's machine parts industry experienced a 19% decline due to the China-U.S. trade wars. While this also resulted in an increased trade deficit, the industry underwent a considerable drop in economic growth.

Further, it is important to note that trade deficits can have immense negative effects, one of these effects being economic colonization. The concept of economic colonization emphasizes the idea that poverty is a result of micro and macro-economic factors are integrated within the global economic system. Economic colonization can also allude to the idea that foreign markets or countries control the economic level of the first country. For instance, in the case of the Sino-U.S. trade wars it considerably affected each country's economy, particularly how both countries controlled each other's exports and imports by imposing restrictive taxes/tariffs in retaliation. In the case of China, as demonstrated above, the country kept on running a deficit between 2018 and 2021; thus, this had a higher chance of establishing economic colonization as the U.S. kept on imposing much higher taxes/tariffs than China.

3 CONCLUSION

To this end, as demonstrated from the above analysis, the implications or rather impact of the Sino-U.S. trade wars on both economies is far more than what was documented. For instance, in the case of China, the country experienced considerable implications, which negatively affected its economy. To this effect, this study makes several conclusions. The first conclusion is that by exploring the negative growth in China's GDP, it is quite apparent that the Sino-U.S. trade wars negatively impacted China's economy as it recorded deteriorating GDP between 2018 and 2020. As an integral element of GDP, China recorded declining exports, and as a result, its GDP declined. The other conclusion that this analysis makes is that the Sino-U.S. trade wars impacted China's level of competitiveness, given the fact that the rise in taxes/tariffs pushed up the prices of exports while at the same time pushed down the prices of imports, specifically from and to the U.S. respectively thus making the Chinese economy less competitive. The other conclusion that this analysis makes is that it is quite apparent that while consumers from both the U.S. and China were the ultimate losers of these trade wars, Chinese consumers had it rough as they had to pay more for US-based products. Again, while Chinese-based companies might absorb some of the imposed tariffs and taxes by the U.S., consumers bear the costs through increased prices. The other conclusion that this analysis makes is that, due to the negative effect these trade wars have on labor productivity, China's economic growth and financial capability have deteriorated thus negatively affecting labor productivity. The other conclusion is that the trade wars have negatively affected trade inflows to China an outcome that has negatively affected the country's economy. Lastly, this paper concludes that China experienced high trade deficits during as well as after the trade wars with the U.S.

REFERENCES

1. Kalsie, A. Arora. A.: US-China Trade War: The Tale of Clash Between Biggest Developed and Developing Economies of the World. Management and Economics Research Journal 5(1), (2019)
2. Organization for Economic Co-operation and Development (OECD), Gross Domestic Product (GDP), Organization for Economic Co-operation and Development (2023).
3. World Bank, GDP (Current US$) China, World Bank (2023)
4. Dang, A. Krishna, K. Zhao, Y.: Winners and losers from the U.S.-China trade war, NBER Working Paper 31922 (2019).
5. World Bank, China Economic Update, World Bank (2023).
6. Simon, J. The Concept of Causality n Economics, Wiley Online Library 24(4), 769-770 (2018).
7. Ernst, E. Merola, R. Samman, D.: Trade Wars and Their Labor Market Effects. International Labor Office, 1–14 (2020)
8. Ahmed, A.: The Impact of the US-China Trade War on the American Economy. Journal of Commerce 3(6), 24–56 (2020)
9. Zemaityte, S. Urbsiene, L.: Macroeconomic Effects of Trade Tariffs: A Case Study of the US-China Trade War Effects on the Economy of the United States. Journal of Economics 11(2), 305-326 (2020).
10. Ding, G. Z. Guo, G. Wu, C. Yu, J.: China-US Trade Friction and Welfare: The Role of Regional Trade Agreements. Journal of Economic Modelling 113(8), (2022).