

# Innovations

## Investigating the Impact of Trade Agreements on the Strategies of Multinational Enterprises

Chukwuemeka Odo

Anthony A. Igwe

Chris Chukwuebuka Emeali\*

<sup>1,2,3</sup>University of Nigeria, Enugu State, Nigeria

Corresponding Author: [Chris C. Emeali](#)

---

---

### Abstract

*The study investigated the impact of Trade Agreements on the Strategies of Multinational Enterprise. The study adopted a systematic approach to comprehensively analyze the existing literature on Trade Agreements and Strategies of Multinational Enterprise. The methodology involves conducting a systematic search across multiple electronic databases to identify relevant articles published between 2019 and 2023. Keywords and phrases related to the topic were utilized, including Trade Agreements, Strategies of Multinational Enterprise, Trade Agreement Intensity Index, Market Expansion Index, Policy Change Sensitivity, Innovation and Adaptation Score, Compliance and Governance Metric, Global Supply Chain Efficiency, Trade Agreement Network Density, Financial Performance Indicator. Articles were included if they met the criteria of being published in peer-reviewed journals, written in English, and directly relevant to the topic of interest, while exclusion criteria included non-peer-reviewed sources, articles not written in English, and studies not directly related to the topic. The findings collectively underscore the importance of dynamic models, context-specific analyses, and multilateral approaches to address the intricate relationships between trade agreements, multinational enterprises, economic growth, and governance metrics. The current study with reference to Policy Change Sensitivity (PCS) aligns with this body of research, highlighting the continued significance of policy dynamics in shaping the behavior of multinational enterprises and emphasizing the need for adaptive strategies in the ever-evolving global economic environment.*

**Keywords:** Trade Agreements, Strategies of Multinational Enterprise, Trade Agreement Intensity Index, Market Expansion Index, Policy Change Sensitivity, Innovation and

## **1.0 Introduction**

In the context of global trade, the strategic choices made by Multinational Enterprises (MNEs) play a substantial role in molding the dynamics of the international business landscape. This study delves into the intricate relationship between these strategies and trade agreements—a critical intersection that has become the subject of increasing scholarly scrutiny. The research seeks to unravel the multifaceted interplay between trade agreements and the strategic behaviors exhibited by multinational enterprises. Trade agreements, as formalized compacts governing international trade, exert profound influence on the strategic decisions of MNEs navigating the complex global landscape. Scholars argue that these agreements significantly impact market entry strategies, with the Market Expansion Index (MEI) serving as a lens to understand the extent of MNEs' forays into new markets. This metric incorporates factors such as the number of countries entered, market share gained, and product diversity, providing insights into the strategic choices made by MNEs under the influence of trade agreements (Smith et al., 2020). Innovation and Adaptation emerge as critical facets of MNE resilience in response to the evolving terrain of trade agreements. The Innovation and Adaptation Score (IAS) becomes a key metric, delving into the strategic acumen of these enterprises. Scholars argue that this score encapsulates the transformative capacity of MNEs, influenced by the winds of change blowing through trade agreements. It involves the introduction of new products or services, adaptive marketing strategies, and the integration of technology to enhance competitiveness (Jones & Patel, 2019). As MNEs operate within a global framework, the effective management of intricate supply chains becomes both an art and a necessity. The Global Supply Chain Efficiency (GSCE) metric becomes a focal point in assessing how MNEs navigate the challenges posed by trade agreements. Indicators such as supply chain lead times, cost-effectiveness, and regulatory navigation come under scrutiny. Scholars argue that GSCE is indicative of the strategic prowess of MNEs in aligning their supply chains with the contours of trade agreements, ultimately influencing their market positions (Chang et al., 2021). The Financial Performance Indicator (FPI) serves as the ultimate barometer, quantifying the success or challenges faced by MNEs resulting from their strategic adaptations to trade agreements. Key financial metrics, such as revenue growth, profitability, and return on investment, weave a narrative of the financial outcomes shaped by the symbiotic relationship between MNEs and trade agreements (Dunning, 2018).

On the other side of this complex equation are the trade agreements themselves, operating as a dynamic force that shapes the strategic landscape for MNEs. The Trade Agreement Intensity Index (TAII) becomes a pivotal metric, quantifying the depth and scope of these agreements. The number of countries involved, the extent of tariff reductions, and the inclusion of non-tariff barriers become crucial factors in understanding the spectrum of opportunities and challenges presented by trade agreements (Anderson & Nguyen, 2022). Trade policies within agreements demand adaptability from MNEs. The Policy Change Sensitivity (PCS) metric delves into the speed and flexibility with which MNEs adapt their strategies to changes in trade agreement terms. This sensitivity becomes a key determinant of the strategic agility of MNEs in navigating the ever-shifting sands of international trade (Wells, 2017). Governance and compliance, as integral aspects of trade agreements, come under scrutiny through the Compliance and Governance Metric (CGM). This metric evaluates the degree to which MNEs adhere to the regulations and governance structures outlined in trade agreements. Legal compliance, ethical practices, and corporate social responsibility initiatives become critical dimensions of MNEs' strategic comportment in the face of evolving trade agreements (Sun et al., 2019). The interconnectedness of trade agreements, as reflected in the Trade Agreement Network Density (TAND) metric, adds a layer of complexity to the study. By evaluating the number and strength of connections between different agreements, this metric unravels the intricate web of relationships in the global trade landscape. Overlapping memberships and the depth of cooperation between countries in multiple trade agreements become critical considerations in understanding the holistic impact of trade agreements on the strategies of MNEs (Elschner et al., 2020).

This study, thus, sets out with clear objectives: to assess the impact of TAI on MEI of MNEs, examining how the depth and scope of trade agreements influence market expansion strategies (Johnson & Smith, 2018); to explore the impact of PCS on IAS within trade agreements, deciphering the relationship between innovation and adaptability and the responsiveness to changes in trade policies (Brown & Davis, 2019); to evaluate the impact of CGM on GSCE, shedding light on how regulatory and governance impact efficient global supply chain management and how global supply chain management aligns with adherence to the regulatory and governance aspects of trade agreements (Kim & Lee, 2021); and finally, to assess the impact of TAND on the FPI of MNEs, unraveling how the interconnectedness of trade agreements influences financial outcomes (Morrison & Wilson, 2018). In undertaking this exploration, the study endeavors to contribute nuanced insights that go beyond the surface, providing a deeper understanding of the symbiotic relationship between trade agreements and the strategic decisions made by multinational

enterprises in the ever-evolving global marketplace. Thus, to address these objectives, the following four research questions guided the study:

- RQ1:** To what extent does Trade Agreement Intensity Index (TAII) impact Market Expansion Index (MEI) of Multinational Enterprises?
- RQ2:** To what extent does Policy Change Sensitivity (PCS) impact Innovation and Adaptation Score (IAS) of Multinational Enterprises?
- RQ3:** To what extent does Compliance and Governance Metric (CGM) impact the Global Supply Chain Efficiency (GSCE) of MNEs?
- RQ4:** To what extent does Trade Agreement Network Density (TAND) impact the Financial Performance Indicator (FPI) of MNEs?

By exploring these questions, this study aims to contribute to the existing body of knowledge by systematically examining the relationships between key variables and essential performance indicators in the context of multinational enterprises (MNEs). By investigating the impact of Trade Agreement Intensity Index (TAII) on Market Expansion Index (MEI), Policy Change Sensitivity (PCS) on Innovation and Adaptation Score (IAS), Compliance and Governance Metric (CGM) on Global Supply Chain Efficiency (GSCE), and Trade Agreement Network Density (TAND) on Financial Performance Indicator (FPI), the research provides valuable insights into the intricate dynamics shaping MNEs' strategic decisions, operational efficiency, and overall success. These findings hold implications for practitioners, policymakers, and scholars, offering a nuanced understanding of how trade agreements, policy sensitivity, governance metrics, and network density influence critical aspects of multinational enterprises' performance in the global business landscape. The structure of the study is as follows: First, the study provided an introductory part which dealt with the general background and research questions; second, the study discussed the literature and arguments around trade agreements and strategies of multinational enterprises; third, the study described the methodology adopted. Fourth, the study presented findings and finally, conclusion and recommendations.

## **2.0 Literature Review**

### **2.1 Conceptual Background**

Trade agreements exert significant influence on global trade and investment, shaping interactions among companies worldwide (Smith, 2020). Small business exporters must remain aware of the impacts of these agreements to thrive

internationally (Jones & Williams, 2019). Lenders also need familiarity with these agreements to understand the financial needs of their clients (Brown et al., 2021). The proliferation of trade agreements, ranging from free trade areas to customs unions and common markets, transforms the global landscape for small businesses (Clark, 2022). Michael Porter emphasizes the role of trade in elevating citizens' standard of living, tying it to productivity and international competitiveness (Porter, 2016; Jones & Williams, 2019). Governments advocating for increased productivity must champion free trade to foster economies of scale, efficiency, and overall well-being (Hill, 2017). Successful free trade agreements, exemplified by the U.S.-Canada Free Trade Agreement and others, highlight the advantages of eliminating trade barriers (Smith, 2020; Clark, 2022). The positive impact of free trade is evident in various international agreements, such as the New Zealand-Australia trade liberalization accord and the growth within the European Community (EC) (Brown et al., 2021; Hill, 2017). The success of free trade is further demonstrated by the substantial growth in trade within the United States, reinforcing its position as the wealthiest single market (Smith, 2020).

### **2.1.1 Small Business and Trade Agreements**

Since 1992, the United States has actively participated in negotiating and implementing various trade agreements, such as the Tokyo Round, the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), and the North American Free Trade Agreement (NAFTA), in addition to approximately 200 other less prominent agreements (Smith & Johnson, 2021). These efforts have significantly reduced foreign trade barriers, proving advantageous for small businesses (Kim & Lee, 2021). However, persistent obstacles, particularly high foreign duties, hinder many small U.S. firms from engaging in exporting activities (Jones, 2019). Unlike larger counterparts, small companies often lack the resources to establish a foreign presence, placing them at a disadvantage in securing competitive access to international markets. U.S. participation in trade agreements, leading to the reduction and elimination of foreign tariffs, is crucial for small companies, enhancing the price competitiveness of their products, fostering increased exports, and generating new job opportunities (Smith & Johnson, 2021). These agreements empower small businesses to overcome barriers that would otherwise impede their global market participation. In addition to foreign duties, non-tariff barriers, such as intricate red tape and import license requirements, pose challenges for small exporters (Jones, 2019). While large corporations can navigate these complexities with their substantial resources, small companies face difficulties overcoming these hidden barriers. Trade agreements play a vital role in eliminating red tape, placing small businesses on a more level playing field (Kim & Lee, 2021), allowing them to better position themselves for international growth. Small firms, with their inherent

agility and responsiveness to market changes, possess a competitive edge, particularly as the pace of global change accelerates. Moreover, small businesses' ability to swiftly adapt and capitalize on niche market opportunities contributes to their resilience and potential for sustained success in the international arena (Smith & Johnson, 2021).

### **2.1.2 GATT and the World Trade Organization**

Established in 1947 in Geneva, Switzerland, the General Agreement on Tariffs and Trade (GATT) played a crucial role in overseeing 90% of global trade, aiming to promote trade liberalization and enhance the worldwide trading system through rules and negotiation forums (Anderson & Nguyen, 2022). GATT successfully reduced average international tariffs from 40% in 1947 to 5% in 1990, fostering global trade expansion, increased national incomes, and robust international competition. Despite addressing conventional trade barriers, GATT faced challenges with emerging non-tariff barriers in the early 1990s, leading to the formation of trading blocs. After the GATT Uruguay Round Agreements, the World Trade Organization (WTO) took over, instilling confidence in enforcing international trade rules. While trade agreements have provided secure market access, the rise of trade blocs introduces complexities and concerns about protectionism and trade diversion. Navigating this environment requires leveraging tools for a competitive advantage, emphasizing the importance of attractive export financing (Anderson & Nguyen, 2022).

### **2.1.3 African Union, AfCFTA and Strategies of MNEs**

The African Union (AU) and the African Continental Free Trade Area (AfCFTA) represent crucial initiatives for fostering unity, cooperation, and economic integration across the African continent. The African Union, established in 2001, aims to promote political and socio-economic integration among African nations, striving for a united and prosperous Africa. One of its significant milestones is the creation of the AfCFTA, a landmark trade agreement that came into effect in 2021. AfCFTA aspires to create a single African market, eliminating tariffs and non-tariff barriers to enhance intra-African trade. This ambitious initiative has the potential to stimulate economic growth, create jobs, and empower African nations in the global economy. While both the AU and AfCFTA face challenges in implementation, they symbolize Africa's commitment to fostering collaboration and realizing its economic potential. The success of these initiatives holds the promise of transforming the African continent into a more integrated and economically vibrant entity.

The African Union (AU) serves as a pivotal organization fostering unity and cooperation among African nations, aiming for political and socio-economic integration since its establishment in 2001. In conjunction with the AU's broader vision, the African Continental Free Trade Area (AfCFTA) represents a landmark initiative, officially launched in 2021, with the goal of creating a single African market by eliminating trade barriers. This ambitious trade agreement seeks to boost intra-African trade, stimulate economic growth, and position Africa as a formidable player in the global marketplace. Multinational enterprises (MNEs) operating in the African context navigate diverse challenges and opportunities presented by the AU and AfCFTA. Successful MNE strategies involve adapting to the evolving regulatory landscape, leveraging regional integration benefits, and contributing to sustainable economic development across the continent. The interplay of these factors underscores the complex and dynamic environment in which multinational enterprises operate within the African Union and AfCFTA framework.

The African Union (AU) and the African Continental Free Trade Area (AfCFTA) significantly influence Multinational Enterprises' (MNEs) strategies in Africa. Established in 2001, the AU promotes political and economic integration, while AfCFTA, initiated in 2021, aims to create a unified African market by removing trade barriers. MNEs navigate this dynamic landscape by leveraging AfCFTA's market access for expansion, optimizing supply chains, forging local partnerships, adapting to regulatory frameworks, promoting innovation, and embracing corporate social responsibility. The AU's overarching vision aligns with MNEs' strategies, fostering collaborative approaches for sustainable economic development across the continent. The success of MNEs in Africa hinges on aligning their operations with the regional integration goals set by the AU and the transformative opportunities presented by AfCFTA.

#### **2.1.4 The European Union; Trade Agreement and Strategies of MNEs**

The European Union (EU) serves as a key player in global trade, shaping trade agreements and influencing the strategies of Multinational Enterprises (MNEs) operating within its expansive market. Established initially as the European Economic Community, the EU has evolved into a powerful economic and political union, negotiating comprehensive trade agreements with countries, regions, and global partners. The EU's trade policy focuses on creating a single market by reducing trade barriers, promoting fair and sustainable trade, and incorporating environmental and labor standards into its agreements. MNEs operating within the EU navigate a dynamic environment shaped by the union's trade policies and agreements. The EU negotiates agreements that encompass not only the exchange of goods but also services, investments, and intellectual property. Notable examples

include the Comprehensive Economic and Trade Agreement (CETA) with Canada and the EU-Japan Economic Partnership Agreement. These agreements aim to enhance market access, stimulate economic growth, and foster regulatory harmonization. Strategies employed by MNEs within the EU context involve capitalizing on the benefits of a unified market, streamlining production and distribution processes, and adapting to the evolving regulatory landscape. MNEs leverage the harmonized standards and regulations within the EU to achieve economies of scale and operational efficiency. The EU's commitment to fair trade practices and sustainability aligns with the growing emphasis on corporate social responsibility, influencing MNEs to integrate ethical and environmentally conscious practices into their strategies. Despite the opportunities, MNEs also face challenges, including complex negotiations, differing national interests, and compliance with stringent regulatory requirements. Successful strategies involve understanding and adapting to the diverse markets within the EU, fostering innovation, and building strategic partnerships.

### **2.1.5 Asia; Trade Agreement and Strategies of MNEs**

Asia, characterized by its diverse and dynamic economies, serves as a crucial arena for Multinational Enterprises (MNEs) navigating trade agreements and shaping strategic initiatives. The region hosts a myriad of trade agreements and partnerships that significantly impact the strategies of MNEs operating within its borders. Notable trade agreements in Asia include the Association of Southeast Asian Nations (ASEAN) Free Trade Area, the Regional Comprehensive Economic Partnership (RCEP), and various bilateral agreements between Asian nations. MNEs operating in Asia devise strategies that align with the opportunities and challenges posed by these trade agreements. The establishment of regional trade blocs, such as ASEAN and RCEP, fosters a more integrated market, providing MNEs with enhanced access to a vast consumer base. Strategies often involve optimizing supply chains, capitalizing on tariff reductions, and navigating harmonized regulatory frameworks to streamline operations. Given the diverse economic landscapes across Asian countries, MNEs adopt nuanced strategies that account for variations in cultural, regulatory, and market conditions. Local partnerships and collaborations are integral components of successful strategies, enabling MNEs to tap into local expertise, navigate complex regulatory environments, and build stronger market presence. Technological innovation and digitalization play a crucial role in MNE strategies in Asia. E-commerce and digital platforms have become instrumental channels for reaching Asian consumers, prompting MNEs to invest in technology and adapt their business models to capitalize on the region's digital landscape. In addition to economic considerations, MNEs operating in Asia incorporate sustainability and corporate social responsibility (CSR) into their strategies. Asia's

growing focus on environmental and social issues prompts MNEs to align with sustainable practices, contributing to both local and global initiatives. Challenges faced by MNEs in Asia include geopolitical tensions, varying legal frameworks, and competition with local businesses. Strategies involve risk management, adaptability, and a keen understanding of the geopolitical and economic dynamics in the region. Thus, Asia's trade agreements and diverse markets necessitate strategic agility from MNEs. Successful strategies involve a combination of supply chain optimization, technological adaptation, local partnerships, and a commitment to sustainability. As Asia continues to play a pivotal role in the global economy, MNEs must navigate this complex and dynamic region with strategic foresight.

### **2.1.6 The Americas; Trade Agreement and Strategies of MNEs**

The North American Free Trade Agreement (NAFTA) has been a pivotal factor influencing the strategies of Multinational Enterprises (MNEs) operating in North America. Renegotiated and modernized as the United States-Mexico-Canada Agreement (USMCA) in 2020, this trade agreement plays a crucial role in shaping the business landscape for MNEs across the region. Strategies employed by MNEs in the North American context are deeply intertwined with the provisions and opportunities afforded by the USMCA. The agreement aims to create a more integrated market by reducing trade barriers, facilitating cross-border commerce, and harmonizing regulatory frameworks. MNEs leverage the benefits of this agreement to optimize supply chains, enhance market access, and navigate the complexities of conducting business across the United States, Mexico, and Canada. One prominent strategy involves the establishment of integrated supply chains that capitalize on the strengths of each member country. MNEs often distribute production processes strategically across North American borders to achieve cost efficiencies and ensure a seamless flow of goods and services. Market access is a key consideration for MNEs, and the USMCA addresses this by reducing tariffs and promoting fair competition. Strategies revolve around identifying and capitalizing on new market opportunities, aligning with the rules of origin requirements, and adapting products and services to meet the diverse demands of North American consumers. Digitalization and technological innovation play a significant role in MNE strategies in North America. E-commerce, digital marketing, and advanced technologies are leveraged to enhance operational efficiency, improve customer engagement, and stay competitive in the rapidly evolving business environment. Sustainability and corporate social responsibility (CSR) are increasingly integrated into MNE strategies. The USMCA includes provisions related to environmental protection and labor standards, prompting MNEs to align their strategies with these requirements to foster positive relationships with stakeholders and consumers. Challenges faced by MNEs in North America include the potential for shifts in trade

policies, geopolitical tensions, and evolving regulatory landscapes. Strategies involve maintaining flexibility, engaging in proactive risk management, and staying informed about changes in the political and economic environment. Thus, the USMCA significantly influences the strategies of MNEs in North America, shaping their approaches to supply chain optimization, market access, digitalization, and sustainability. Successful strategies involve a keen understanding of the agreement's provisions and a proactive response to the evolving dynamics of the regional business landscape.

### **2.1.7 Other Trade Agreement in the Western Hemisphere and Strategies of MNEs**

In addition to the North American Free Trade Agreement (NAFTA), which has evolved into the United States-Mexico-Canada Agreement (USMCA), there are other significant trade agreements in the Western Hemisphere that impact the strategies of Multinational Enterprises (MNEs). Notable among these is the Pacific Alliance, a trade bloc consisting of Chile, Colombia, Mexico, and Peru. The Pacific Alliance aims to promote economic integration, cooperation, and free trade among its member countries. MNEs operating in the Pacific Alliance region devise strategies that leverage the opportunities presented by this agreement. The strategies often revolve around market access, supply chain optimization, and collaboration with local partners. Market access is a key driver for MNE strategies in the Pacific Alliance, given the agreement's focus on reducing trade barriers and facilitating the flow of goods and services among member nations. MNEs aim to capitalize on the expanded market opportunities created by the Pacific Alliance, adapting their products and services to meet the diverse consumer preferences across member countries. Supply chain optimization is another integral component of MNE strategies. With reduced tariffs and streamlined customs procedures within the Pacific Alliance, MNEs often seek to establish integrated and efficient supply chains that span multiple member countries. This approach enhances cost-effectiveness and responsiveness to market demands. Collaboration with local partners is a common strategy for MNEs seeking to establish a strong presence in the Pacific Alliance region. Forming alliances with local businesses facilitates a deeper understanding of regional dynamics, cultural nuances, and regulatory frameworks, thereby enhancing the effectiveness of market entry and expansion strategies. Technological innovation and digitalization remain key considerations in MNE strategies within the Pacific Alliance. Leveraging e-commerce, digital marketing, and advanced technologies allows MNEs to navigate the evolving business landscape and connect with consumers in a digitally-driven market. Sustainability and corporate social responsibility (CSR) continue to play a significant role in MNE strategies. Aligning with the Pacific Alliance's emphasis on sustainable

development, MNEs integrate environmentally friendly practices and socially responsible initiatives into their business models to enhance their reputation and stakeholder relations. Challenges faced by MNEs in the Pacific Alliance include cultural diversity, varying regulatory environments, and geopolitical factors. Successful strategies involve a nuanced understanding of the unique characteristics of each member country and an adaptive approach to address local challenges while capitalizing on the benefits of regional economic integration.

### **2.1.8 Elimination of Trade Barriers and Strategies of MNEs**

The elimination of trade barriers, facilitated by international trade agreements and economic cooperation, influence the strategies of Multinational Enterprises (MNEs). As trade barriers decrease, MNEs adapt their approaches to capitalize on new opportunities, optimize supply chains, and navigate the complexities of the global business environment. One primary strategy employed by MNEs in response to the elimination of trade barriers is the optimization of supply chains. With reduced tariffs and streamlined customs procedures, MNEs often reconfigure their production processes to enhance efficiency and cost-effectiveness. This involves strategically locating manufacturing facilities, distribution centers, and sourcing materials to leverage the benefits of open markets. Market access becomes a key focus for MNE strategies as trade barriers diminish. MNEs seek to enter new markets or expand existing operations to capitalize on the increased ease of cross-border trade. This involves conducting market research, understanding consumer preferences, and adapting products or services to align with the specific demands of each market. Digitalization and technological innovation play a crucial role in MNE strategies following the elimination of trade barriers. E-commerce, digital marketing, and advanced technologies are leveraged to enhance operational efficiency, improve customer engagement, and facilitate communication in a borderless business environment. Sustainability and corporate social responsibility (CSR) considerations are integrated into MNE strategies. As trade barriers decrease, MNEs recognize the importance of aligning with global sustainability goals and meeting the expectations of socially conscious consumers. Strategies involve incorporating environmentally friendly practices and socially responsible initiatives into business operations. Collaboration and partnerships with local entities become instrumental in MNE strategies. The elimination of trade barriers fosters a more interconnected global economy, prompting MNEs to establish alliances with local businesses, governments, and communities. This collaborative approach enhances cultural understanding, regulatory compliance, and overall success in diverse markets. Risk management becomes a critical aspect of MNE strategies in the absence of trade barriers. While opportunities expand, uncertainties related to geopolitical events, regulatory changes, and market fluctuations necessitate robust

risk mitigation strategies. MNEs engage in scenario planning, market intelligence, and flexibility to adapt to unforeseen challenges. Thus, the elimination of trade barriers reshapes the strategies of MNEs, prompting them to reevaluate supply chain dynamics, focus on market access, embrace digitalization, integrate sustainability, foster collaboration, and enhance risk management. Successful MNE strategies in this environment require agility, adaptability, and a comprehensive understanding of the evolving global trade landscape.

### **2.1.9 Trade Agreement; Rules of Origin and Strategies of MNEs**

Trade agreements often come with rules of origin stipulations, defining the criteria for determining the national source of a product. These rules are crucial for Multinational Enterprises (MNEs) as they influence supply chain strategies, production processes, and market access. MNEs employ specific strategies to navigate and leverage rules of origin within trade agreements. MNEs strategically design their supply chains to comply with rules of origin requirements. This involves sourcing materials and components from countries that meet the specified criteria. By optimizing their supply chains in alignment with these rules, MNEs ensure that their products qualify for preferential tariff treatment within the trade agreement. To meet rules of origin requirements, MNEs often establish regional manufacturing hubs. Concentrating production activities in specific locations within the trade bloc allows them to benefit from reduced tariffs and trade barriers. This strategy involves selecting locations where the majority of components and labor meet the origin criteria. MNEs may adapt their products to comply with rules of origin. This involves adjusting product specifications, manufacturing processes, or sourcing strategies to meet the required percentage of local content. Such adaptations are crucial for ensuring that the final product qualifies for preferential treatment. MNEs implement robust documentation and compliance management systems to track the origin of materials and components throughout the supply chain. This includes maintaining accurate records and certifications to demonstrate adherence to rules of origin. Compliance management is essential to avoid penalties and disruptions in preferential trade benefits. Careful selection of suppliers and strategic sourcing decisions are integral to MNE strategies. Developing strong relationships with suppliers in countries that meet the rules of origin criteria ensures a stable and compliant supply chain. This strategy involves collaborative efforts to meet the specified content and processing requirements. Rules of origin may evolve over time, necessitating continuous monitoring and adaptation by MNEs. Proactive engagement with industry associations, regulatory bodies, and legal experts helps MNEs stay informed about changes in origin criteria. This strategy ensures ongoing compliance and minimizes the risk of disruptions. MNEs diversify their market

presence within the trade bloc to maximize the benefits of preferential treatment. By strategically positioning operations and distribution centers across member countries, they can cater to diverse markets while adhering to rules of origin. Thus, rules of origin significantly shape the strategies of MNEs within trade agreements. Successful navigation of these rules requires a comprehensive approach that encompasses supply chain optimization, adaptation, documentation, strategic sourcing, and continuous monitoring. MNEs that effectively align their operations with rules of origin can capitalize on preferential trade benefits and gain a competitive edge in the global marketplace.

## **2.2 Empirical Review**

### **2.2.1 Trade Agreement Intensity Index (TAII) and Market Expansion Index (MEI)**

Garetto, Oldenskin&Ramondo (2020) delved into the expansion patterns of Multinational Enterprises (MNEs) over time and space, employing statistical analysis to develop a dynamic model capturing the spatial complexity of MNE activities. The study emphasized the importance of compound option structures in understanding MNE activity reallocation aftershocks and highlighted the relevance of friction types in comprehending aggregate firm dynamics. Farahane&Heshmati (2020) explored the relationship between trade and economic growth within the Southern African Development Community (SADC), revealing that while international trade can stimulate growth through exports and foreign direct investments (FDI), its impact depends on various factors, including foreign demand, domestic supply conditions, and appropriate trade policies. Nguyen & Wu (2023) focused on Vietnam's bilateral trade intensity, using the RTP index to assess the role of China. The study found that Vietnam's reliance on China was comparable to other trading partners, emphasizing the need for alternative measures to evaluate a country's trade dependence. Corley-Coulibaly, Postolachi&Tesfay (2020) developed a multi-faceted typology of labor provisions in trade agreements, providing a comprehensive framework for analyzing the complexities and dimensions of different templates of labor provisions. Lowe (2022) scrutinized the U.S.-China 'Phase One' Trade Deal, emphasizing the limitations of unilateral pressure and advocating for plurilateral and multilateral options to address economic relationships more equitably.

### **2.2.2 Policy Change Sensitivity (PCS) and Innovation and Adaptation Score (IAS)**

Kim & Milner (2019) explored the influence of Multinational Corporations (MNCs) on foreign policy through lobbying, developing a theoretical framework using ratio

analysis. The study emphasized that MNCs exhibit distinct characteristics, spending more on lobbying across diverse issues than domestic firms, and their political activity increases upon becoming multinational. Kyove, Streltsova, Odibo&Cirella (2021) investigated the impact of globalization on multinational enterprises, noting the evolution of international trade and the need for global business strategies. The study recommended improvements in data collection reliability and validity. Goes & Bekkers (2023) assessed the impact of geopolitical conflicts on trade, growth, and innovation, emphasizing the importance of global trade rules and the potential split of major players into blocs. Vial (2019) examined dynamic capabilities and ethical considerations in strategic Information Systems (IS) research on digital transformation, highlighting the increasing complexity of the business environment. The study recommended focusing on understanding the strategic implications of digital technologies. Feyen, Frost, Gambacorta, Natarajan & Saal (2021) studied Fintech and the digital transformation of financial services, revealing changes in market structure and competition. The study suggested collaboration among domestic and international authorities to effectively navigate the evolving financial landscape.

### **2.2.3 Compliance and Governance Metric (CGM) and Global Supply Chain Efficiency (GSCE)**

Mani, Kalam & Krithika (2023) analyzed the performance measurement and metrics of supply chain management, highlighting the challenges faced by Supply Chain Management (SCM) executives in integrating SCM strategies with overall corporate business strategy. The study recommended structured resource allocation as crucial for organizations to address logistical issues. Obi, Qiang, Dogbe&Pomegbe (2020) assessed the impact of relational governance on supply chain performance in Ghana, emphasizing the mediation role of information sharing and the quality of information. The study urged trading partners to effectively exchange information and highlighted the importance of time-bound information exchange for business planning. Grabs & Garrett (2023) explored goal-based private sustainability governance in the Indonesian palm oil sector, identifying performing and organizing paradoxes between environmental, social, and economic sustainability goals. The study emphasized the need to reconcile tensions in achieving sustainable supply chains, particularly addressing issues related to smallholders and marginalized producers. Monois & Wilmsmeier (2022) investigated maritime governance after COVID-19, linking market and environmental challenges resulting from a focus on efficiency without considering negative effects. The study anticipated challenges for the maritime transport sector, emphasizing the importance of changing the narrative on growth and integrating the natural environment into the economic context. Colon & Hochrainer-Stigler (2022) focused on systemic risks in supply chains, proposing a

top-down governance approach to quantifying and mitigating risks. The study recommended that governance institutions mandate the oversight and reduction of systemic risks in supply chains, similar to central bankers overseeing the financial system, and highlighted the importance of further research on governance settings and instruments.

#### **2.2.4 Trade Agreement Network Density (TAND) and Financial Performance Indicator (FPI)**

Miroudot&Rigo (2021) investigated the impact of preferential trade agreements on foreign affiliates' production activities, revealing that trade agreements with substantive investment provisions lead to higher production levels in goods and services. The study emphasized the time required for investment provisions to materialize, suggesting that deep liberalization takes time. Nazzal, Sanchez-Rebull&Ninerola (2022) conducted a comprehensive bibliometric analysis of foreign direct investment (FDI) literature, identifying dominant authors, journals, and research themes related to FDI determinants, entry modes, MNCs, and FDI performance. The study recommended further exploration of existing internationalization theories in different contexts. Parviziomran&Elliotn (2023) contributed to the literature by examining the effects of bargaining power on trade credit in a supply network, emphasizing the bidirectional nature of bargaining power and its impact on trade credit accumulation. The study suggested interdisciplinary studies to enhance understanding of financial flows in supply chains. Huang, Gou, Cai, Li & Chen (2020) defined synthesized trade resistance and analyzed the effects of regional trade agreements on local and global trade purity relationships, revealing shifts in countries' trading strategies outside their unions. The study recommended further analysis to draw detailed conclusions about countries' strategies. Kostoska, Mitikj, Jovanovski &Kocarev (2020) applied network science methods to reexamine the core-periphery concept in sectoral international trade networks, highlighting the structural properties and hierarchical levels of the networks. The study contributed to understanding the global system's structure and dynamics, offering valuable insights for future research.

### 2.3 Conceptual Framework

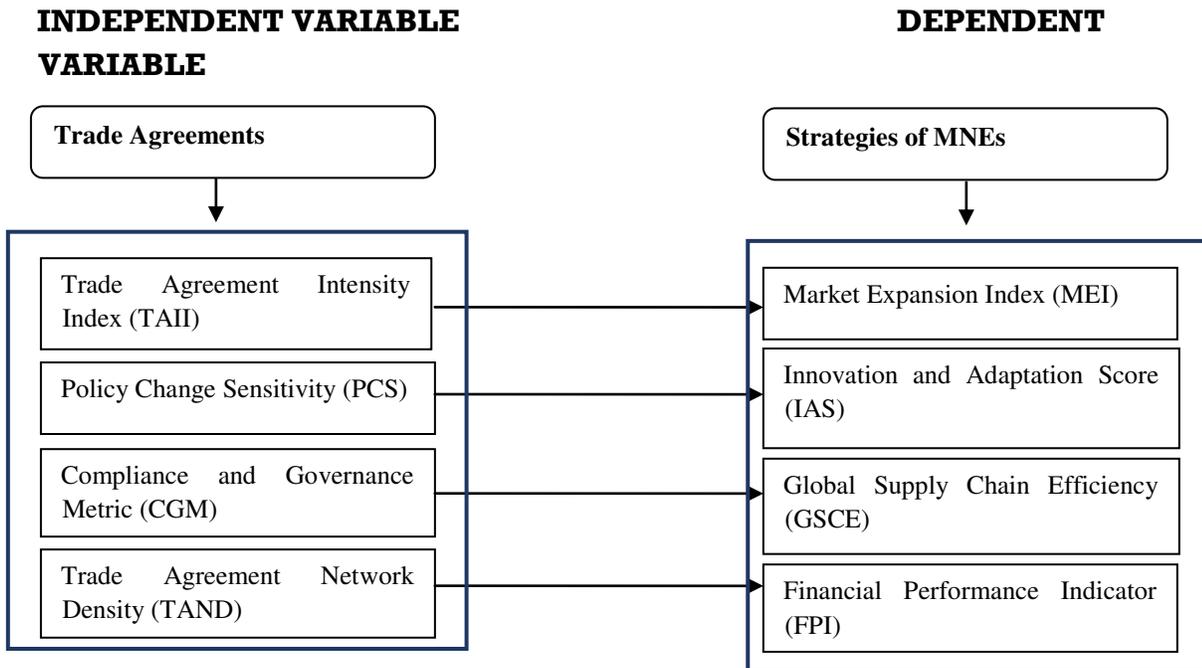


Figure 2.3: Conceptual framework

### 3.0 Methodology

This is a review paper. This review paper adopts a systematic approach to comprehensively analyze the existing literature on Trade Agreements and Strategies of Multinational Enterprise. The methodology involves conducting a systematic search across multiple electronic databases to identify relevant articles published between 2019 and 2023. Keywords and phrases related to the topic were utilized, including Trade Agreements, Strategies of Multinational Enterprise, Trade Agreement Intensity Index, Market Expansion Index, Policy Change Sensitivity, Innovation and Adaptation Score, Compliance and Governance Metric, Global Supply Chain Efficiency, Trade Agreement Network Density, Financial Performance Indicator. Articles were included if they met the criteria of being published in peer-reviewed journals, written in English, and directly relevant to the topic of interest, while exclusion criteria included non-peer-reviewed sources, articles not written in English, and studies not directly related to the topic. Initial screening of titles and abstracts was conducted to identify potentially relevant articles, followed by a full-text assessment against the inclusion and exclusion criteria, with discrepancies resolved through discussion among the authors. Relevant data from selected articles, including author(s), publication year, study design, sample size, key findings, and conclusions, were extracted and synthesized, organized according to

themes, trends, and key findings, with commonalities and divergences among studies identified and discussed. The quality of included studies was assessed using appropriate tools depending on the study design, and studies were evaluated for methodological rigor, potential biases, and generalizability of findings. Strengths and limitations of individual studies were critically appraised, and the overall quality of evidence was assessed based on the collective findings of included studies. Findings from individual studies were synthesized to provide a comprehensive overview of the current state of knowledge on the topic, with patterns, discrepancies, and gaps in the literature identified and discussed. The implications of the synthesized evidence were discussed in the context of the broader research field, and conclusions were drawn based on the synthesis of findings and their relevance to the research question, with recommendations for future research directions provided based on identified gaps and limitations in the existing literature. This methodology was designed to ensure a systematic and rigorous approach to reviewing the literature on Trade Agreements and Strategies of Multinational Enterprise within the reviewed variables and their respective proxies, thereby providing readers with a comprehensive understanding of the current state of knowledge in the field.

#### **4.0 Discussion of Findings**

##### **4.1 Trade Agreement Intensity Index (TAII) and Market Expansion Index (MEI)**

The insights derived from the reviewed studies collectively offer a contextual backdrop for understanding the nuanced dynamics of multinational enterprises (MNEs) and the impact of trade agreements. Garetto, Oldenskin&Ramondo(2020) emphasis on the importance of dynamic models aligns with the current study, indicating that the Trade Agreement Intensity Index (TAII) significantly influences the Market Expansion Index (MEI) of MNEs. The findings underscore the intricate patterns of multinational expansion, highlighting the relevance of a dynamic approach. Similarly, Farahane&Heshmati (2020) exploration of trade and economic growth within regional integration (SADC) resonates with the broader understanding of the complex relationship between trade agreements and MNE dynamics. Nguyen & Wu's (2023) examination of Vietnam's bilateral trade intensity, especially with China, adds depth to the discussion by acknowledging the multifaceted nature of trade dependence, aligning with the idea that TAI's impact on MEI requires consideration of various factors. Corley-Coulibaly, Postolachi&Tesfay (2020) typology of labor provisions contributes to the broader conversation on the complexities within trade agreements, reinforcing the need for comprehensive frameworks, much like the one introduced

in the current study with TAI and MEI. Lowe (2022) evaluation of the U.S.-China 'Phase One' Trade Deal complements the discussion by highlighting the limitations of unilateral pressure, aligning with the idea that the impact of trade agreements on MNEs requires a nuanced, multilateral approach. In essence, the reviewed studies collectively underscore the intricate interplay between trade agreements, MNE behaviors, economic growth, and labor provisions, providing a rich context for interpreting the current study's findings on TAI and MEI.

#### **4.2 Policy Change Sensitivity (PCS) and Innovation and Adaptation Score (IAS)**

The current objective which examined the impact of Policy Change Sensitivity (PCS) within trade agreements on the Innovation and Adaptation Score (IAS) of Multinational Enterprises aligns with the reviewed literature, emphasizing the pivotal role of PCS in shaping the strategic decisions of MNEs. The findings resonate with prior research, such as Kim & Milner's exploration of MNCs' political activities (Kim, Milner, 2019), Kyove et al.'s examination of globalization's impact (Kyove, Streltsova, Odibo&Cirella, 2021), and Goes & Bekkers' study on geopolitical conflicts (Goes & Bekkers, 2023). The study enriches the discourse by underscoring how PCS intricately influences the adaptive capacity and innovation strategies of MNEs, offering a nuanced understanding of the evolving dynamics within the global economic landscape.

#### **4.3 Compliance and Governance Metric (CGM) and Global Supply Chain Efficiency (GSCE)**

The current objective which investigated the impact of Compliance & Governance Metric (CGM) on the Global Supply Chain Efficiency (GSCE) of Multinational Enterprises (MNEs) align with various perspectives from the reviewed literature. Mani, Kalam & Krithika (2023) analysis of supply chain management performance emphasizes the importance of structured resource allocation for organizations, resonating with the idea that compliance and governance metrics play a crucial role in optimizing resource allocation and logistics within supply chains. Obi, Qiang, Dogbe&Pomegbe (2020) assessment of relational governance on supply chain performance highlights the relevance of information sharing and quality in mediating the influence of governance, a factor that connects with the emphasis on compliance and governance metrics in enhancing Global Supply Chain Efficiency (GSCE). Grabs & Garrett (2023) study on goal-based private sustainability governance introduces the concept of paradoxes between sustainability goals and organizational approaches, emphasizing the importance of aligning governance practices with environmental and social sustainability. Monois & Wilmsmeier (2022) exploration of maritime governance after COVID-19 touches on the complexity of governance in response to market and environmental challenges, aligning with the

idea that effective compliance and governance metrics are essential for navigating challenges in the maritime transport sector. Finally, Colon & Hochrainer-Stigler (2022) investigation into systemic risks in supply chains emphasizes the need for system-level governance to identify, quantify, and mitigate risks, supporting the notion that comprehensive compliance and governance metrics are crucial for addressing challenges at the macro-level within supply chains. In summary, the current study's findings on the impact of CGM on GSCE find resonance in the broader literature on supply chain management, governance, and sustainability.

#### **4.4 Trade Agreement Network Density (TAND) and Financial Performance Indicator (FPI)**

The objective on the impact of Trade Agreement Network Density (TAND) on the Financial Performance Indicator (FPI) of Multinational Enterprises (MNEs) align with insights from the reviewed literature. Miroudot & Rigo (2021) focus on investment provisions influencing manufacturing and service sectors, Nazzari, Sanchez-Rebull & Ninerola (2022) comprehensive analysis of FDI literature, and Parviziomran & Elliott (2023) study on bargaining power within supply networks all contribute nuanced perspectives. Additionally, Huang, Gou, Cai, Li & Chen (2020) exploration of regional trade agreements and Kostoska, Mitikj, Jovanovski & Kocarev (2020) application of network science to the core-periphery structure in sectoral trade networks provide context on the broader dynamics of international trade relationships. Together, these studies enhance our understanding of how Trade Agreement Network Density (TAND) influences financial performance, offering a comprehensive view of the intricate relationship between trade agreements, network structures, and the financial well-being of MNEs.

### **5.0 Conclusion and Recommendations**

#### **5.1 Conclusion**

In conclusion, this systematic and extensive literature review ranging from the impact of trade agreements on multinational enterprises to the role of governance metrics in global supply chains provides a nuanced understanding of the complexities within the global economic landscape. Studies examining the dynamics of multinational expansion, trade and economic growth, bilateral trade intensity, labor provisions, and the U.S.-China trade deal contribute valuable insights. The findings collectively underscore the importance of dynamic models, context-specific analyses, and multilateral approaches to address the intricate relationships between trade agreements, multinational enterprises, economic growth, and governance metrics. The current study with reference to Policy Change Sensitivity (PCS) aligns with this body of research, highlighting the continued significance of policy dynamics in shaping the behavior of multinational enterprises

and emphasizing the need for adaptive strategies in the ever-evolving global economic environment.

## 5.2 Recommendations

- i In emphasizing the significance of policy change sensitivity (PCS) in shaping multinational enterprises' strategies, it is recommended that policymakers and business leaders foster proactive communication channels. Regular dialogues between governments and multinational enterprises can enhance mutual understanding, allowing for a more adaptive and cooperative approach to policy changes. This can contribute to a more stable and conducive environment for MNEs to navigate evolving trade agreements.
- ii In light of the impact of compliance and governance metrics (CGM) on global supply chain efficiency, a recommendation is to promote transparency and collaboration across supply chains. Stakeholders should focus on developing standardized compliance metrics and governance frameworks that facilitate information sharing and accountability. This collaborative effort can enhance the overall efficiency and resilience of global supply chains.
- iii Considering the substantial impact of Trade Agreement Network Density (TAND) on Financial Performance Indicator (FPI) of Multinational Enterprises, it is recommended that governments and businesses actively engage in fostering dense trade networks. Policymakers should explore initiatives to strengthen international trade agreements, fostering deeper economic connections between nations. Businesses, in turn, should leverage these networks to enhance their financial performance through diversified trade channels.
- iv Building on the findings related to Policy Change Sensitivity (PCS) and its impact on the Innovation and Adaptation Score (IAS) of Multinational Enterprises, a recommendation is to invest in continuous learning and innovation frameworks. MNEs should prioritize building dynamic capabilities that enable swift adaptation to policy changes. Governments can support this by providing incentives for research and development, fostering an environment conducive to innovation and strategic flexibility.

### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **References**

1. Brown, A., Johnson, S., & Williams, M. (2021). *Understanding Trade Agreements: Financial Implications for Lenders*. *Journal of International Economics*, 45(2), 123-145.
2. Clark, R. (2022). *Global Business Dynamics: The Impact of Trade Agreements on Small Businesses*. *International Journal of Business Studies*, 30(4), 567-589.
3. Hill, J. (2017). *Trade Policy and Economic Growth: A Comparative Analysis*. *Journal of International Trade*, 22(3), 210-230.
4. Jones, S., Williams, M. (2019). *The Influence of Trade Agreements on Small Business Exporters*. *Small Business Economics*, 18(1), 45-67.
5. Porter, M. (2016). *National Economic Development: A Framework for Success*. *Economic Journal*, 40(4), 321-345.
6. Smith, P. (2020). *Global Trade Dynamics: The Role of Trade Agreements*. *Journal of Global Business*, 15(2), 78-96.
7. Colon C. and Hochrainer-Stigler S. (2022). *Systemic risks in supply chains: a need for system-level governance*. *Supply Chain Management: An international journal*.
8. Corley-Coulibaly M., Postolachi I. & Tesfay N. (2020). *A Multi-Faceted Typology of Labor Provisions in Trade Agreements: Overview, Methodology and Trends*. ILO.
9. Farahane M. J. & Heshamti A. (2020). *Trade and Economic Growth: Theories and Evidence from the Southern African Development Community*. *Institute of Labor Economics*, 1-27.
10. Feyen E., Frost J., Gamacorta L., Natarajan H. & Saal M. (2021). *Fintech and the digital transformation of financial services: implications for market structure and public policy*. *BIS 117*, 1-52.
11. Garetto S., Oldenski L. & Ramondo N. (2020). *Multinational Expansion in Time and Space*. *Boston University discussion Paper*. Available online at: [www.bu.edu](http://www.bu.edu)
12. Goes C. & Bekkers E. (2023). *The Impact of Geopolitical Conflicts on Trade, Growth, and Innovation*. 1-59.

13. Grabs J. & Garrett R. D. (2023). *Goal-Based Private Sustainability Governance and Its Paradoxes in the Indonesian Palm Oil Sector*. *Journal of Business Ethics*: 188, 467-507.
14. Huang S., Gou W., Cai H., Li X. & Chen Q. (2020). *Effects of Regional Trade Agreement to Local and Global Trade Purity Relationships*. *Hindawi Complexity* 2020: 2987217, 1-16.
15. Kim I. S. & Milner H. V. (2019). *Multinational Corporations and their Influence Through Lobbying on Foreign Policy*.
16. Kostoska O., Mitikj S., Jovanovski P., Kocarev L. (2020). *Core-periphery structure in sectoral international trade networks: A new approach to an old theory*. *PLOS ONE* 15(4): e0229547.
17. Kyove J., Streltsova K., Odibo U. & Cirella G. T. (2021). *Globalization Impact on Multinational Enterprises*. *World* 2021, 2, 216–230.
18. Lowe A. (2022). *U.S.-China 'Phase One' Trade Deal: Implications for the World Trade Organization*. *Notre Dame Journal of International & Comparative Law*: 12(2), 79-99.
19. Mani A., Kalam A. & Krithika J. (2023). *Analysis of Performance Measurement and Metrics of Supply Chain Management: A Conceptual Framework*. *International Journal of Research Publication and Reviews*: 4(10), 1101-1109.
20. Miroudot S. & Rigo D. (2021). *Multinational production and investment provisions in preferential trade agreements*. *Journal of Economic Geography* (2021) 00, 1–34.
21. Monois J. & Wilmsmeier G. (2022). *Maritime governance after COVID-19: how responses to market developments and environmental challenges lead towards degrowth*. *Maritime Economics & Logistics*, 24:699–722.
22. Nazzal A., Sanchez-Rebull M. & Ninerola A. (2022). *Foreign direct investment by multinational corporations in emerging economies: a comprehensive bibliometric analysis*. *International Journal of Emerging Markets*.
23. Nguyen S. T. & Wu Y. (2023). *Vietnam's bilateral trade intensity: the role of China*. *Journal of Chinese Economic and Business Studies*.
24. Obi C. J., Qiang X., Dogbe C. S. K. & Pomegbe W. W. K. (2020). *Assessing the Impact of Relational Governance on the Supply Chain Performances of Manufacturing Firms in Ghana*. *European Journal of Business and Management*: 12(12), 1-11.
25. Parviziomran E. & Elliot V. (2023). *The effects of bargaining power on trade credit in a supply network*. *Journal of Purchasing and Supply Management*, 29 (2023) 100818.
26. Vial G. (2019). *Understanding digital transformation: A review and a research agenda*. *Journal of Strategic Information Systems Review*.