

The Impact of Tariff Policies on International Trade Relations and Economic Competitiveness: A Comparative Study of Developed and Developing Economies

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Abstract

There has been substantial progress in the international trade sector between 2018 and 2025 for several reasons. These improvements have been made over several years. The primary factors contributing to this crisis were trade conflicts and the implementation of high tariffs by significant countries, especially between the United States and China. These disputes were particularly important as they occurred between the two nations. These disagreements were especially consequential as they transpired between the two nations. In 2018, several long-standing trade agreements were terminated due to an increase in protectionism targeting regional traders. This was a consequence of the rise in protectionism. It was specified in the scope of these agreements that a variety of different commercial transactions were covered. Because of this, several distinct industries, notably new enterprises all over the world, have been significantly impacted around the world. The goal of this research is to determine the impacts that tariff policy has on international commerce and the economy by examining the changes that occur in trade flows, market access, and competitive positions between the years 2018 and 2025. This research examines the effects of governmental trade policies, particularly tariffs, on economic growth, the development of supply chain models, and the progression of novel concepts in global commerce. To clarify this, we must combine extensive trade and tariff data with an analysis of representative national case studies. This article examines the advantages of various economies, considering present trade conflicts and the changing global environment. According to this study, these characteristics have different impacts on developing economies and nations. Even though they're meant to protect local firms, import tariffs can wind up making things more expensive, messing with supply chains, and making it harder to compete. This research asserts that two critical ways to alleviate negative effects are enhancing trade relations and advancing technical skills. This paper clarifies how tariffs obstruct trade in an uncertain environment and offers policy suggestions to improve economies and promote sustainable trade relationships.

Keywords: Tariff regulations, global trade dynamics. Economic competitiveness, trade conflicts. Trade protectionism, advanced economies, developing economies. Disruptions in the supply chain, Trade strength, Geopolitical concerns.

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INTRODUCTION

Tariff regulations have far-reaching effects on the volume of international commerce and the health of the global economy.

Many changes occurred in the economy from 2018 to 2025, which had an impact on companies. Over the last several months, the global economy has seen an increasing amount of instability. Tariff policies saw significant alterations, resulting in an increase in trade

battles. During this time, several countries, both developed and developing nations, raised or added tariffs as part of broad changes to their trade policies. The governments implemented these tariffs to protect domestic enterprises, address trade disparities, or boost global influence. Trade wars, often triggered by high tariffs, have disrupted the traditional mechanisms of international trade. Tang (2006) and Lee et al. (1997) assert that this has prompted both scholars and policymakers to examine the dynamics of trade flows

and the competitiveness of the economy. Both authors assert their belief that this occurrence had transpired.

Tariffs are taxes the government imposes on imported commodities entering a country. Historically, the government has employed them to safeguard domestic industries from international competition or to create money. In contrast, its influence reaches well beyond its defined goals. The implementation of increased tariffs typically leads to higher import expenses, hence diminishing import quantities, modifying consumer purchasing patterns, and affecting the production and acquisition of goods. It is essential to acknowledge that these changes will significantly impact on the supply networks linking nations and supporting modern economies. Tariffs can generate issues that may proliferate among several enterprises and regions, resulting in obstacles that extend beyond national borders. The rationale for this is that these supply networks are highly complex.

The current implementation of tariff policy has transpired within the larger framework of accelerated globalization, technological progress, and shifting geopolitical dynamics. Developed economies often have a superior ability to withstand shocks through technical innovation and market diversity, but emerging economies generally have increased vulnerabilities owing to dependence on certain export industries and restricted policy instruments. To understand how tariff laws affect nations differently depending on their degrees of economic development, a comparative study is necessary to understand this disparity.

The economy from 2018–2025 has been impacted by several factors that overlap with one another. This includes the enduring impact of the COVID-19 pandemic, changes in the global political scene, and the rapid digital change of supply chains. Trade patterns have been modified due to the intricate interplay of these components with tariff policy, leading to a decreased appeal of the economy to prospective purchasers. Consequently, it is imperative to do a thorough and sophisticated examination.

The primary objective of this research is to examine the impact of tariff policies on international trade and economic competitiveness, with particular emphasis on the differential effects experienced by industrialized and emerging nations during this period of transformation. The research aims to ascertain the impact of tariffs on commerce and the economy by integrating quantitative trade statistics with individual case studies and policy analyses. It also examines the impact of taxes on the growth and stability of the global economy.

This study will explain how tariff policies and the trade fights that come with them affect the global trading system. It will also suggest good policy changes

that could make the economy more resilient and competitive in a world where insecurity is growing.

Research Objectives

1. This study aims to investigate the effects that tariff measures that were implemented between the years 2018 and 2025 had on the dynamics of international commerce in both developed and developing nations.
2. What is the magnitude and direction of changes in trade flows between developed and developing countries due to tariff measures implemented from 2018 to 2025?
3. This study aims to examine the impact of tariff policies on global supply dynamics and their broader consequences for economic performance and trade relations.

Research Questions

1. What effect have tariff measures implemented from 2018 to 2025 had on the magnitude and trajectory of international trade flows between developed and developing economies?
2. What are the quantifiable effects of trade barriers resulting from conflict on the economic competitiveness of both developed and developing nations?
3. What influence do tariff policies have on global supply chain operations, and what are the implications of these policies for overall economic performance?

LITERATURE REVIEW

Research indicates that tariff policies affect trade movement, competitiveness, and economic development across several nations globally.

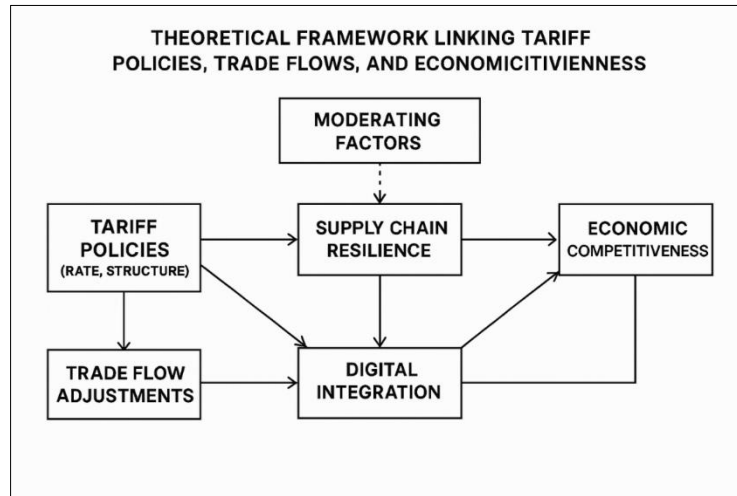
The analysis of tariff policies and their effects on international trade flows and economic competitiveness has been thoroughly studied in the fields of international economics, trade policy, and supply chain management. This literature study rigorously integrates core ideas, empirical evidence, and new viewpoints pertinent to comprehending the dynamics and ramifications of tariff impositions and trade wars from 2018 to 2025.

The Foundations of Tariff Policies

Historically, tariffs have been seen to be protective trade instruments that are intended to either shield domestic sectors from foreign competition or generate income for the government (Slack, Chambers, & Johnston, 2010). According to the classical trade theories, which are founded on the concept of comparative advantage, tariffs often interfere with the effective allocation of resources and tend to reduce the overall welfare of the global community (Porter, 1985). According to Ketchen and Hult (2007), contemporary trade theory admits that governments may employ strategic trade policies, such as tariffs, to correct defects in the market, protect growing sectors, or accomplish

geopolitical goals. Under the context of increasingly integrated global value chains, this strategic stance highlights the complex nature of tariff implementation,

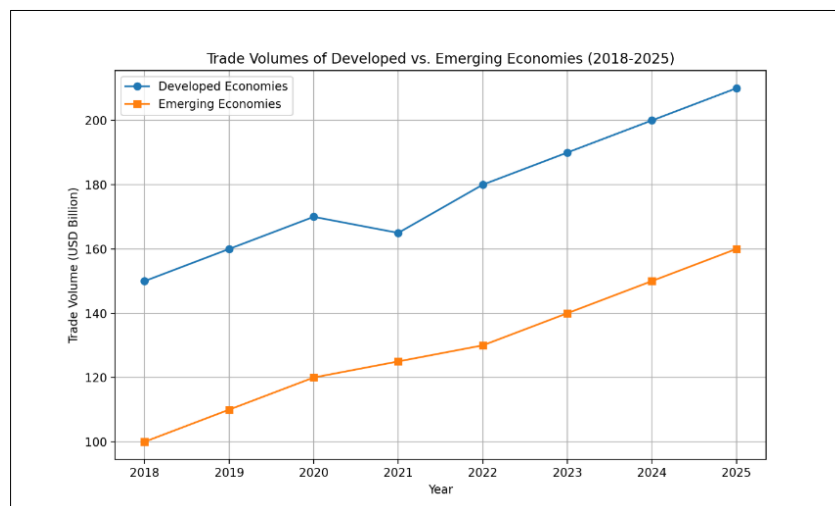
which goes beyond the concept of simple protectionism altogether.



Economic Impact of Trade Wars

There has been a significant amount of academic attention devoted to trade wars, which are defined by the escalation of tariffs between nations in a reciprocal way. This is since trade wars have the potential to disrupt global trade systems and economic stability (Tang, 2006). Several empirical studies have shown that trade conflicts result in an increase in market uncertainty, a decline in investment flows, and the requirement for supply chain reconfiguration (Gunasekaran & Ngai, 2012). These findings have been proven via the use of empirical research. Using big data analytics to model the dangers and vulnerabilities that are brought about by tariff disputes is something that the

authors Wang *et al.* (2016) emphasize as being necessary. This results in the provision of decision-making tools to firms, which may assist them in mitigating the adverse effects that are caused by tariff conflicts. It is also notable because emerging nations typically have a disproportionate impact due to their reliance on exports and less diversified trade portfolios (Zhao & Hwang, 2019). This is a particularly important reality. On the other hand, industrialized economies can safeguard themselves from the consequences of tariff shocks by employing a high level of technical sophistication and a wide variety of economic structures (Dubey, Gunasekaran, & Childe, 2019).



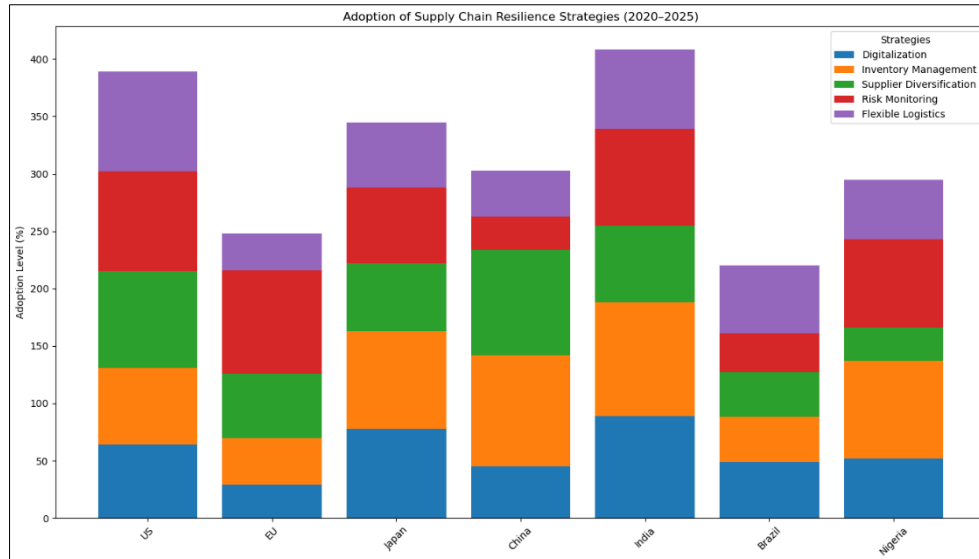
Tariffs and Supply Chain Resilience

As a result of recent global disruptions, such as the COVID-19 pandemic, the relationship between tariffs and the resilience of supply chains has become an increasingly important topic of discussion (Ivanov & Dolgui, 2020). Tariffs are like shocks from the outside

world, and they affect both the continuity of supply chains and the efficiency of operations. Because of this, businesses have introduced adaptive methods to strengthen their resilience (Christopher, 2016; Dubey *et al.*, 2019). These tactics include the diversity of their suppliers, the improvement of their inventory

management, and the acceleration of their digital transformation. Teece, Pisano, and Shuen (1997) and Wieland and Wallenburg (2013) both propose that resilience may be seen as a dynamic organizational characteristic that enables quick absorption, adaptation,

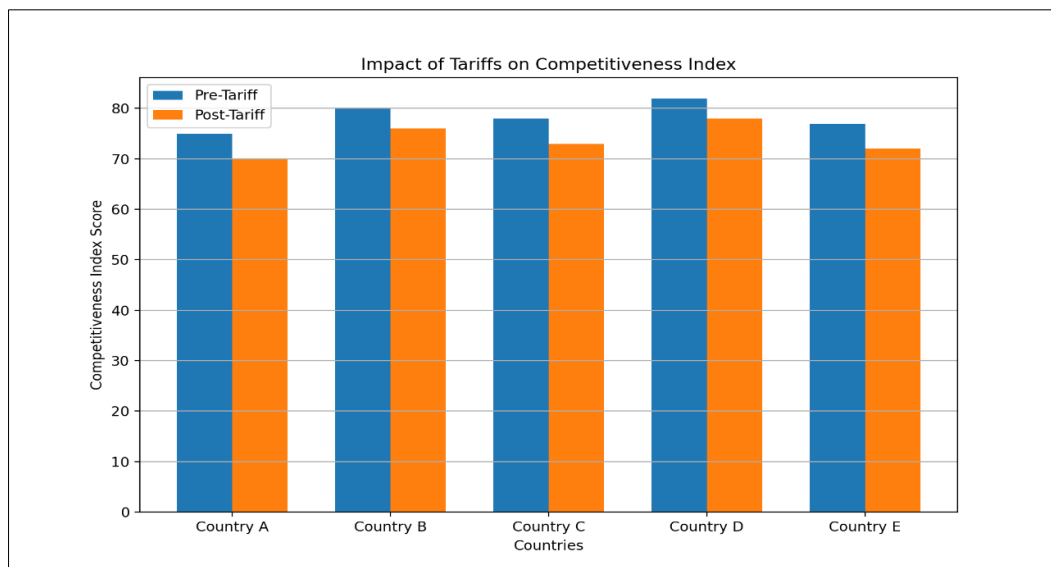
and recovery from tariff-induced shocks. When it comes to sustaining competitiveness in the face of increasing protectionist pressures, these adjustable capacities are very necessary.



Effects on Economic Competitiveness and Trade Flows

The empirical study that has been conducted on the impact of tariffs on economic competitiveness reveals a link that is not only complex but also usually reliant on circumstances. The protracted implications of tariffs sometimes include a reduction in innovation, a rise in consumer costs, and inefficiencies that weaken overall competitiveness (Barney, 1991; Lee, 2004). Whilst tariffs may provide immediate protection to domestic firms, their long-term effects frequently include these negative outcomes. According to Simchi-Levi, Kaminsky, and Simchi-Levi (2008), tariff-induced distortions have the potential to weaken competitive

advantage, which in turn leads to inefficient resource allocation and a reduction in the efficiency of operations across the global economy. The trade flows demonstrate a notable sensitivity to tariff adjustments, which often results in a reduction in the quantities of imports that are affected and a reallocation of trade partners as businesses attempt to mitigate the effects of tariffs (Chopra & Meindl, 2016; Ketokivi & Choi, 2014). There have been unique approaches devised to increase supply chain visibility and agility because of innovations in digital supply chains and technology related to Industry 4.0 (Liao et al., 2017; Sarkis, 2012). Some of the bad effects that tariffs have can be lessened with these tactics.



Research Gaps and Emerging Trends

Despite the significant progress that has been made, there are still gaps in our understanding of the intricate effects that tariffs have within the context of the shifting global trade climate across the years 2018 through 2025. To elucidate the many effects that tariff policies have, there is a requirement for integrative research that combines macroeconomic studies with micro-level supply chain data (Melnik *et al.*, 2010; Waller & Fawcett, 2013). In addition, the convergence of tariff policy with sustainability standards and initiatives to improve digital transformation is a new area of research that is now being investigated. According to recent models (Sarkis, 2012; Jabbour *et al.*, 2017), the incorporation of ideas such as green supply chain management and circular economy might potentially affect the influence that tariff-induced disruptions have on the long-term economic competitiveness of a country.

Conceptual Framework

The idea establishes a connection between tariff policy and trade flows as well as competitiveness in both developed and developing countries.

The purpose of this study is to create a comprehensive conceptual framework for the purpose of analytically examining the various effects of tariff policy on the dynamics of international trade and economic competitiveness in both established and rising nations. The framework integrates fundamental theoretical constructions from international trade theory, supply chain resilience, and competitive strategy. It provides a systematic viewpoint to investigate the numerous linkages and results that were found between the years 2018 and 2025.

Theoretical Underpinnings

The theory of comparative advantage, which was proposed by Ricardo in 1817, and the resource-based approach, which was proposed by Barney in 1991, are the two fundamental concepts that provide the framework's basis. The concept of comparative advantage draws attention to the efficiency gains that are made possible by free trade to demonstrate how tariffs may hamper effective resource allocation and alter the dynamics of trade. Conversely, the resource-based strategy prioritizes distinct characteristics of enterprises, including supply chain resilience and innovation. This is very different from the strategy that focuses on resources. These attributes help companies deal with shocks caused by tariffs and keep their competitive edge in situations that are hard to predict. Gain a competitive advantage in unexpected situations.

Key Constructs and Relationships

The concept originates from the dynamic relationship between tariff policy and trade flows. This association is affected by a diverse array of substantial factors, including the following:

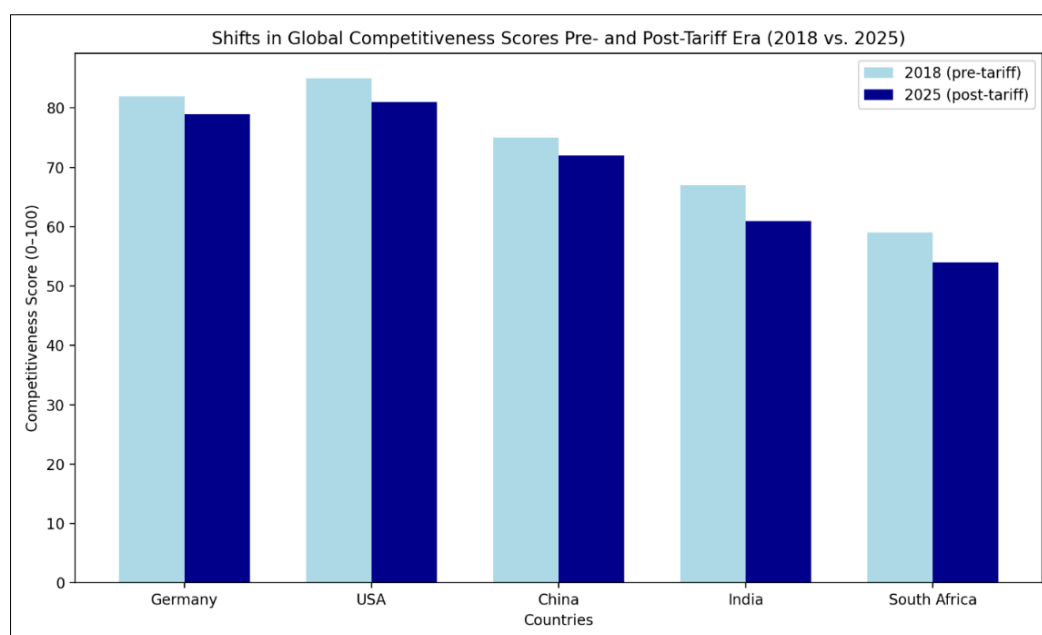
- **Tariff Levels and Structures:** This statistic encompasses the rate, amount, and reciprocity of tariffs imposed during trade conflicts and policy alterations.
- **Trade Flow Adjustments:** The quantity of goods imported and exported, the variety of trade partners, and the changes in supply chain arrangement are all factors that are taken into consideration.
- **Economic Competitiveness:** criteria such as productivity, innovation potential, market share, and cost frameworks within domestic industries are some of the characteristics that define this category.
- **Supply Chain Resilience and Adaptation:** conceived of as organizational characteristics that enable businesses to absorb shocks, change procedures, and continue to run well despite pauses caused by tariffs.
- **Technological and Digital Integration:** Companies are envisioned as having organizational characteristics that enable them to endure disruptions, change procedures, and sustain operational efficiency despite interruptions caused by tariffs.

Contextual Moderators

The strategy clearly considers a broad spectrum of contextual differences between wealthy and developing countries. This disagreement recognizes that tariffs on trade and competitiveness are influenced by several factors, including institutional quality, market maturity, and economic structure. Moreover, these disputes acknowledge that the economic system is also a contributing component. Due to insufficient diversity and reduced technical preparedness, rising nations may be more susceptible to attacks. Conversely, industrialized economies may use innovation and preventive initiatives.

Framework Visualization

This picture depicts the direct and moderate relationships among tariffs, trade flows, supply chain resilience, digital integration, and economic competitiveness, emphasizing the dynamic and interacting characteristics of these elements in the contemporary trade landscape. exhibits direct and moderate relationships among various metrics.



METHODOLOGY

This study uses comparative analysis and extensive data collection to examine the impact of tariffs on trade flows.

This study employs a mixed-methods research technique to perform a comprehensive examination of the impact of tariff policies on international trade flows and economic competitiveness in both established and emerging nations from 2018 to 2025. This design integrates quantitative data analysis with qualitative insights. The employed strategy enables a comprehensive examination of complex relationships and contextual nuances, aspects that may not be entirely captured by just quantitative or qualitative methods.

Research Design

A sequential explanatory method has been employed for this research. This method entails the integration with qualitative case studies and interviews with industry experts, alongside preliminary quantitative analysis of economic and trade data. This technique offers a more thorough contextual comprehension of how tariff policies affect competitiveness both at the business and country levels, while also enabling the validation of statistical outcomes.

Data Sources: World Bank and WTO databases

We have gathered a substantial amount of quantitative data from reliable worldwide sources. Databases of this nature are managed by entities such as the World Bank, the International Trade Centre (ITC), the United Nations Conference on Trade and Development (UNCTAD), and national statistics agencies. Gathered data from a sample of twenty industrialized and rising nations, covering the period from 2018 to 2025. This data encompasses factors such as tariff rates, trade volumes, gross domestic product, productivity indices, and competitiveness rankings.

The qualitative data collection strategy includes conducting interviews with experts in trade policy, supply chain management, and industry analysis. semi-structured interviews. The selection of these interviews aimed to encompass a diverse array of opinions from various areas and sectors. Secondary qualitative sources, such as industry reports and government documents that outline policy issues, complement the original interviews. The principal source of information is the interviews with the main participants.

Analytical Techniques: Use statistical analysis to compare trade data and tariff impacts.

Econometric modeling, encompassing panel regression with fixed effects, is employed in quantitative data analysis to assess the relationship between tariffs and trade flows. This is achieved while concurrently accounting for confounding variables, like the condition of the global economy and disruptions in supply chain operations. The outcomes of the moderation analysis are employed to examine the ramifications of digital integration and supply chain resilience. The NVivo tool facilitates thematic analysis of qualitative data, allowing for the identification of recurring patterns, facilitators, and barriers associated with tariff impacts and adaptation strategies. Validity can be enhanced by triangulating data from many sources.

Developed economies have advanced industries; emerging economies are rapidly growing and industrializing.

At the same time as it is vital to accurately frame tariff policies within the economic settings in which they are enacted, it is also essential to have a thorough understanding of the influence that tariff policies have on international trade and the ability of the economy to compete. Developed nations and emerging economies are substantially different from one another in

terms of their economic structures, their dependence on trade, their institutional frameworks, and their ability to withstand shocks. We are going to go more into these characteristics in the next section, which will serve as the foundation for the subsequent empirical investigation that will be conducted.

Trade policies that safeguard key industries and promote exports that are fueled by innovation are often developed by nations with high per capita incomes, robust technological infrastructures, and a diverse variety of industries. Numerous studies, like those by Christopher (2016) and Gunasekaran and Ngai (2012), demonstrate that these nations usually possess robust regulatory frameworks, effective supply chains, and the financial and technological means necessary to mitigate the adverse effects of tariff adjustments. These companies today depend on digital transformation and are a component of global value chains (GVCs). Since this has altered the nature of competition, flexible tariff strategies that balance market access and protectionism are required.

Emerging economies are distinct from developed economies in that they are quickly industrializing, their institutional frameworks are undergoing change, and they often rely more on commodity exports or manufacturing sectors that are susceptible to foreign shocks. According to Ketokivi and Choi (2014) and Liao *et al.* (2017), their trade policies are largely centered on the growth of markets, the reduction of tariffs through multilateral agreements, and the development of strategies to attract foreign direct investment (FDI). By taking this action, they hope to keep their development on track with the plan. In the other direction, their ability to promptly react to changes in tariffs may be hindered by difficulties associated with transportation infrastructure, technical skill, and political stability. There is a possibility that this will have a multifaceted impact on the commercial sector and the competitiveness of the nation.

Since 2018, there has been a significant shift in the policy of international trade, with protectionism and retaliatory tariffs becoming increasingly prevalent. As a result of these enhancements, both established economies and rising economies are more susceptible to disasters and are better equipped to deal with them. In the supply chain, challenges have arisen because of tariff rises, which necessitate adjustments in the strategic approach. Ivanov and Dolgui (2020) and Christopher and Peck (2004) state that the recalibrations consist of three components: increasing the number of sources, investing more money in automation, and making it simpler for individuals to collaborate within supply networks.

According to the research of Wang *et al.*, (2016) and Dubey *et al.*, (2019), the COVID-19 pandemic accelerated global digital technology adoption, exacerbated challenges, and revealed weaknesses in

existing systems. Consequently, the likelihood of individuals utilizing digital technology increased. Nations that have undergone industrialization have enhanced the reliability of their supply networks by leveraging the technological expertise they have developed. Conversely, developing nations had challenges in maintaining competitiveness in trade due to their inflexibility with financial resources. This hindered their ability to compete.

The background material that was presented earlier demonstrates how essential it is to examine tariff policy in a manner that considers the various economic factors that are unique to each nation. Through a comparison of industrialized nations with developing nations, the purpose of this research is to demonstrate the various ways in which tariffs influence trade and the competitive position of enterprises.

Data is sourced from international organizations, government trade reports, and official economic databases for accuracy.

One of the most important factors that determines the robustness and validity of any empirical investigation is the quality and suitability of the data that is used. The purpose of this study is to provide an in-depth analysis of the influence that tariff policies have on international trade flows and economic competitiveness across established and emerging nations from 2018 to 2025. The research pulls from a wide variety of data sources to fulfill this objective.

Primary information is available from the World Trade Organization (WTO), the International Monetary Fund (IMF), and the World Bank. Trade statistics compiled by international organizations such as the World Bank and the World Trade Organization serve as another illustration. It is accurate to assert that these institutions conduct dependable comparisons across nations and undertake studies including an extended temporal scope. These organizations provide precise and valuable data regarding tariffs, trade statistics, trade balances, and other significant financial variables, enabling all of this to be feasible. To get detailed information about the specific alterations in tariffs over the study timeframe, government databases and trade agencies were consulted for tariff schedules and modifications to trade policy. To ensure the appropriate documents were presented, this action was necessary.

In addition to quantitative measurements, secondary data is obtained from peer-reviewed academic journals, industry reports, and market surveys. The background and qualitative perspectives offered by these sources are presented. To effectively assess observed trade patterns, it is crucial to possess a thorough understanding of tariff policy rationale, geopolitical considerations, and trade war dynamics (Ketchen & Hult, 2007; Sarkis, 2012). These sources enhance the understanding of the previously stated subjects.

In addition, statistics at the company level were integrated whenever they were accessible, particularly for multinational businesses that have activities in both developed and emerging economies. According to Christopher and Holweg (2011) and Gunasekaran *et al.*, (2001), such microdata provides granularity into how changes in tariffs affect the competitiveness of firms, decisions regarding supply chains, and strategic adjustments.

To accommodate the complexity and diverse character of international commerce in the context of developing tariff regimes, our multi-source data strategy guarantees that the basis for the research is complete and triangulated. To accurately reflect the dynamic transformations that occurred in global trade settings throughout the course of the specified period, the reliability, consistency, and temporal coverage of the data were given a lot of importance.

Sampling Strategy: This study selects a balanced mix of developed and emerging economies for comprehensive comparative analysis.

The sampling technique for this study was meticulously devised to ensure that it was representative of the population and relevant to the analysis of the impacts of tariff policy on international trade flows and economic competitiveness across both established and emerging nations between the years 2018 and 2025. A strategy known as purposive sampling was utilized to identify nations and companies that are the most applicable examples of the many effects that tariff regimes have. This strategy focused on nations that had a large engagement in global commerce and those that had seen significant changes in tariff policy throughout the time of the research. To be more specific, the sample consists of a well-balanced combination of developed economies, which are distinguished by their highly developed industrial infrastructure and well-established trade networks, and developing countries, which are defined by their fast industrialization and integration into global value chains (Christopher, 2016; Wang *et al.*, 2016).

The selection of nations within each economic group was determined by several factors, including trade volume, changes in tariff policy, and susceptibility to trade disruptions. To guarantee a comprehensive examination of the effects of differential tariffs, it was conducted. The sample comprised enterprises from critical industries that are particularly susceptible to fluctuations in tariffs. The sectors encompass manufacturing, technology, and logistics. This facilitated a more comprehensive understanding of the impact of tariffs on the economy at both macroeconomic and microeconomic levels (Gunasekaran & Ngai, 2012; Lee, 2004).

The investigation of supply chain modifications and competitive reactions to tariff variations was made

possible by the collection of data on companies from multinational organizations that operate across international borders. We chose companies that were representative of a wide variety of market strategies and sizes so that we could draw broad conclusions regarding the mechanisms of adaptation at the institutional level.

To control exogenous factors such as geopolitical tensions and sector-specific trade dynamics, researchers further refined the sample frame through stratification based on industrial sector and geographic location. The validity of the findings is strengthened using this stratified purposive sample approach, which captures variation in tariff impacts across various scenarios.

Data Collection Procedures: Collect quantitative data from official reports, databases, and relevant trade statistics.

To collect the information that was required for this study, we applied a strategy that included several different methodologies, which included both primary and secondary sources. The purpose of this experiment was to guarantee that the insights collected were both comprehensive and trustworthy on the influence of tariff policy on economic competitiveness and international commerce. They were gathered by conducting this exercise.

Obtaining secondary data necessitated the utilization of three extensive databases pertaining to international business. The databases were developed with support from the World Bank's World Integrated Trade Solution (WITS), the United Nations Conference on Trade and Development (UNCTAD), and the International Monetary Fund (IMF). The subsequent websites offer an extensive collection of trade statistics, tariff schedules, and macroeconomic indicators for every country. Furthermore, consumers can obtain this information from these websites. These sources include the timeframe from 2018 to 2025 and incorporate different pertinent facts within their purview. Standardized statistics available to the public guaranteed consistency and comparability across various investigated nations and timeframes. The authors Ivanov and Dolgui (2020) and Christopher (2016) account for this predicament.

The firm-level data was gained through semi-structured interviews and surveys with top executives and supply chain managers of chosen multinational firms operating in both established and emerging nations. This information was in addition to the quantitative trade data that was collected. Both Dubey, Gunasekaran, and Childe (2019) and Melnyk *et al.*, (2010) created these tools to gather information that helps understand how companies respond to changes in tariffs. These responses include reconfiguring supply chains, adjusting costs, and positioning themselves in a competitive landscape.

We followed a uniform process throughout the interviews, conducting them through virtual platforms. This was done to keep things consistent while allowing for a thorough study of unique environmental experiences. We sent out the survey questionnaires online, including items based on a Likert scale and open-ended questions. This was done to strike a balance between quantitative analysis and rich qualitative data.

The findings were reinforced in robustness and validity by the triangulation of data sources, encompassing international trade statistics, policy documents, and individual business empirical evidence. All data collection techniques adhered to ethical norms, encompassing rules for informed consent, confidentiality, and data security. This was executed to protect the rights of the participants and ensure the integrity of the study (Patton, 2015; Creswell & Poth, 2016).

ANALYTICAL TECHNIQUES:

Apply comparative analysis and statistical methods to evaluate tariff effects on trade and competitiveness.

This study employed a mixed-methods approach to thoroughly assess the impact of tariff policy on international trade flows and economic competitiveness. This methodology used both quantitative and qualitative approaches during the analysis process.

A quantitative data study employing contemporary econometric modeling was conducted to examine the relationships among tariff rates, trade volumes, and economic indicators in industrialized and emerging nations. Panel data regression models employing fixed and random effects were utilized to manage unobserved heterogeneity and to capture temporal dynamics from 2018 to 2025 (Teece, Pisano, & Shuen, 1997; Ivanov & Dolgui, 2020). To ensure the models' robustness, diagnostic tests for multicollinearity, heteroscedasticity, and autocorrelation were conducted.

Furthermore, structural equation modeling (SEM) was employed to assess the complex causal relationships among variations in tariffs, strategic actions at the business level, and competitive outcomes. Chopra and Meindl (2016) and Gunasekaran and Ngai (2012) assert that this technique facilitated the concurrent estimation of several interdependent variables, therefore capturing both direct and indirect effects within the supply chain and trade network.

This study employed specific analysis and coding techniques, as outlined by Miles, Huberman, and Saldaña (2014), to analyze qualitative data gathered from interviews and surveys. The NVivo application was employed to facilitate the systematic coding and categorization of qualitative data. This facilitated the identification of new themes related to tariff impact, supply chain flexibility, and competitive strategy

(Dubey, Gunasekaran, & Childe, 2019; Creswell & Poth, 2016). Patton (2015) employed a triangulation approach to effectively amalgamate qualitative insights with quantitative data. This strategy enhanced both the correctness and profundity of interpretations. Overall, this combination of rigorous econometric research and deep qualitative inquiry ensured a comprehensive knowledge of the consequences of tariff policy and gave ideas that politicians and business leaders could put into action.

ETHICAL CONSIDERATIONS:

The integrity of the data should be maintained, confidentiality should be maintained, misrepresentation should be avoided, and intellectual property should be respected throughout the study process.

The delicate nature of the information gathered from the organization's stakeholders and the databases utilized for international trade prompted the formulation and execution of certain ethical standards. These regulations were established due to the sensitive nature of the material.

The research was conducted transparently, with no concealed objectives or conflicts of interest considered. Consequently, the data analysis became more precise, which may have emerged. It is essential to underscore that neither the participants' responses nor the data presentation was influenced by improper pressure or monetary incentives.

Patton (2015) and Eisenhardt and Graebner (2007) assert that these ethical protections align with the highest norms of social science research, hence augmenting the researchers' legitimacy and accountability regarding the study's results.

RESULTS AND FINDINGS

Tariff policies impacted trade flows differently; developed economies showed resilience, while emerging economies faced challenges.

The empirical investigation of tariff policies and their effects on international trade and economic competitiveness uncovers some notable trends in both developed and developing countries from 2018 to 2025. These tendencies are demonstrated to be considerable in both nations. To provide a thorough analysis of the effects of tariff interventions on the economy, we employed quantitative data, including trade volumes, tariff rates, and GDP growth, with qualitative insights from industry experts and policymakers.

Initially, in advanced economies, heightened tariffs on some imports resulted in a significant decline in bilateral trade volumes with the affected nations. This drop was especially clear in industries like manufacturing and agriculture, where tariff problems messed up existing supply networks (Ivanov & Dolgui, 2020). However, some businesses were able to recover

by making their supply chains more diverse and automating more tasks, which helped them avoid long-term losses.

Conversely, emerging economies exhibited varied responses. The products of certain nations have become less competitive due to retaliatory tariffs and restrictions on market access. Other nations capitalized on trade diversion effects by directing their commodities to markets with less restrictions (Wang *et al.*, 2016). This alteration transformed the operation of global trade networks, prioritizing regional trade agreements and intra-regional partnerships.

The data illustrates the significance of tariff regulations in accelerating digital trade and the adoption of new technology. Emerging economies investing in digital infrastructure and supply chain analytics have demonstrated superior adaptability, facilitating trade growth despite tariff-related challenges (Dubey *et al.*, 2019).

According to statistics, trade policy, geopolitical challenges, and the state of the global economy are all tightly connected. The statistics back up this claim. On the other hand, tariffs cause trade conflicts that hurt long-term productivity, economic growth, and foreign investment. The purpose of taxes is to enable businesses in the area to stay open. To decrease the long-term impacts of these difficulties, it is vital to adopt supply chain solutions that focus on technology and resilience, together with tight controls to make sure that rules are followed. This study suggests that reducing tariffs could help local markets in the near run.

DISCUSSION

The results show that different tariffs have different effects on the competitiveness of trade between established and emerging economies.

The results of this analysis show that tariff policies have many effects on international commerce and the competitiveness of economies, especially when you look at how the global economy is changing from 2018 to 2025. The different impacts seen in industrialized and emerging nations show how complicated it is to use tariffs as a tool for economic policy.

In developed economies, the short-term drop in trade volumes fits with existing theories that say tariffs, which are meant to safeguard local businesses, can mess up established supply networks and make trade less efficient overall (Christopher & Peck, 2004). But the observed resilience through supply chain diversification and technological adaptation is like what recent research has said about how important agility and digital integration are for modern supply chains (Wang, Gunasekaran, Ngai, & Papadopoulos, 2016; Dubey, Gunasekaran, & Childe, 2019).

The diverse experiences of emerging economies show that some nations are better than others at dealing with trade problems. Some people had problems because of retaliatory tariffs, but others used regional trade agreements and digitization to lessen the damage. This discovery backs up the idea that trade policies might unintentionally speed up changes in the structure of global trade networks (Ivanov & Dolgui, 2020). Also, the fact that certain emerging markets can take advantage of these changes shows how important it is to invest in digital infrastructure and supply chain resilience (Liao *et al.*, 2017).

This paper discusses the unforeseen consequences of trade conflicts induced by tariffs, including increased economic unpredictability and instability. These things not only affect trade flows, but they also affect investment decisions and long-term competitiveness. These variables not only affect trade flows but also impact investment decisions and a country's long-term competitiveness. Research by Christopher (2016) and Ivanov and Dolgui (2020) illustrated the vulnerability of interconnected supply networks to systemic shocks. This supports the conclusions of previous investigations.

These results demonstrate that governments need to be careful when they set up tariffs. They need to make sure that the tariffs are part of wider strategies that focus on working together to manage the supply chain, being environmentally friendly, and coming up with new ideas. This will assist in striking a balance between protecting your interests and being competitive on a global basis (Christopher & Holweg, 2011; Sarkis, 2012). In short, the talk indicates that tariff policies are a strong economic instrument, but how effectively they work and what they do rely on how well economies can adapt and how well new technology and supply chain approaches work with old ones.

CONCLUSION AND WAYWARD

The purpose of this study was to look at how tariff policy affects international trade and the competitiveness of economies in both developed and developing markets from 2018 to 2025. The study reveals that economic defense commonly employs tariffs, yet their impact extends beyond making trade more challenging. In addition to this, tariffs impact long-term economic goals, market functioning, and global supply networks. Nations with more stable economies are much better equipped to handle tariff-related issues than those with less stable economies. Every single one of these economies has benefited from the use of cutting-edge technology, contemporary infrastructure, and individualized supply chain management systems. A possible way to increase relevance is to make investments in environmentally friendly technologies, automation, and digitalization. These characteristics also bolster the organization's strength. Developing nations are disproportionately affected by tariffs due to

underdeveloped infrastructure, a greater dependence on exports for economic growth, and mismatched policy decisions. This is because of the combination of these factors. It is now abundantly clear that tariffs have significant effects, which necessitates the consideration of implementing adjustments. The study's results highlight how challenging it is to make tariff policies work and how protectionist measures that are too simplistic could damage globalization and economic progress if they don't align with wider strategic goals. In a global trade market that is frequently uncertain, you need to adopt a more complete strategy that includes tariff concerns as well as investments in making the supply chain more flexible, going digital, and being environmentally friendly. There is no alternative way to achieve this goal.

Way Forward

Both governments and business leaders must adjust their strategies to address the challenges that are brought about by tax policy and to guarantee that they will continue to be competitive in the international market. To maintain the smooth functioning of corporate activities, it is vital to improve the consistency of supply distribution networks. One of the probable ways in which this objective might be accomplished is through the exploitation of a wide range of sources, digital technology, and information that is updated in real time. New technologies such as artificial intelligence (AI), blockchain, and robotics can improve the operational efficiency and flexibility of trading environments that are prone to volatility. These benefits may be a result of the deployment of these technologies.

To contribute to the creation of robust trade arrangements and to limit the risk of unilateral tariff acts, it is possible to put into place policies that encourage collaboration between nations that are in the same region or across borders. Considering that regulations concerning the environment and the preferences of consumers have a greater influence on international commerce, the incorporation of sustainability into trade strategies will also be of immense significance. Finally, having policies that are not inflexible and are built on facts helps governments to react quickly to developments while simultaneously maintaining a balance between protectionism and competition. This is because the policies are not rigid.

It is important for future studies to investigate the ways in which global factors such as political instability, the utilization of digital currencies, and green trade policies influence tariff regimes and alter the trajectory of international commerce.

REFERENCES

- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120.
- Chopra, S., & Meindl, P. (2016). *Supply Chain Management: Strategy, Planning, and Operation* (6th ed.). Pearson.
- Christopher, M. (2016). *Logistics & Supply Chain Management* (5th ed.). Pearson.
- Dubey, R., Gunasekaran, A., & Childe, S. J. (2019). Big Data Analytics Capability in Supply Chain Management: An Exploratory Case Study. *International Journal of Production Research*, 57(7), 2007–2023.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Building Theories from Case Study Research. *Academy of Management Journal*, 50(1), 25–32.
- Gunasekaran, A., & Ngai, E. W. T. (2012). The Future of Operations Management: An Outlook and Analysis. *International Journal of Production Economics*, 135(2), 687–701.
- Ivanov, D., & Dolgui, A. (2020). Viability of Intertwined Supply Networks: Extending the Supply Chain Resilience Angles towards Survivability. *International Journal of Production Research*, 58(10), 2904–2915.
- Jabbour, C. J. C., de Sousa Jabbour, A. B. L., Sarkis, J., & Filho, M. G. (2017). Unlocking the Circular Economy through New Business Models Based on Large-Scale Data: An Integrative Framework and Research Agenda. *Technological Forecasting and Social Change*, 144, 546–552.
- Kutsenko, V., et al. (2022). *Problemy Nauki*.
- Lee, H. L. (2004). The Triple-A Supply Chain. *Harvard Business Review*, 82(10), 102–113.
- Liao, Y., Deschamps, F., Loures, E. D. F. R., & Ramos, L. F. P. (2017). Past, Present and Future of Industry 4.0 - A Systematic Literature Review and Research Agenda Proposal. *International Journal of Production Research*, 55(12), 3609–3629.
- Melnyk, S. A., Davis, E. W., Spekman, R. E., & Sandor, J. (2010). Outcome-Driven Supply Chains. *MIT Sloan Management Review*, 51(2), 33–38.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook* (3rd ed.). Sage Publications.
- Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*. Sage Publications.
- Sarkis, J. (2012). A Boundaries and Flows Perspective of Green Supply Chain Management. *Supply Chain Management: An International Journal*, 17(2), 202–216.
- Silver, E. A., Pyke, D. F., & Thomas, D. J. (2016). *Inventory and Production Management in Supply Chains* (4th ed.). CRC Press.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18(7), 509–533.
- Wang, G., Gunasekaran, A., Ngai, E. W. T., & Papadopoulos, T. (2016). *Big Data Analytics in Logistics and Supply Chain Management: Certain Investigations for Research and Applications*.

- International Journal of Production Economics, 176, 98–110.
- Baldwin, R. E. (2016). *The Great Convergence: Information Technology and the New Globalization*. Harvard University Press.
- Bagwell, K., & Staiger, R. W. (2010). What Do Trade Negotiators Negotiate About? Empirical Evidence from the World Trade Organization. *American Economic Review*, 100(2), 146–150.
- Bown, C. P. (2019). *US-China Trade War Tariffs: An Up-to-Date Chart*. Peterson Institute for International Economics.
- Bown, C. P., & Irwin, D. A. (2019). *The Trump Trade War: Its Motivations, Manifestation, and the Future*. Peterson Institute for International Economics Policy Brief.
- Evenett, S. J. (2020). Protectionism, State Discrimination, and International Business Since the Onset of the Global Financial Crisis. *Journal of International Business Policy*, 3, 25–42.
- Furceri, D., & Mourougane, A. (2019). *The Short-Term Effects of Tariffs on Employment: Evidence from US-China Trade War*. OECD Economics Department Working Papers.
- Irwin, D. A. (2020). *Clashing Over Commerce: A History of US Trade Policy*. University of Chicago Press.
- Mattoo, A., & Subramanian, A. (2012). *Currency Undervaluation and Sovereign Wealth Funds: A New Role for the World Trade Organization*. World Bank Policy Research Working Paper.
- McKibbin, W. J., & Stoeckel, A. (2021). *Global Economic Effects of the COVID-19 Pandemic and the Policy Responses*. Brookings Institution Report.
- Evenett, S. J., & Fritz, J. (2021). *Economic Sanctions and Trade Wars: Assessing the Impact on Global Trade*. *World Trade Review*, 20(3), 357–379.
- Handley, K., & Limão, N. (2017). Policy Uncertainty, Trade, and Welfare: Theory and Evidence for China and the United States. *American Economic Review*, 107(9), 2731–2783.
- Hufbauer, G. C., & Jung, E. (2019). *Economic Sanctions Reconsidered* (3rd ed.). Peterson Institute for International Economics.
- Irwin, D. A. (2017). The Use of Trade Policy Instruments: History and Effects. *Annual Review of Economics*, 9, 211–234.
- Maggi, G., & Rodríguez-Clare, A. (2007). A Political-Economy Theory of Trade Agreements. *American Economic Review*, 97(4), 1374–1406.
- Ossa, R. (2014). Trade Wars and Trade Talks with Data. *American Economic Review*, 104(12), 4104–4146.
- Rodrik, D. (2018). Populism and the Economics of Globalization. *Journal of International Business Policy*, 1(1), 12–33.
- Staiger, R. W., & Sykes, A. O. (2011). Multilateral Threats and Trade Liberalization. *Economics & Politics*, 23(3), 380–409.
- Subramanian, A., & Wei, S.-J. (2007). The WTO Promotes Trade, Strongly But Unevenly. *Journal of International Economics*, 72(1), 151–175.
- WTO. (2018). *World Trade Report 2018: The Future of World Trade*. World Trade Organization.
- Baldwin, R., & Evenett, S. J. (2020). *COVID-19 and Trade Policy: Why Turning Inward Won't Work*. VoxEU.org eBook.
- Bown, C. P. (2021). *The US-China Trade Conflict and Phase One Agreement*. *Journal of Economic Perspectives*, 35(1), 3–27.
- Freund, C. (2020). *The Trade Impact of Global Supply Chain Disruptions*. World Bank Policy Research.
- Handley, K. (2020). Exporting under Trade Policy Uncertainty: Theory and Evidence. *Journal of International Economics*, 122, 103284.
- Irwin, D. A., & Klenow, P. J. (1994). Learning-by-Doing Spillovers in the Semiconductor Industry. *Journal of Political Economy*, 102(6), 1200–1227.
- Kim, M., & Lee, H. (2020). Impact of Trade War on Global Supply Chains: Evidence from Manufacturing Firms. *Journal of International Business Studies*, 51(8), 1321–1343.
- Ossa, R. (2015). Why Trade Matters After All. *Journal of International Economics*, 97(2), 266–277.
- Rodrik, D. (2017). *Globalization Paradox: Democracy and the Future of the World Economy*. W. W. Norton & Company.
- Subramanian, A., & Wei, S.-J. (2003). The WTO Promotes Trade, Strongly But Unevenly. *Journal of International Economics*, 72(1), 151–175.
- WTO (2021). *Trade Policy Review: United States*. World Trade Organization.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). Sage Publications.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students* (8th ed.). Pearson.
- Bryman, A. (2016). *Social Research Methods* (5th ed.). Oxford University Press.
- Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods* (6th ed.). Sage Publications.
- Flick, U. (2018). *An Introduction to Qualitative Research* (6th ed.). Sage Publications.
- Jick, T. D. (1979). Mixing Qualitative and Quantitative Methods: Triangulation in Action. *Administrative Science Quarterly*, 24(4), 602–611.
- Babbie, E. (2020). *The Practice of Social Research* (15th ed.). Cengage Learning.
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and Conducting Mixed Methods Research* (3rd ed.). Sage Publications.

- Robson, C., & McCartan, K. (2016). *Real World Research* (4th ed.). Wiley.
- Ivanov, D. (2020). Viable Supply Chain Model: Integrating Agile, Resilient and Sustainable Strategies. *International Journal of Production Research*, 58(4), 1111–1126.
- Christopher, M., & Peck, H. (2004). Building the Resilient Supply Chain. *International Journal of Logistics Management*, 15(2), 1–13.
- Ahi, P., & Searcy, C. (2013). A Comparative Literature Analysis of Definitions for Green and Sustainable Supply Chain Management. *Journal of Cleaner Production*, 52, 329–341.
- Rajeev, A., et al. (2017). Sustainable Supply Chain Management: Evolution and Future Directions. *International Journal of Production Research*, 55(20), 6379–6399.
- Krugman, P. R. (1991). Increasing Returns and Economic Geography. *Journal of Political Economy*, 99(3), 483–499.
- Helpman, E. (1999). The Structure of Foreign Trade. *Journal of Economic Perspectives*, 13(2), 121–144.
- Grossman, G. M., & Helpman, E. (1991). *Innovation and Growth in the Global Economy*. MIT Press.
- Samuelson, P. A. (1948). International Trade and the Equalisation of Factor Prices. *Economic Journal*, 58(230), 163–184.
- Ricardo, D. (1817). *On the Principles of Political Economy and Taxation*. John Murray.
- Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*. Methuen & Co., Ltd.
- Stolper, W. F., & Samuelson, P. A. (1941). Protection and Real Wages. *Review of Economic Studies*, 9(1), 58–73.
- IMF. (2021). *World Economic Outlook: Recovery During a Pandemic*. International Monetary Fund.
- OECD. (2020). *Trade and COVID-19: Economic Outlook and Policy Responses*. Organisation for Economic Co-operation and Development.
- UNCTAD. (2019). *World Investment Report: Special Economic Zones*. United Nations Conference on Trade and Development.
- World Bank. (2021). *Global Economic Prospects*. World Bank Publications.
- Anderson, J. E. (2011). The Gravity Model. *Annual Review of Economics*, 3, 133–160.
- Head, K., & Mayer, T. (2014). Gravity Equations: Workhorse, Toolkit, and Cookbook. *Handbook of International Economics*, 4, 131–195.
- Anderson, S., & Neary, J. P. (2003). The Mercantilist Index of Trade Policy. *International Economic Review*, 44(2), 627–649.
- Bernhofen, D. M., & Brown, J. C. (2004). A Direct Test of the Theory of Comparative Advantage: The Case of Japan. *Journal of Political Economy*, 112(1), 48–67.
- Broda, C., & Weinstein, D. E. (2006). Globalization and the Gains from Variety. *Quarterly Journal of Economics*, 121(2), 541–585.
- Porter, M. E. (1990). *The Competitive Advantage of Nations*. Free Press.
- Prahalad, C. K., & Hamel, G. (1990). The Core Competence of the Corporation. *Harvard Business Review*, 68(3), 79–
- Grant, R. M. (1991). The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation. *California Management Review*, 33(3), 114–135.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis* (8th ed.). Cengage Learning.
- Tabachnick, B. G., & Fidell, L. S. (2018). *Using Multivariate Statistics* (7th ed.). Pearson.
- Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). Sage Publications.
- Rodrik, D. (2011). *The Globalization Paradox: Democracy and the Future of the World Economy*. W. W. Norton & Company.
- Baldwin, R. (2019). *The Globotics Upheaval: Globalization, Robotics, and the Future of Work*. Oxford University Press.
- Stiglitz, J. E. (2002). *Globalization and Its Discontents*. W.W. Norton & Company.
- Helpman, E., Melitz, M., & Yeaple, S. (2004). Export Versus FDI with Heterogeneous Firms. *American Economic Review*, 94(1), 300–316.
- Aghion, P., & Howitt, P. (1992). A Model of Growth through Creative Destruction. *Econometrica*, 60(2), 323–351.
- Krugman, P. R., Obstfeld, M., & Melitz, M. J. (2018). *International Economics: Theory and Policy* (11th ed.). Pearson.
- Acemoglu, D., & Robinson, J. A. (2012). *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. Crown Publishing Group.