

The US-China Trade War: Impacts On Chinese And American Automotive Firms In Terms Of Market Performance, Financial Performance, And Global Competitiveness

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This paper provides an analysis of the trade dispute between the United States and China, with an overview of the background and origins of the trade conflict, an analysis of the impacts on current economic activity globally in the automotive industry, and the possible future economic effects it projects. The trade war has been marked by the concurrent increase in tariffs on both sides. With measures such as the Phase One Agreement barely reducing tariffs, trade tensions between these countries are high and there is an evident reduction in trade since 2019. This study has uncovered a considerable slowdown in the growth of the automotive market, a steep decline in sales and market share, export losses with trade diversions leading to a disruption in supply chains and the changing status in the global competitiveness of the American and Chinese automotive industries. Several significant causes fueled the trade war between the United States and China. These include allegations of intellectual property theft and coerced technology transfers by Chinese enterprises, allegations of unfair trade practices such as subsidies and state-backed backing for Chinese sectors, and the two countries' growing trade deficit. Geopolitical considerations, particularly questions of national security and strategic influence, worsened the trade conflict, resulting in rising tariffs and increased economic tensions between the two economic behemoths. The framework of this paper helps to measure the impact of this trade war based on the analysis of the most significant losses or largest benefits for countries and firms. This research will utilize a literature review approach, gathering secondary data from a diverse range of sources such as scholarly publications, books, official documents, and trade publications without qualitative or quantitative synthesis techniques due to the issues accessing official industry data. The sample size will be determined by selecting sources based on their relevance to the research and the quality of data they provide. To access academic articles, databases like ResearchGate and Google Scholar will be searched using search phrases like "US-China trade war," "automotive industry," "market performance," "financial performance," and "global competitiveness." Filtering of search results will consider their relevance and data credibility. The websites of governmental organisations such as the International Monetary Fund (IMF), the United Nations Conference on Trade and Development (UNCTAD), and the Bureau of Industry and Security (BIS) will be examined for official publications. The reports chosen will be based on their accuracy and direct applicability to the study's focus.

Introduction

The 2018 onset of the US-China trade war has had a substantial effect on the world economy. A crucial sector in both nations, the automotive industry, has been severely impacted by the trade dispute. This article examines how the US-China trade war has affected the market performance, financial performance, and worldwide competitiveness of Chinese and American automotive manufacturers.

The US-China Trade War, a complicated and lengthy economic battle, arose as a result of long-standing tensions and conflicts between two of the world's largest economies. A thorough examination of the history, origins, and underlying causes of this trade conflict uncovers a complex interaction of elements, most notably intellectual property challenges, trade

imbalances, and growing political tensions.

The sensitive issue of intellectual property rights was one of the key drivers of the trade war. American businesses have often expressed worries about China's alleged coerced technology transfers and intellectual property theft. These concerns were bolstered by investigations and findings by the United States Trade Representative (USTR), which exposed China's weak intellectual property protection and unfair trade practices¹.

Trade disparities between the United States and China have also played an integral role in rising tensions. The United States has routinely had large trade deficits with China, importing significantly more items than it exports. The trade gap has reached historic proportions, leading officials to examine China's trade policies and practices. The US Census Bureau

offers data on the two nations' trade balance, highlighting the magnitude of the trade imbalance².

Deepening political tensions between the two countries intensified the trade conflict. Geopolitical tensions, human rights concerns, and geopolitical rivalry all led to an environment of mistrust between the United States and China.

The United States imposed tariffs on a number of Chinese imports in accordance with the Trump administration's threat to impose duties on a total of \$34 billion of Chinese products in 2018³. In total, the US government imposed duties on more than \$300 billion in Chinese imports, resulting in an average tariff rate of 17.5 per cent⁴, which ignited a trade war between the two nations. China's government responded to each round of US tariffs with duties of its own, resulting in both sets of duties being extended to the majority of goods traded between the US and China by September 2019. These tariffs had a negative impact on bilateral trade flows^{5,6}, and have since become a major irritant in US-China relationships⁷. The effects of the trade conflict have been felt in a variety of industries, such as the automotive industry.

In both the US and China, the automotive sector is crucial. The industry has a direct and significant impact on the United States economy, employing more than 1.7 million individuals. Furthermore, the sector is a major consumer of a variety of other industries, resulting in a net employment impact of approximately 8 million jobs. Furthermore, the automotive industry contributes approximately 4.5% to the total U.S. employment. These jobs collectively yield \$500 billion-plus in annual wages and generate more than \$70 billion in tax revenues⁸. The automotive sector is even more influential in China, which has been the world's largest automotive market since 2008². The objective of this study is to provide a summary of the US-China trade conflict and how it affects the automotive sector by studying the pertinent literature. Moreover, I will research how the trade war has affected the market performance, financial performance, and global competitiveness of Chinese and American automotive companies. Lastly, I will examine the results and produce a conclusion on how they affect Chinese and American automotive manufacturers.

The decision to analyse the effect of the US-China Trade War on market performance, financial performance, and global competitiveness of Chinese and American automotive companies stems from the importance and relevance of these variables in assessing the overall effects of this trade war on the automotive industry. These specific features provide critical insights into how the trade war has altered the competitive environment, financial stability, and long-term viability of automotive manufacturers in both countries.

Market performance is a critical sign of how well automakers are faring in the aftermath of the trade war's disruptions. Understanding the changes in market share, sales volumes, and revenue patterns of Chinese and American automobile

manufacturers is crucial to gauging the trade war's immediate consequences on their operations, as tariffs and punitive measures changed international trade dynamics. A thorough examination of market performance will allow us to determine how consumer preferences changed, which models gained popularity, and how demand patterns were altered as a result of trade war-induced economic uncertainty. This data will be important to policymakers and industry stakeholders as they devise strategies to manage shifting market conditions and adapt to changing consumer behaviours.

Secondly, financial performance is an important criterion for assessing the impact of the trade war on the overall health and stability of the automotive industry in both nations. Tariffs, supply chain interruptions, and changes in consumer demand all have a direct impact on these companies' financial statements. We can assess the financial impact of the trade war on Chinese and American automakers by examining financial metrics such as profitability, liquidity, and debt levels. A full assessment of their financial resilience or weaknesses will give critical insights into their capacity to weather the trade war's obstacles and make educated decisions about future investments and expansion plans.

Lastly, examining the worldwide competitiveness of Chinese and American automotive businesses is critical to understanding the long-term effects of the trade war on the dynamics of the automobile sector. The trade war has not only affected bilateral commerce but has also transformed global supply chains, affecting the global competitive landscape for car makers. We can measure how successfully these firms have adapted to the changing trade climate and how they compare to other global players in the automobile sector by analysing criteria such as technical innovation, research and development capacity, and worldwide market presence. Understanding these companies' worldwide competitiveness can aid in identifying possible areas for improvement, collaboration, or market development, paving the path for a more sustainable and resilient automotive sector in the post-trade war era.

Due to its far-reaching repercussions for global economic dynamics, the US-China trade war has sparked significant research interest across several fields. Numerous studies have examined its implications on various businesses and economies, but there is a significant research gap about the particular repercussions on the automobile sector. Although several studies have touched on the trade war's larger economic repercussions, there is still a paucity of detailed studies focusing on the automobile industry's critical link with this trade conflict. The purpose of this research article is to fill a gap in knowledge by examining the various impacts of the United States-China trade dispute on Chinese and American automotive manufacturers.

The significance of this study rests in the fact that the US and Chinese economies both rely heavily on the automotive

industry. Policymakers and business executives may understand how to mitigate the adverse effects and enhance performance by gaining a deeper grasp of how the trade war has impacted their respective industries.

To investigate how the US-China trade war has affected Chinese and American automotive manufacturers in terms of market performance, financial performance, and global competitiveness, this research will employ a literature review research style and technique. Secondary data will be gathered from various sources, including scholarly publications, books, official documents, and trade publications. Peer-reviewed articles, conference papers, and official publications produced between 2018 and the present will be the criteria for inclusion, guaranteeing relevance to the ongoing trade war. In addition, reputable news sources and industry publications will be evaluated to acquire up-to-date information. The data will be analyzed through the use of thematic synthesis to determine the main drivers and trends in the market performance, financial performance, and global competitiveness of Chinese and American automobile manufacturers. This study attempts to give an impartial and thorough assessment of the trade war's consequences on the automobile sector by synthesising results from diverse sources, contributing to the existing body of knowledge on this vital economic struggle.

Academic articles will be searched in databases like Research Gate and Google Scholar. The search phrases utilised would be but not limited to "US-China trade war," "automotive industry," "market performance," "financial performance," and "global competitiveness." The relevance of the search results to the study issue and the calibre of the data will be taken into account while filtering them.

Government websites such as the International Monetary Fund (IMF), the United Nations Conference on Trade and Development (UNCTAD), the Bureau of Industry and Security (BIS) etc. will be used as sources for official publications. These reports will be chosen based on the data's accuracy and relevance to the study topic.

Literature Review

Impact of Tariffs on US-China Trade

The imposition of tariffs on a variety of goods, including automotive and their components, has become a symbol of the US-China trade war. These tariffs have had a significant effect on the bilateral trade between the two countries. The level of trade between the United States and China decreased significantly in 2019, with a decrease of more than 10 percentage points. According to the Bureau of Industry Statistics (BIS), in 2019, the United States exports to China amounted to USD 106.6 billion, a decrease of USD 13.5 billion (11.3 per cent) compared to 2018; the United States imports from China

amounted to USD 452.2 billion, an increase of 16.2 per cent (US\$ 87.4 billion)⁹.

According to research done by Mary Amity et al. the increase in investment among publicly traded companies fell by an expected 0.3 percentage point in the fourth quarter of 2019, however, the depressing effect of the United States-China tariff announcements will result in a further 1.6 percentage point fall in the pace of investment growth among listed firms over the two-year period, resulting in a decline of 1.9 percentage points. The study discovered that tariff announcements by the United States and China reduced U.S. aggregate equity prices in a sample of over 3,000 listed businesses by 6.0 percentage points, resulting in a \$1.7 trillion fall in the market value of the sampled listed firms⁴. According to the research, tariff announcements have severe consequences on the equity prices of listed companies, resulting in a significant loss of market value. Additionally, the projected decline in investment growth over the two years underscores the uncertainty and caution prevailing among businesses due to the trade war. The International Monetary Fund (IMF) estimates that the designed tariffs between the United States and China, which are expected to affect all trade between the two countries, will reduce about 0.3% of GDP in the short term globally, with business and market confidence accounting for half of the decrease¹⁰. In addition, after reaching a high of nearly 4 per cent in 2017, global growth slowed to around 3.2 per cent in late 2018 as activity cooled down amid an intensifying trade war and US-China tariff disputes. This suggests that the trade war's consequences extend well beyond individual trade figures and impact the overall global economic climate¹⁰. The International Monetary Fund's projections further emphasize the negative global impact, with a potential 0.3 per cent reduction in global GDP, indicating a ripple effect beyond the two countries involved.

Effects on Automotive Firms in the US and China

Several studies have examined the effects of the US-China trade war on automotive firms in both countries. Since the beginning of the trade war in 2018, the automotive industry has been the focus of a series of tariffs imposed by both sides, with tariffs of up to 25 per cent on automobiles and their parts. At the beginning of 2019, tensions eased, with the majority of automotive tariffs being reduced. However, the trade war has since been reignited, with a further 25 per cent tariff being threatened. This has had a negative effect on overall automotive and parts trade between the US and China, resulting in a 27 per cent decrease in total trade in the first half of 2019¹¹. The periodic escalation of hostilities and threats of further tariffs have added volatility to the sector, leading to uncertainties and challenges for automakers on both sides. Another study highlighted that tariffs on automobiles and their components

would raise vehicle costs for US consumers, resulting in decreased sales and production. This study estimated that the tariffs would lead to a \$62 billion loss in GDP and the loss of 715,000 jobs in the US¹². The adverse effects on the automotive industry have not been limited to the two countries directly involved. For instance, the study estimating a \$62 billion loss in GDP and job losses in the US due to decreased sales and production highlights how the trade war's consequences extend to affect domestic industries and employment.

Regarding Chinese auto manufacturers, a study by Wang et al. (2020)¹³ analyzed the changes in the stock performance of Chinese automotive firms due to the trade war. The study found through empirical results that Chinese companies more exposed to the US market experienced greater losses in stock prices due to the trade war. The study demonstrates that the exposure to the US market has made them vulnerable to losses in stock prices. This reveals how interlinked the global automotive markets are, as repercussions in one country can have direct effects on companies operating in another. For example, Weichai Power Co., Ltd., a prominent Chinese producer of diesel engines and powertrain systems, experienced a decline in its stock price during the intensification of the US-China trade war¹⁴.

State of the Chinese and American automotive markets before and after the trade war

Before diving into the impact of the trade war on both Chinese and US automotive manufacturers, it's important to first understand the Chinese and US auto industries prior to and during the trade war.

Chinese Automotive Market

The Chinese automotive market remains the largest in the world. The Chinese government expects automotive output to reach 30 million units in 2020 and 35 million units in 2025. The China Association of Automobile Manufacturers claimed 27 million car sales in 2018 (Privacy Shield Framework). Rising earnings, urbanization and government initiatives that promoted car ownership all contributed to the expansion of the Chinese automotive industry.

The Chinese automotive market saw a considerable slowdown in growth once the trade war began. The market shrank post-2018, with sales falling from approximately 28 million to 25.8 million in 2019. Sales fell due to the trade dispute with the United States, stiffer credit standards, and a sluggish economy. Sales of automobiles decreased to 25.3 million units in 2020, indicating the market's second year of decline¹⁵.

American Automotive Market

The US sales of new vehicles in 2018 reached an output of approximately 17.2 million (Mark Lines, 2019). Domestic automakers like General Motors and Ford dominated the market. Foreign automakers with considerable market share included Toyota, Honda, and Hyundai, whose sales have gradually increased in recent years².

The American automotive market's development slowed once the trade war began, although the effects were not as severe as in China. In 2019, sales of 17 million automobiles, a minor reduction of 1.3%, indicated a market contraction¹⁶. The market further crashed in 2020, with sales down 14.6% to 14.5 million automobiles^{16,17}.

In accordance with the data stated above about both countries' automotive markets, before the trade war, both the Chinese and American automotive markets were on an upward trajectory, with China being home to the largest vehicle market in the world, and the US experiencing steady sales growth.

However, after the trade war began, there were contrasting impacts on the two markets. The Chinese automotive market experienced a considerable slowdown in growth, with sales declining due to trade disputes, credit standards, and an economic slowdown. In contrast, the American automotive market's development slowed but not to the same extent, with a relatively minor reduction in sales.

This contrast in impact can be attributed to various factors, including the level of exposure to the trade war and the existing market dynamics. The severity of the slowdown in China may also have implications for the global automotive industry, given its status as a major player in the market.

Impact of the trade war on market performance, financial performance, and global competitiveness of Chinese and American automotive firms

Market Performance

Both Chinese and American automotive companies have experienced major market performance changes as an effect of the US-China trade war. China's automobile sales experienced a decrease of 11.6 per cent in September 2018 compared to the same month the year before, according to the country's leading auto industry association. With 2.39 million automobiles sold, this was the world's largest auto market's third straight month of decrease. The drop comes at a time when economic growth is stalling and a trade war between the US and China is heating up. This sales decline followed a 3.8% reduction in August and a 4.0% loss in July¹⁸. The trade war with the US, tighter emission requirements, and a weakening Chinese economy are among the factors contributing to the decrease in sales.

American automakers have also witnessed a decline in sales in the Chinese market. General Motors, for example, had a 14.3% market share and \$2 billion equity income. However, by 2022, GM's market share in China had dropped to 9.8%, reflecting a \$677 million decrease in equity income¹⁹.

Financial Performance

The financial performance of both Chinese and American automotive manufacturers has been adversely affected by the US-China trade conflict. The Chinese market experienced its first decline in sales since 1990, due in part to trade war uncertainty causing consumers to restrain themselves from making purchases. Ford experienced a decrease in Chinese sales and has since fallen out of the Top 100 Most Valuable Global Brands. Luxury automobile brands, including Mercedes-Benz which accounts for 28% of total unit sales in China, experienced a decrease in growth²⁰.

American automakers have also faced challenges due to the trade war. The results of the analysis indicate that the effects of US tariffs resulted in a 25% decrease in Chinese exports, resulting in a loss of US\$35 billion in the US tariffed goods market in the first six months of 2019²¹. This has led to lower earnings for companies like General Motors with a 4.5% reduction in market share and a 66.2% reduction in equity income¹⁹. US Census trade data indicates that automobiles decreased from the third most valuable export item to China from the United States in 2017, amounting to more than \$10 billion, to the fourth most valuable in 2018, amounting to \$6.65 billion²⁰.

Global Competitiveness

The trade war has had implications for the global competitiveness of both Chinese and American automotive companies. US tariffs on China have made other companies more competitive in the US market, leading to trade diversion. About 21 billion USD (63%) of the 35 billion USD of China's export losses in the US market has been transferred to other countries such as Mexico, Vietnam, EU, Korea, Canada, India and other Southeast Asian countries²². This shift has made it more challenging for Chinese automakers to compete internationally.

On the other hand, American automakers have been less affected by this change as they already have established supply networks in countries outside of China. This has helped them maintain a higher global competitiveness than their Chinese counterparts.

To reduce their reliance on Chinese suppliers, American automotive companies have increased their investment in research and development as a response to the trade conflict. This focus on innovation and the development of new technologies and products has further strengthened their ability to

compete internationally.

The decline in automobile sales in both China and the US indicates how the trade war has dampened consumer confidence and contributed to the contraction of the automotive markets in both countries^{18,21}.

Financially, the negative impact on equity income and market share of automotive companies, as highlighted in various studies¹⁹, underscores the challenges faced by firms in navigating the trade war's uncertainties.

The trade diversion effect, wherein other countries benefited from the US tariffs on China, has added complexity to the global competitiveness landscape. Chinese automakers have faced challenges in competing internationally due to the shifting trade dynamics¹⁶. On the other hand, American automakers' established supply networks outside of China have helped them maintain higher global competitiveness.

However, it's crucial to acknowledge that the trade war's impacts are subject to continuous change, and further monitoring and analysis will be necessary to understand the evolving dynamics and potential pathways for resolution.

Impact of the trade war on other important dimensions of the Chinese and American automotive industry

Supply Chain Disruptions

The Asian Development Bank (ADB) undertook a detailed analysis of the influence of the trade war between the United States and China on supply chain disruptions. The ADB report investigates how tariffs have caused considerable disruptions in regional supply networks, disrupting the movement of products and services between China and the United States⁸.

The report emphasises that the trade war's tariffs and retaliatory measures have caused supply chains to be reevaluated and restructured, particularly in businesses that rely heavily on cross-border trade, such as the automobile industry. Automotive manufacturers in both China and the United States have had difficulties procuring crucial components, resulting in production delays and supply chain bottlenecks. This has further resulted in reduced output and availability of vehicles in the market.

Furthermore, according to the ADB analysis, supply chain disruptions have not been restricted to the directly engaged automotive businesses, but have also cascaded across the broader sector. Downstream sectors, which rely primarily on the timely delivery of autos and automotive components, have struggled to satisfy production deadlines, resulting in total economic inefficiencies.

Investment Decisions in the Automotive Industry

The United Nations Conference on Trade and Development (UNCTAD) conducted a comprehensive analysis of the effects

of the United States-China trade dispute on the automotive industry's investment decisions¹⁶. An analysis has revealed that the effects of the ongoing trade dispute have had a significant effect on global foreign direct investment (FDI) flows, with large drops in FDI inflows to both China and the US.

Due to the uncertainties and dangers involved with the protracted trade battle, automotive businesses in both countries have had to rethink their investment plans and expansion strategies, according to UNCTAD data. The trade war's consequences, such as tariffs and uncertain market conditions, have caused automobile companies to make cautious decisions, impacting capital expenditures and investments.

The report goes on to look at how automakers have tried to reduce the impact of tariffs by diversifying their suppliers and transferring certain manufacturing operations to other countries. This realignment of investment has resulted in a shift in the regional distribution of automobile manufacturing, altering the global automotive industry's competitive environment.

Technology Transfer in the US-China Trade War

Researchers have extensively examined the implications of the US-China trade war on technology transfer. Studies conducted by reputable institutions like the National Bureau of Economic Research (NBER) have explored how the trade war has affected technology flows between the two countries.

It has been revealed that the trade war's tariffs and export controls have resulted in reduced technology transfer from the US to China. The heightened scrutiny of Chinese investments in American tech companies has also contributed to a decline in cross-border technology sharing. This has limited Chinese firms' access to cutting-edge technologies and innovations from the US, impacting their ability to innovate and compete globally.

Similarly, American companies doing business in China have faced challenges in protecting their intellectual property rights and technology assets. The fear of forced technology transfers and intellectual property theft has led some American firms to reconsider their investment strategies and technology partnerships in China.

Furthermore, the trade war has motivated both the US and China to focus more on domestic research and development. As a response to the trade tensions, both countries have increased investments in technology and innovation, aiming to become more self-reliant and reduce their reliance on foreign technologies.

Government Policies and Their Economic Impact

Government policies have played a pivotal role in shaping the course of the US-China trade war. The economic consequences of the trade war and the role of government policies

have been studied by credible organisations such as the United Nations Conference on Trade and Development (UNCTAD).

The UNCTAD report analyzed the tariff actions taken by the US and China and their effects on trade volumes and global supply chains. The study found significant trade diversion effects, with countries outside of the US and China benefiting from the shifts in trade patterns. Some countries, such as Vietnam, Mexico, and Taiwan, have experienced increased exports as they became alternative sourcing and production bases for firms seeking to avoid tariffs¹⁶.

The report also investigated the broader economic implications of government policies during the trade war. It examined how uncertainties related to the trade conflict affected business sentiment and investment decisions globally.

Furthermore, the UNCTAD research analyzed the role of government policies in fostering technological competitiveness and industrial development amid the trade war. Some governments introduced targeted policies to support domestic industries affected by the trade conflict, including measures to promote research and innovation.

Overall, the US-China trade war has had a significant impact on both Chinese and American automotive companies. The majority of the expenses associated with the US tariff measures against China have been passed on to US consumers and Chinese importing enterprises in the form of higher pricing. According to the research, however, Chinese firms have lately begun to absorb some of the tariff costs by decreasing the prices of their export items. (UNCTAD, 2019). Chinese automakers have experienced declines in their financial and market performance, as well as a decrease in their global competitiveness. American automakers, while not immune to the effects of the trade war, have shown relatively stronger financial performance, market stability, and continued competitiveness on the global stage.

Discussion

This study has examined how the US-China trade war affected the market, financial performance, and worldwide competitiveness of Chinese and American automotive manufacturers. We discovered that the trade conflict significantly influenced the automotive industry of both nations through a study of the literature and empirical investigation. According to descriptive statistics, the Chinese auto industry saw a sharp drop in sales in the early phases of the trade conflict. The American automotive market, in comparison, had a slight decline before levelling out. We also discovered that compared to their American counterparts, Chinese automotive businesses saw a more significant influence on market performance.

This study also examines the impact of the US-China trade war on the market, financial performance, and global competitiveness of Chinese and American automotive manufacturers.

It is found that the trade conflict significantly influenced the automotive industry of both nations through a study of the literature and empirical investigation.

Our study further revealed that the trade conflict had a conflicting effect on the global competitiveness of both Chinese and American automotive businesses. While the trade conflict enhanced the production and sales of American-made cars in China, Chinese automakers saw a severe decline in their capacity to compete internationally as a result of higher trade barriers and tariffs.

The study's results are crucial because they shed light on the far-reaching impact of the US-China trade war on both countries' automobile industries. The trade war's consequences go beyond market and financial performance, influencing global competitiveness and geopolitical relations. This study can help policymakers, corporate leaders, and researchers build solutions to meet the problems provided by the trade war and improve global competitiveness.

The findings point to the need for a more cooperative strategy to settle trade issues between the US and China from a policy standpoint. A more collaborative strategy is required to settle disputes and advance commerce between the two countries because the use of tariffs and trade barriers only serves to hurt both economies in the long term. Based on the results of this study on the effects of the trade war between the US and China on the automotive sector, several concrete policy recommendations can be made to alleviate the negative effects and promote collaboration between the two countries:

1. **Advocate for Trade Negotiations:** Policymakers should actively engage in trade negotiations to find common ground and resolve disputes. Open and constructive dialogues can lead to the easing of tensions and the gradual reduction of trade barriers, benefiting the automotive sector.
2. **Reduce Tariffs:** Both the US and China should consider lowering tariffs on automotive products and components. Reducing tariffs can boost trade, enhance market access, and make vehicles and parts more affordable for consumers.
3. **Foster International Collaborations:** Encourage joint ventures and partnerships between Chinese and American automotive manufacturers. Collaboration can facilitate technology transfer, and knowledge sharing, and promote innovation in the industry.
4. **Support Research and Development (R&D):** Provide incentives and subsidies to automotive companies investing in R&D. Supporting research and innovation will drive advancements in the automotive sector and enhance competitiveness.

5. **Strengthen Intellectual Property Protections:** Enhance intellectual property protections to safeguard innovations and technologies. This will foster a fair and secure environment for automotive companies to operate in.
6. **Promote Sustainable Supply Chains:** Encourage sustainable and diversified supply chains to minimize disruptions caused by trade tensions. Supporting resilient supply chains will ensure a steady flow of goods and components.
7. **Facilitate Cross-Border Investments:** Create a favourable investment climate to attract foreign direct investments in the automotive industry. Cross-border investments can lead to job creation and technology exchange.

Implementing these practical recommendations can help mitigate the adverse effects of the trade war on the automotive industry and foster cooperation between the US and China. By taking collaborative steps, policymakers can work towards achieving a more stable and prosperous environment for the automotive sector in both nations.

The report emphasises the importance of a more cooperative and constructive approach to addressing trade disputes between the United States and China policymakers. Relying on tariffs and trade barriers has shown to be detrimental to both economies. Policymakers should prioritise genuine communication and talks to identify mutually beneficial solutions, as well as boost trade openness and build an atmosphere of trust and collaboration.

Executives at both Chinese and American automakers should be aware of the study's conclusions in order to design appropriate mitigation plans. Chinese companies should diversify their markets beyond the United States in order to reduce their dependency on a single market. Chinese enterprises may improve their worldwide competitiveness and survive the obstacles faced by increasing their global presence and investing in research and development.

American automakers, on the other hand, should seize the chances given by the trade conflict in the Chinese market. To preserve a worldwide competitive edge, they need to continue to invest in research and development. American enterprises may increase their footing in the Chinese market and mitigate possible trade dispute losses by partnering with Chinese partners and adjusting to local tastes.

Researchers should expand on the findings of this study to investigate the broader economic and geopolitical ramifications of trade conflicts. To acquire a thorough knowledge of the trade war's worldwide implications, future studies should investigate how it affects different sectors of the economy and geographical locations. Furthermore, researchers might look into the efficiency of various policy interventions targeted at

minimising the negative effects of trade wars and promoting long-term economic growth.

The study's limitations stem from its exclusive emphasis on the automotive industries in China and the United States. While the findings have value in understanding how the trade war affected these specific industries, they may not completely convey the larger effects of trade conflicts on the global economy. The automobile sector is only one component of a complex and linked global economy, and its reaction to the trade war may not be reflective of the reactions of other industries.

As a result, drawing broad inferences about the overall impact of trade conflicts merely on the data of the automotive industry may be constrained. Because of their distinct qualities, supply chain dynamics, and market conditions, various industries and locations may face differing consequences. As a result, caution should be used when extrapolating the study's conclusions to the whole world economy.

A more comprehensive methodology is required to improve the validity and greater relevance of future studies. Future research can broaden the scope to cover a variety of industries, such as electronics, agriculture, and services, to better understand how trade conflicts affect different sectors. Furthermore, researchers ought to look into the effects of trade wars on different geographical regions, taking into account variables such as trade linkages, economic structures, and political interactions.

Future studies should include the time component of trade conflicts, in addition to sectoral and geographical diversity. Analysing the long-term effects of trade wars on economies will offer a better understanding of the long-term consequences that go beyond the immediate response seen during the trade war's height. Furthermore, academics should investigate the efficacy of specific policy actions in alleviating the negative consequences of trade wars and promoting long-term economic growth. A multidimensional and holistic approach to trade war research will allow academics to acquire a thorough knowledge of the complicated web of economic and geopolitical ramifications. Studies conducted in the future can provide a deeper and more comprehensive comprehension of the long-term repercussions of trade disputes on the international economy by resolving the limitations of this study and widening the research scope.

In conclusion, the US-China trade war significantly impacted both nations' automotive sectors. The results of this study have vital ramifications for American and Chinese businesses alike and point to the need for a more cooperative strategy to settle trade issues between the two countries. To develop a more thorough knowledge of the effect of the trade war on the global economy, future studies should examine how they affect different sectors of the economy and geographical areas.

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