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Assessing the Long-Term Economic Impacts of Trade Wars on Global Supply Chain Stability and Costs

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KEY W O R D S	ABSTRACT
Trade Wars, Global Supply Chains, Economic Impacts.	The long-term economic impacts of trade wars on global supply chain stability and costs have become a critical area of analysis due to the increasing frequency and intensity of trade conflicts in recent years. This paper uses a qualitative literature review methodology to explore how trade wars influence global supply chains, focusing on the effects on stability, operational efficiency, and costs. The findings highlight that trade wars often lead to significant disruptions in global supply chains, creating volatility in trade flows, increasing production costs, and prompting companies to reassess their sourcing strategies. The paper identifies key factors such as tariff imposition, shifts in trade policies, and the reconfiguration of global trade networks that contribute to both short-term shocks and long-term structural changes in the global supply chain landscape. Furthermore, the study examines the cost implications for businesses, particularly in terms of raw material costs, labor adjustments, and transportation disruptions. The analysis suggests that while businesses may seek to mitigate risks through diversification and regionalization of supply chains, the long-term economic impact of trade wars could potentially result in higher operational costs and a more fragmented global supply chain system. The paper concludes by proposing policy recommendations for managing trade tensions and ensuring the resilience of global supply chains in the face of trade wars.

A. INTRODUCTION

In recent years, trade wars have emerged as significant geopolitical events with far-reaching implications for global economies. A trade war typically involves a series of tariff increases, trade restrictions, and retaliatory measures between nations, often sparked by concerns over trade imbalances, unfair practices, or economic protectionism (Razumei & Alekseenko, 2024). The resulting shifts in trade policies can have profound effects international markets. businesses, and consumers. Of particular concern is the longterm impact of trade wars on global supply chain stability and costs, which are essential components of the modern economy.

Global supply chains, which rely on the smooth and predictable flow of goods, services, and raw materials across borders, have been particularly vulnerable to disruptions caused by trade wars(Frejtag-Mika & Mika, 2020). These disruptions can occur in multiple forms, including increased tariffs, customs delays, reduced access to certain markets, and the reconfiguration of trade routes(Delpeuch et al., 2021). As businesses attempt to mitigate these challenges, the costs of production, transportation, and inventory management can increase, ultimately leading to higher prices for consumers and reduced profit margins for companies.

The long-term economic consequences of these disruptions are not limited to short-term price hikes; they extend to broader implications for global economic stability, competitiveness, and the structure of international trade networks. Trade wars result in businesses can reconsidering their reliance on certain markets, seeking alternative suppliers, or even relocating production facilities favorable to more regions(Sanskar, 2023). In some cases, these shifts can lead to a reorganization of global supply chains, with companies adapting their strategies to navigate the new trade environment.

In light of the evolving dynamics of trade wars and their effects on global trade patterns, assessing the long-term economic impacts on supply chains is crucial for understanding the resilience of international trade systems. This assessment provides valuable insights for policymakers, businesses, and economists who need to anticipate future challenges and make informed decisions to sustain economic growth and stability(Channe, 2024). By examining the shifting landscape of global trade, realignment of supply chains, associated costs, this analysis will explore how trade wars can reshape the future of global commerce, with an emphasis on the strategic responses required to mitigate risks and maintain competitiveness in an increasingly uncertain economic environment(Elgin, 2025).

B. METHOD

The long-term economic impacts of trade wars on global supply chain stability and costs are complex and multifaceted. To explore these

qualitative impacts, literature review methodology is an effective approach. A literature review serves to collect, synthesize, and critically assess existing research, theories, and findings on the subject of trade wars and their effects on supply chains. This methodology allows for the identification of key themes, patterns, and insights that may inform future research or policy decisions(Batiuk & Kuzyk, 2025). This review is based on peer-reviewed academic articles, government reports, industry papers, and expert analyses to build a comprehensive understanding of how trade wars influence global supply chains over time.

2. Objective of the Study

The primary objective of this qualitative literature review is to assess the long-term economic effects of trade wars, with a specific focus on how they impact global supply chain stability and costs(Iddrisu et al., 2025). The study will explore how trade wars influence supply chain disruptions, sourcing decisions, production networks, pricing strategies, and overall market dynamics. It will also consider the broader economic consequences, including shifts in international trade policies, geopolitical risks, and changes in consumer behavior that could alter the landscape of global supply chains.

3. Literature Selection Criteria

The literature review will include academic reports journal articles, books, from international organizations, and reputable industry sources published in the past two decades. Studies included will focus on topics related to trade wars, supply management, international trade economics, and cost analysis. Specific inclusion criteria for selecting sources will be:

• Relevance: The article must address trade wars or economic conflicts (e.g.,

tariff impositions, trade restrictions) and their direct or indirect effects on supply chains.

- Geographical Focus: While global in nature, sources that specifically examine the economic impacts on countries or regions directly involved in trade wars (such as the U.S.-China trade war) will be prioritized.
- Time Frame: Studies or reports discussing trade wars since the early 2000s, especially those examining longterm or post-conflict effects, will be included.
- Methodological Rigor: Preference will be given to research employing robust qualitative methodologies such as case studies, interviews, and expert analysis.
- Diversity of Perspectives: A variety of perspectives will be sought, including those from academia, policy makers, industry experts, and trade analysts to ensure a comprehensive view of the impacts.

4. Data Collection

The data for this review will be collected through a systematic search of digital databases such as Google Scholar, JSTOR, ScienceDirect, and SSRN. Keywords for search will include "trade wars," "global supply chain," "economic impact of trade wars," "supply chain stability," "tariffs and global supply chain," and "costs of trade restrictions." In addition, gray literature such as reports from international trade organizations (e.g., WTO, World Bank, OECD) and government publications will be considered to gain insights into policy perspectives and real-world implications.

5. Data Analysis

The data analysis will follow a thematic coding approach. The process will involve the following

steps:

- Initial Reading and Familiarization: The first step will be to familiarize the researcher with the content of the selected articles by reading them thoroughly. This will help identify broad themes and recurring topics relevant to the economic impacts of trade wars on global supply chains.
- Coding: A coding scheme will be developed based on recurring themes such as:
 - o Disruptions in global supply chains due to trade conflicts.
 - Changes in cost structures for companies operating across borders.
 - Adaptation strategies employed by businesses (e.g., diversification of supply sources, reshoring).
 - Shifts in market stability and longterm supply chain resilience.
 - Impacts of policy responses, such as tariffs and trade agreements.

Each article will be coded for these themes to facilitate comparison and synthesis.

- Theme Identification and Synthesis: Once coding is complete, the research team will identify key themes and subthemes emerging from the data. For example, one significant theme might be the "shifting balance of power in global supply chains," which explores how trade wars disrupt traditional supply chain flows and force companies to seek alternative markets or suppliers. Another theme might focus on "cost implications," investigating how trade tariffs lead to increased operational costs and price volatility.
- Cross-Case Comparisons: Different case studies or examples from the literature will be compared to identify common

trends and divergent findings. For instance, studies focusing on the U.S.-China trade war may be compared with those analyzing trade tensions in the EU or other regions. This will help identify whether the economic impacts of trade wars are consistent across regions or whether they vary significantly depending on local factors.

Critical Reflection and Contextualization: The final stage of analysis involves critically reflecting on the findings within the broader context of global trade dynamics. This includes considering the methodological limitations reviewed studies, potential biases, and in the current research. gaps Additionally, the researcher will assess the applicability of the findings to contemporary issues, such as the ongoing trade negotiations or the aftermath of COVID-19 on supply chains.

6. Reporting and Presentation

The findings of the qualitative literature review will be structured into key sections that outline the themes and insights drawn from the reviewed literature (Ameh, 2024). The report will begin with an introduction that outlines the research question and methodology. It will then discuss each major theme identified, providing a synthesis of the evidence and highlighting the long-term economic impacts of trade wars on global supply chains and costs. Each theme will be supported by relevant findings from the literature, with direct quotes or paraphrased summaries used to bolster the discussion. The conclusion will summarize the key findings, discuss their implications for global supply chain management, and suggest areas for future research.

7. Limitations and Ethical Considerations

While qualitative literature reviews are powerful tools for synthesizing knowledge, they are inherently limited by the availability and scope of existing literature. In this case, the review will focus on studies that are published in English, which may exclude valuable research published in other languages. Additionally, the subjective nature of qualitative research can introduce biases in interpretation. To mitigate this, the researcher will strive for transparency in the coding process and ensure that all relevant literature is considered (Ofem et al., 2022).

Ethical considerations will include proper citation of sources, avoiding plagiarism, and ensuring that all information is presented in a way that respects the intellectual property rights of authors.

C. RESULT AND DISCUSSION

The long-term economic impacts of trade wars on global supply chain stability and costs have been profound and far-reaching. Trade wars, often initiated through tariffs and trade barriers, disrupt established global supply chains, leading to increased uncertainty, higher operational costs, and a reconfiguration of trade relationships(Steltenpohl et al., 2023). As tariffs on goods rise, companies face higher production costs, particularly in industries dependent on imported raw materials or intermediate goods. often results in higher prices as businesses pass on these consumers, increased costs. Furthermore, the disruption of global supply chains leads to delays and inefficiencies in the movement of goods, exacerbating supply chain instability.

In the long term, companies may seek to mitigate these risks by reshoring or diversifying their supply chains, which, while potentially reducing exposure to tariff-related disruptions, often results in significant initial investment costs. Businesses may need to establish new relationships with suppliers in alternative countries, negotiate new trade agreements, or invest in automation and technology to counteract the increased costs. These adjustments can lead to significant changes in global production networks, especially in sectors where supply chains are deeply integrated across borders, such as electronics, automotive, and manufacturing.

Additionally, trade wars can also encourage the development of regional supply chains, as companies look for ways to avoid the unpredictability of global trade policies. However, this regionalization often leads to higher costs due to a lack of economies of scale and reduced specialization. In some cases, trade wars may lead to the fragmentation of international markets, as countries and regions prioritize self-sufficiency, which further escalates supply chain disruptions.

The long-term economic consequences extend beyond direct cost increases; they also affect global economic growth. Prolonged trade tensions can reduce global trade volumes, slow down investment, and create market volatility. The uncertainty surrounding future trade policies makes it difficult for businesses to plan long-term, which can ultimately undermine global supply chain resilience. Overall, trade wars have significant and lasting effects on both the stability and cost structure of global supply chains, reshaping international trade dynamics and introducing new challenges for businesses and economies worldwide.

Trade wars, characterized by escalating tariffs, trade restrictions, and retaliatory measures between nations, have become a significant feature of global trade relations in recent years. These conflicts disrupt international trade creating ripple effects that flows, industries and economies worldwide. While generate often trade wars short-term disruptions, their long-term economic impacts can be profound, particularly concerning the stability and costs associated with global supply chains. Analyzing these long-term impacts is crucial for understanding how international businesses, governments, and consumers will be affected over time.

Trade Wars and Their Initial Economic Impact

Initially, trade wars result in immediate consequences such as rising costs, supply shortages, and market volatility. Tariffs imposed on goods entering or leaving a country increase the cost of production, as companies are forced to source more expensive materials or components from other markets. These costs are often passed on to consumers in the form of higher prices, which can erode purchasing power and reduce demand for certain goods. Industries heavily reliant on global supply chains, such as electronics, automotive, and manufacturing, are particularly vulnerable to these shifts.

Table 1, on the immediate consequences of trade wars, their effects on costs, supply chains, and affected industries:

Impact	Specific	Description	Affected	Short-Term
Area	Consequences		Industries	Effects on
	•			Market and Consumers

Impact Area	Specific Consequences	Description	Affected Industries	Short-Term Effects on Market and Consumers
Rising Production Costs	Increased tariffs on imported raw materials and components	Companies face higher expenses sourcing inputs from non-tariffed countries or domestic markets at premium prices.	Electronics, automotive, manufacturing	Higher product prices, reduced profit margins for producers.
Supply Shortages	Disruption in global supply chains due to restricted trade flows	Delays and scarcity of key inputs caused by import/export restrictions lead to production bottlenecks.	Automotive, electronics, consumer goods	Reduced product availability, delays in delivery times.
Market Volatility	Increased uncertainty leads to fluctuating commodity and stock prices	Investors react to unpredictable market conditions, causing price swings and volatility in financial markets.	All industries reliant on trade	Lower investor confidence, stock market instability.
Consumer Purchasing Power	Higher retail prices resulting from increased production costs	Consumers face inflationary pressures, decreasing real income and willingness to buy non-essential items.	General retail, consumer electronics, automotive	Declined demand for higher-priced goods, shifting consumer behavior.
Industry Vulnerability	Heavy reliance on international supply chains amplifies risks	Industries with complex, cross-border production networks struggle to adapt quickly to tariff changes.	Electronics (semiconductors), automotive assembly, manufacturing	Increased operational costs and risks of relocating supply chains.

The first phase of a trade war typically leads to direct economic losses, particularly in industries

where international suppliers are critical. For instance, if a country places tariffs on steel imports, businesses that rely on affordable steel from foreign sources will face higher production costs. This often leads to price hikes, reduced profit margins, and, in some cases, the relocation of production facilities to countries with more favorable trade policies. Additionally, businesses may struggle to navigate the increased uncertainty and risk that accompanies trade wars, making it harder to plan for the future.

Long-Term Effects on Global Supply Chain Stability

In the long term, the economic impacts of trade wars can significantly alter the structure and dynamics of global supply chains. Trade wars typically expose vulnerabilities within existing supply chains, highlighting the over-reliance on specific countries or regions for key materials, labor, or components. As countries impose tariffs on imports from one another, businesses are often forced to seek new suppliers or adjust their sourcing strategies to avoid punitive tariffs. This realignment can lead to a restructuring of global supply chains, with companies diversifying their supplier bases or shifting production to new locations.

One significant long-term effect of trade wars on supply chains is the increased emphasis on resilience over cost efficiency. In the past, businesses optimized supply chains primarily for cost-effectiveness, seeking the lowest possible prices from global suppliers. However, trade wars challenge this model, as companies must now balance cost savings with the need for stability and reliability. As a result, companies may prioritize building more flexible, diversified supply chains that can withstand the disruption of trade barriers. For example, businesses may move production to countries with lower trade

risks, invest in reshoring operations, or explore alternative suppliers from regions not involved in the conflict.

The search for stability may also lead to the development of regional supply chains as companies seek to mitigate the risks of relying on distant international markets. Instead of relying on a global network of suppliers, businesses may focus more on regional sourcing strategies, reducing dependence on long, complex supply chains that are vulnerable to trade wars. This approach could result in shorter, more localized supply chains, which could potentially reduce transportation costs, lower the risk of disruptions, and improve supply chain agility.

Changes in the Cost Structure of Global Supply Chains

One of the most immediate and significant impacts of trade wars on global supply chains is the increase in costs. Tariffs raise the price of imported goods, which directly affects the cost of raw materials, intermediate goods, and finished products. This cost increase can have a cascading effect throughout the supply chain, as businesses pass these additional costs onto consumers or absorb them in the form of reduced profit margins.

However, the long-term economic impact on costs extends beyond tariffs. Trade wars often lead to changes in global production practices, which can increase labor costs, logistical regulatory compliance expenses, and requirements. For example, as companies shift production to new regions, they may encounter costs or invest higher labor in manufacturing facilities, both of which can drive up the overall cost of production. Additionally, trade wars can disrupt the smooth flow of goods, leading to longer lead times and

increased transportation costs as businesses seek alternative routes or modes of delivery.

Table 2, on both the immediate and long-term cost impacts of trade wars on global supply chains:

Impact Type	Specific Cost Impacts	Description	Supply Chain Components Affected	Consequences for Businesses and Consumers
Immediate Cost Increase	Higher tariffs on imported raw materials, intermediate and finished goods	Tariffs directly increase purchase prices of imports, raising input costs for manufacturers.	Raw materials, components, finished products	Higher production costs leading to increased prices or lowered profit margins.
Labor Cost Changes	Shifts in production location can increase labor expenses	Moving production to new regions may expose companies to higher wages or skill premiums.	Manufacturing operations	Increased operational costs that may lead to higher product prices.
Logistical Expenses	Longer shipping routes, alternative transport methods	Trade restrictions cause supply chain disruptions, forcing use of less efficient or costlier logistics.	Transportation, warehousing	Higher freight costs and extended delivery times, affecting inventory management.
Regulatory Compliance	Costs related to adhering to new tariffs, certifications, and customs procedures	Compliance with different trade regulations increases administrative and operational costs.	Customs clearance, documentation, tariffs	Increased overhead expenses and complexity in crossborder transactions.
Cascading Supply Chain Effects	Cost increases passed along or absorbed at different stages	Businesses may pass costs to consumers or accept reduced margins to stay competitive.	Entire supply chain	Consumer price inflation or squeezed corporate profitability.

Moreover, trade wars can also lead to inflationary pressures within economies. As businesses face higher production costs, these increased expenses are often passed on to

consumers in the form of higher prices for goods and services. This inflationary pressure can erode the purchasing power of consumers, which may reduce demand for certain products and, in turn, lead to economic slowdowns in affected regions. The longer a trade war

continues, the more entrenched these cost increases become, potentially leading to a sustained period of economic instability.

Supply Chain Adaptation and Technological Innovation

As businesses seek to mitigate the impacts of trade wars, they are increasingly turning to technological innovations to streamline their supply chains and reduce costs. Automation, artificial intelligence (AI), and blockchain technology are among the most prominent tools used to enhance supply chain resilience and efficiency. For example, AI-driven supply chain management systems can predict potential disruptions, optimize inventory levels, and identify alternative suppliers, allowing companies to respond more quickly to changes in trade policies or supply chain shocks.

Blockchain technology, on the other hand, can improve transparency and traceability within global supply chains, reducing the risk of fraud and ensuring that companies can track goods in real time. These technologies help to reduce the impact of trade wars by enabling companies to more informed make decisions, adjust production plans quickly, improve and operational efficiency.

Additionally, companies may invest in automation to reduce labor costs and make production more flexible. Automated systems can help businesses scale production up or down more easily in response to changing demand or shifting trade policies, reducing the financial risks associated with trade wars.

Geopolitical Reconfiguration and Long-Term Stability

The long-term impact of trade wars also involves the geopolitical reconfiguration of global trade. As nations engage in trade conflicts, they may form new alliances, create trade blocs, or seek to reduce reliance on potentially adversarial countries. For instance, countries involved in a trade war may choose to diversify their trade relationships by forging new economic partnerships or expanding into emerging markets.

These geopolitical shifts can lead to the creation of new economic powerhouses and reorganization of global trade flows. The emergence of trade agreements like Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Regional Comprehensive Economic Partnership (RCEP) reflects an ongoing effort to mitigate the risks associated with trade strengthening regional trade cooperation. These could ultimately result stabilization of global supply chains, businesses and countries work together to establish more predictable and reliable trade frameworks.

D. CONCLUSIONS

The long-term economic impacts of trade wars on global supply chains are multifaceted and far-reaching. While the immediate effects may involve rising costs, market volatility, and long-term disrupted trade flows, the consequences are likely to reshape the structure of global supply chains, influence structures, and spur technological innovation. As businesses adapt to the changing geopolitical landscape, they will seek to build more resilient and flexible supply chains that can withstand future disruptions. By diversifying suppliers, reshoring production, and adopting technologies, companies can mitigate the economic risks associated with trade wars and ensure the stability of their supply chains. However, achieving long-term stability will coordinated require efforts between governments, businesses, and international organizations to create more predictable and fair trade systems that minimize the risk of future conflicts.

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