Review Article

Israel- Palestine Conflict: A Supply Chain Disruption Growing after Russia- Ukraine War and Covid-19 **Pandemic**

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Abstract - Even though the world is greatly interconnected through various routes of the supply chain, which is made easy by internet technologies such as 4G and 5G, the global supply chain has been significantly disrupted in the last five years due to various causes such as the Covid-19 pandemic, Russia- Ukraine war and now due to the Israel-Palestine conflict. These supply chain disruptions adversely affected the shipping and maritime industries and also the economies of various countries not involved in such conflicts. In this research, a critical review of literature has been carried out, and authors have reviewed and analyzed the supply chain disruptions that occurred globally due to the Israel- Palestine conflict and Houthis' invasion of the Red Sea; evaluated the impact of supply chain disruptions on various industries and their economies far away from conflict regions; also provided the strategies to minimize the risk associated with supply chain disruptions. The author has observed global supply chain crises and PDS disruption due to these geopolitical tensions. The authors have also framed policy suggestions for reducing supply chain disruptions due to geopolitical conflicts based on the data observed in various literature.

Keywords - Supply chain disruptions, Israel-Palestine conflict, Russia-Ukraine war, Covid-19 pandemic, Shipmen crisis.

1. Introduction

An interruption in the formal flow of products/goods, money, services, and/or information from supplier to end user via manufacturer is called a supply chain disruption. The possible consequences of disruptions are delays, shortages, higher costs and supply chain inefficiencies. There are several factors, such as production disruption, trade policies and government rules, transportation issues, political issues, and natural disasters, due to which the global supply chain has been disrupted significantly in the past, whereas most of the supply chain disruptions occur presently due to pandemics and geopolitical wars such as Covid-19 pandemic, Israel-Palestine war, and Russia-Ukraine war. There is also a humanitarian supply chain crisis in Israel and the Gaza Strip because of the armed conflict between Israel and Hamas. This supply chain crisis is also observed in Ukraine and allied countries for movements of products, services, cash, and information. The humanitarian supply chain deals with emergency and distribution of essential commodities such as food, water, medicines, medical services, transportation, and eviction services to war-affected populations and disaster areas. There is the destruction of roads, bridges, factories, houses, schools,

and offices in war-prone regions such as Russia-Ukraine, Israel-Palestine, Syria etc. Armed conflicts are also harmful to the lives of humans, animals, trees and agricultural crops in the long run, and such incidents cause non-recoverable damages to society. The wars also resulted in a high risk of emergence and spread of diseases, and people also fell to hunger, malnutrition, and dehydration. The war ramped up the cost of living due to the rising prices of essential products, energy uses, and emergency services. As the basic facilities have been affected in war-torn zones, humanitarian supply chain management is required so that the global supply chain disruption can be staved off as soon as possible. Yemen's Houthi groups are illegally and surprisingly attacking most of the container ships in the Red Sea, one of the busiest sea transportation routes, as revenge for Israel's attack on the Gaza Strip (Curran et al., 2024). The onslaught by Houthis on container ships using drones and missiles is the biggest supply chain crisis since the Covid-19 pandemic. This kind of supply chain disruption is growing continuously as several supply chain players have been affected globally in the past five years (Feingold, 2024). Therefore, it is essential to learn the complexities involved in wars and find alternative and advanced solutions to mitigate supply chain disruptions.

The conflict between Ukraine and Russia has escalated into a full-blown war, causing abrupt consequences for the global community. Sanctions imposed by the USA, the European Union, Australia, and other regions have targeted various sectors, including finance, real estate, imports, exports, and technology (Orhan, 2022; Dyson et al., 2023). The ban on energy-related product trade between the USA and Russia, particularly in oil and natural gas, has ripple effects on sectors such as transportation, leading to increased freight charges. The agricultural sector faces supply chain disruptions, impacting food production globally, with potentially serious ramifications, particularly in regions already strained by reduced food availability due to climate change. The war has also resulted in severe land degradation, including natural resource destruction and pollution, with farming fields abandoned and agricultural infrastructures destroyed (Mbah and Wasum, 2022). The authors have derived four objectives for the present research. The first objective of this research is to review various literatures critically and consecutively so that one can notice the issues concerned with supply chain planning and management during war situations. The second objective is to study the casualties that occurred in the global supply chain due to the Israel-Palestine conflict as the Houthi groups attacked several container ships in the Red Sea. The fourth objective is to study the financial implications of global supply chain disruption due to armed conflicts. In this research, the authors also explain advanced technologies that can be used to deal with supply chain disruptions.

2. Literature Review

To take on board the supply chain complications caused by wars, geopolitical tensions and pandemics, it is requisite to study up-to-date literature and bring a significant summary out of it for policymakers, industrialists, academics, and practitioners. Larson (2021) has observed and presented a view on the armed conflicts and calamities in several countries, internally and externally. Such events resulted in significant disruption and mismanagement in the humanitarian supply chain.

The authors also brought to light that disaster workers were being attacked increasingly, and security was absent for aid workers. Whenever there are armed conflicts between two or more countries, it becomes essential to deploy emergency supply chain forces to deal with humanitarian crises.

Chukwuka *et al.* (2023) addressed and analyzed certain risk parameters that play a crucial role in disrupting emergency supply chains. The authors have also provided preventive measures and suggestions to avoid supply chain disruptions during armed discord and natural calamities and presented a risk analysis model.

Mahajan and Tomar (2020) outlined the intricacies of supply chain disruptions within the context of food markets in India amid the pandemic. They provided valuable insights into the challenges faced by supply chains during unprecedented disruptions. They had comprehended and navigated the complexities introduced by the global pandemic, ultimately contributing to the ongoing discourse on supply chain resilience and adaptation.

Santhi *et al.* (2022) significantly contributed to the literature on Industry 4.0 technologies and their role in overcoming both traditional and contemporary challenges in the supply chain domain. The authors presented the broader context of ongoing efforts to harness technological advancements to create adaptive and resilient supply chains capable of withstanding the multifaceted disruptions posed by pandemics, wars, and natural calamities.

Shekarian *et al.* (2020) showed a nuanced examination of the joint effects of flexibility and agility on mitigating disruptions to fortify supply chains against an increasingly turbulent backdrop, providing valuable insights for academics, practitioners, and policymakers alike. The integration of digital technologies and the advent of Industry 4.0 have emerged as transformative forces for the perspectives of supply chains and the analytics of supply chain risks. Ivanov *et al.* (2019) illuminated the influence of digital technology and Industry 4.0 on supply chain ripple effects. They represented the solutions to harness the power of the digital revolution in fortifying supply chains against disruption-induced ripples.

O'Sullivan (2019) offered an insightful exploration into the dynamic world of supply chain management through a curated collection of real-world case studies. They presented a mosaic of industry scenarios, illustrating the complexities, challenges, and innovative solutions that characterize contemporary supply chain and logistics operations. Each case study serves as a narrative lens, providing readers with a deep dive into the strategic decision-making processes, risk management, and operational intricacies faced by organizations across diverse sectors. With a keen emphasis on practical applications, they not only unveiled the intricacies of supply chain dynamics but also served as a valuable resource for professionals seeking actionable insights to enhance their own supply chain practices.

Jagtap *et al.* (2022) studied the profound effect of the geopolitical tensions between Russia and Ukraine on the intricate web of global food supply chains. Through meticulous exploration, authors have disclosed the all-round repercussions on agricultural production, distribution, and trade, describing the vulnerabilities and disruptions introduced by the conflict. From agricultural productivity to international trade routes, authors dissect the intricate connections that make the food supply chain susceptible to political upheavals.

Ngoc et al. (2022) have diligently investigated the Russia and Ukraine wars and the intricate tapestry of global supply chains. They employ a comprehensive approach, delving into the potential influence on manufacturing, transportation, and logistical nodes within global supply networks. By exemplifying the interdependencies and dynamics included in supply chain systems inherently, the research furnishes a significant and deep understanding of geopolitical conflicts on international trade and industrial processes. The Russia-Ukraine war is a reminder of the fragility of global supply chains. The war has shown that even a small disruption in a key part of the supply chain can have significant repercussions on the global economy. Through a meticulous lens, the author sheds light on the multifaceted consequences of the conflict on various facets of supply chain management. From disruptions in raw material sourcing to challenges in transportation logistics, the research delves into the complexities faced by global supply networks (Sathe and Manaswi, 2022)

The paper written by Allam et al. (2022) underscores the inequitable landscape created by the higher cost of implementing green technology, particularly affecting regions unable to absorb its immediate costs. The impacts of COVID-19 and the R-U war were marked as the major constraints for the global supply chain of several items flowing through different regions. These challenges resulted in higher payments to labourers and steep prices of products. It has also been observed that these crises have made it hard to attain the objectives of a sustainable supply chain, green technology and climate change agenda. Ganguly et al. (2017) outlined and ranked several threats that could compromise organization's supply chain's agility and resilience. They anticipated that the study would make two contributions to the field of SCM and provide future research directions for managers and academicians. First, as part of its risk mitigation methods, an organization aiming to increase the agility of its supply chain might want to deal with the set of risks that have been discovered. Second, the relative criticality of SCM can be evaluated using the displayed results.

The author's rigorous analysis investigates the nuances of disrupted trade routes, fluctuations in commodity pricing, unavailability of supply chain professionals, communication gaps, etc. Orhan (2022) [13] methodically examines the direct and indirect effects of the conflict on global trade, elucidating the difficulties encountered by various stakeholders ranging from exporters and importers to logistics providers and legal entities. Moreover, the author presents clear observations on the potential long-term repercussions of trade partnerships and alliances in the wake of the conflict. Additionally, the article extrapolates on potential scenarios for global trade reconfiguration in response to the evolving Russia-Ukraine war, offering meaningful overviews of the strategic adjustments and the ramifications for international trade frameworks.

Mbah and Wasum (2022) have thoroughly examined the economic consequences of the Russian-Ukraine crisis on the United States, United Kingdom, Canada, and Europe. The authors rigorously scrutinized the complicated ramifications across these geographies, considering the interconnected economic ties and trade relationships. Authors have evaluated the strategies and policy measures adopted by the USA, UK, Canada, and Europe to reduce the economic fallout of the crisis, emphasizing the imperative for coordinated efforts and robust fiscal and monetary policies to restore stability and resilience and emphasize the necessity for proactive and collaborative measures to navigate the challenges and restore economic equilibrium.

Rose et al. (2023) contributed to the understanding of the macroeconomic repercussions resulting from grain commodity export disruptions attributed to the Russia-Ukraine War. The study employs the GTAP multi-regional CGE model to demonstrate significant cascading economic impacts globally across varying sectors and regions. The findings indicated that the Ukrainian economy would bear the most negative effects, with an estimated real GDP reduction of about \$859 million (approximately 0.65%) over a projected 1-year period as a result of export disruptions. Conversely, countries/regions such as China and the Rest of Asia would experience relatively significant reductions in GDP due to supply chain disruptions. Interestingly, the disruption of Russian grain exports has a relatively small impact on its GDP, primarily due to Russia's lower trade dependency.

Srai *et al.* (2023) employed interviews with six supply chain executives to investigate the key supply chain risks and disruptions caused by the Ukraine–Russia war, providing valuable discernment on the initial corporate responses to the conflict and the subsequent influences guiding reconfiguration responses. The findings highlighted the pivotal role of procurement and supply chain management in supply and downstream markets, signifying their ability to accelerate decoupling and mitigate the associated supply chain disruptions from humanitarian perspectives.

3. Methodology of Research

A quantitative research methodology is used in the current paper to study meanings, perspectives, and various factors associated with supply chain systems during conflict and crises. This method is employed to uncover challenges linked with the global supply chain as it is a subjective and interpretive approach. This method is used to identify supply chain disruption patterns, as well as to analyze content, narratives, and perspectives of the humanitarian supply chain at the time of crisis or war. Authors have collected rich, extensive and circumstantial information in the field of supply chain disruption due to conflicts and pandemics. The article will furnish subjective insights into supply chains and logistics systems that guide researchers and company managers in understanding complex supply chain problems and

challenges. Authors have extracted information from real-world challenges that occurred due to geopolitical conflicts in the field of global supply chains, logistics, and inventory management (Atkinson, 2006).

In the present research, the authors have evidently defined the research objectives to set a clear direction and intention for the research. The objectives are constructed to prepare a roadmap, narrow down their focus, set criteria for examination, and align the research with methodologies, techniques and outcomes. Once the objectives are stated, it becomes easier to evaluate that the study has achieved its goals (Bandaly *et al.*, 2012). Authors have significantly searched the literature using keywords such as supply chain disruption,

Israel-Palestine conflict, Russia-Ukraine conflict, geopolitical tensions and their influence on the global supply chain, supply chain risk management, risk mitigation strategies, etc. The literature has been shorted out depending on the inclusion criteria, such as matching keywords, data analysis, and methodologies. Authors have screened the literature by evaluating the relevance of the current search and the quality of published articles by studying abstracts, conclusions, results, and/or full texts. Thematic analysis is also carried out to determine similar patterns and themes in the supply chain disruption analysis, geopolitical conflicts, and risk mitigation. It is performed to develop a comprehensive understanding of supply chain disruption during geopolitical tensions (Grondys and Kot, 2023).

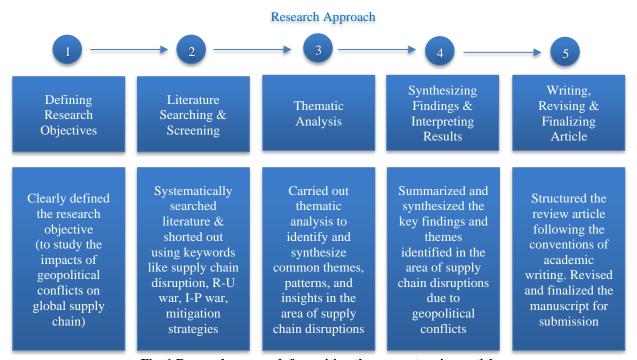


Fig. 1 Research approach for writing the current review article

The authors have summarized and synthesized the key findings, themes, and patterns determined in the area of supply chain disruption and risk management. Finally, the authors have structured the review article following the framework of academic writing, as illustrated in Figure 1. The author has effectuated the manuscript in proper referencing style and citation style and put it in formats as per the journal template. The revision and finalization of the manuscript were also carried out before submission to the journal.

4. Discussions

4.1. The Israel-Palestine Conflicts

The Hamas suddenly attacked Israel on 7th October 2023 when the Israeli people were celebrating a Supernova Sukkot gathering and music festival near the Western Negev desert. This attack was similar to 1973's Yom Kippur attack on Israel

as per the attack pattern observed by experts. It is the deadliest attack on Israel after the war of 1973 (Zanotti, 2010). Then the Israeli PM announced it as a state of war, and the Israeli army retaliated to find their kidnapped people and kill Hamas attackers. They have also bombarded several missiles on the Gaza Strip in a counter-attack, and large numbers of civilians were injured and killed. This is how the conflict started in October 2023 (Curran et al., 2024). As the Israel-Palestine conflict is a very complicated geopolitical tension and war, it is also known as the cursed war, and it has increased the geopolitical and supply chain tensions in the Middle East. This war is more important for the supply chain and logistics field, as the shipping industries are significantly affected by war when passing through the Red Sea and Suez Canal (Feingold, 2024). Yemen's Houthi groups illegally and surprisingly attacked most of the container ships in the Red Sea as revenge

for Israel's attack on the Gaza Strip. The onslaught by Houthis on container ships using drones and missiles is the biggest supply chain crisis after the Covid-19 pandemic.

This crisis augmented the susceptibilities in the global supply chain and amplified the tensions among most of the sea transporters and logistics companies across the globe. Large numbers of container ships have rerouted their travel through the Cape of Good Hope in Africa, which is a longer distance to reach North America and Europe from India rather than the Suez Canal route. The rerouted travel of container ships also costs more than the Suez Canal route, creating chaos among shipping industries (Lynch and Halper, 2024). The cost of container shipping from Asia to the Mediterranean Sea has increased by four times more than normal, according to an expert from a shipping company (Paché, 2024), as each shipment added an extra 6450 kilometres to transport materials. 'Longer the duration of these disruptions, the more likely shipping rates will stay elevated, if not increase further', said Nora Szentivanyi, Sr. Economist of J P Morgan group. In the initial two months of the crisis, the US and European countries continuously effectuated several counter-attacks on Houthis. Still, the problems in the Suez Canal and the Red Sea are unsolved. The shipping crisis has increased supply chain bottlenecks throughout the globe, as 12% of global containers were being transported through the Red Sea (Pradhan, 2024). However, this causes a scarcity of containers even though the container manufacturers are working hard and increasing their capacity to provide more containers to their customers. Individual shipping customers are facing more trouble exporting their products than big players in the shipping industry.

4.2. Causes of Supply Chain Upheaval in War Zones

There are several factors that contribute to supply chain disruption in war-affected countries. These factors can include physical damage to infrastructure, disruptions transportation networks, trade embargoes and sanctions, security risks such as theft and sabotage, political instability, and heightened geopolitical tensions. The consequences of the Israel-Palestine and Russia-Ukraine wars on global supply chains span various industries, including automotive, aerospace, semiconductors, electronics, oil, gas, and energy sectors (Allam et al., 2022), as shown in Figure 2. The automotive industry, for example, has experienced challenges in sourcing raw materials such as steel and aluminum due to disrupted supply chains and increased transportation costs. Besides, the aerospace sector has faced setbacks in producing and delivering aircraft parts, leading to delays and increased production costs. In the semiconductor and electronics industries, there have been disruptions in the manufacturing and supply of crucial components, impacting the production of electronic devices and appliances. The conflict has also affected the oil, gas, and energy sectors, leading to fluctuations in oil prices and potential disruptions in the supply of energy resources. The conflict has led to disruptions in trade between countries involved in the war, as well as with other countries in the region. This has affected the movement of food products, leading to potential shortages or higher prices for certain food items. The wars have discontinued supply chains, affecting the transportation and distribution of food items in the war zones. This has resulted in delays and problems getting consumers and businesses access essential foods. Authors have observed that the five major causes of global supply chain disruptions are the Israel-Hamas conflict, the Houthis attack in the Red Sea, congestion and bottlenecks in the Red Sea and black sea, labour shortages, and the Russia-Ukraine conflict, as shown in Figure 3. These pay-offs highlight the interconnected nature of global supply chains and emphasize the need for strategic mitigation strategies to address the challenges posed by conflict zones. The authors will look into specific mitigation strategies and best practices for navigating supply chain disruptions in conflict zones across these industries.

4.3. Analyzing Supply Chain Vulnerabilities in War-Affected Areas

Analyzing supply chain vulnerabilities in war zones is crucial for knowing the considerable risks and adverse effects on supply chain and logistics systems. The vulnerabilities can include physical damage to infrastructure, disruption of transportation routes, closure of borders, political instability, security risks, the displacement of manpower and the loss of critical resources and raw materials. In addition, regulatory changes, trade embargoes, and financial instability in war-torn areas may face challenges. There may be chances of loss of agricultural produce and the lack of manpower to access adequate food and resources, leading to shortages in the supply chain and humanitarian crises (Cozzolino et al., 2012). the public distribution systems will collapse in war zones, making it an even more challenging situation to obtain essential goods and services. The supply chain vulnerabilities can also extend to corruption, bribery, and fraudulent activities, as organized crime may take advantage of the crisis.

The supply chain of drinking water, basic medical facilities, essential medicines, sanitation facilities, and other critical infrastructure can also be severely impacted in warinfluenced areas (Duong et al., 2023). The method of analyzing supply chain vulnerabilities in war-torn areas can involve conducting comprehensive risk assessments, evaluating historical data on previous conflicts in the region. analyzing geopolitical dynamics and economic factors, assessing the capabilities of local infrastructure and logistics networks, and considering potential scenarios and their ramifications on the supply chain and logistics operations (Krykavskyy et al., 2023). Additional methods may include engaging with local stakeholders and experts in the region, engaging in open dialogue with government officials and industry professionals, and conducting on-site visits to firsthand assess the current state of infrastructure and logistics capabilities.

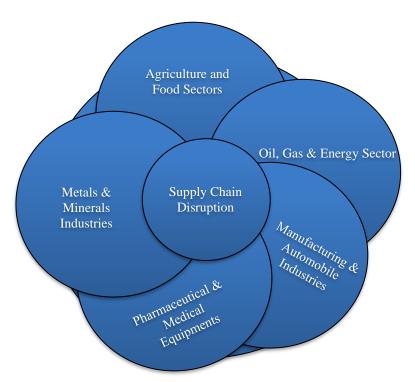
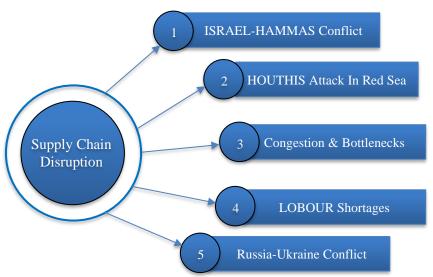


Fig. 2 Impact of supply chain disruptions on major sectors of international trade



 $Fig. \ 3 \ Causes \ of \ supply \ chain \ disruption \ as \ observed \ in \ the \ present \ environment \ of \ war.$

Several strategies can be employed to mitigate the supply chain disruptions in war-torn areas. The strategies such as establishing backup or alternative delivery routes, diversifying suppliers and sourcing regions, implementing robust risk management strategies, maintaining strong communication channels with stakeholders, utilizing technologies such as blockchain and artificial intelligence for enhanced visibility and transparency, establishing resilient inventory management systems, fostering collaboration and partnerships with humanitarian organizations and local groups and conducting continuous training and capacity building for

supply chain and logistics professionals to deal with emergencies (Alicke and Strigel, 2020).

It has become essential to utilize advanced technologies such as predictive modeling, data analytics, big data, deep learning, IoT, IIoT, and cloud computing to monitor supply chain operations in real time and identify potential disruptions before they occur or escalate; if the crisis occurs advanced the experts will make use of these technologies to quickly analyze the situations and make informed decisions to minimize the impact on supply chain operations and also plan contingency actions and strategies (Bhimani, 2019).

Regular supply chain audits and evaluations are needed to ensure that the strategies and contingency plans implemented are effective and adaptable in war situations. It is crucial to ensure humanitarian aid reaches the affected populations promptly and effectively despite the challenges posed by disrupted supply chains.

4.4. Economic Impacts of Supply Chain Disruptions

The fourth industrial revolution is transforming economies worldwide and developing novel business models, including those in the fields of supply chain and logistics. Technologies like artificial and machine learning are influencing every factor of the economy for everyday growth. Automation and robotics are leading to a huge economic plunge by increasing productivity, product quality, and efficiency of industries and markets. During such a transforming era, the Israel-Palestine war and the Russia-Ukraine war are the biggest economic crises for the countries having trade relations with these war-affected countries (Tivadar, 2021). The Israeli stock market (TASE) has been significantly affected by the Israel-Palestine war, as the TASE plays a major role in Israel's economy and is responsible for the country's market infrastructure and growth. On the other hand, the Palestine Stock Exchange (PSE) has been drastically affected because of the Israel-Palestine war. The prices of shares are below the moving average, adversely affecting the Palestinian economy and market infrastructure, which had already been a poor performer last financial year (Khan and Rehman, 2023). Some Jordanian banking companies have also been affected, as they own and operate 50% of banks in the Palestine region. Jordanian banks are providing deposits and credit facilities to the people of Palestine. From an economic viewpoint, it can be seen that Israel imports Palestinian goods on a large scale. Similarly, huge amounts of goods were imported by Palestine from Israel. However, the supply chain and transportation of these imports and exports are negatively influenced, which causes massive supply chain disruptions for all kinds of goods and services due to the Israel-Palestine war (Manners-Bell, 2023).

Many of the top shipping companies have stopped their shipping through the Suez Canal, one of the most significant trade routes worldwide, as there have been surprise attacks on vessels in the Red Sea in response to the Israel-Hamas conflict in Gaza. The attack has potential ramifications on the global economy as the transportation cost is increasing daily due to the rerouting of several shipments (Pradhan, 2024). If some of the ships plan to sail through the Suez Canal and Strait of Bab-Al-Mandab, the insurance prices are at an all-time high for each shipment. It is crucial for business companies to make business decisions to reroute their transportation because it is important for them to protect their crew members and containers. Approximately 18 million barrels of crude oil wasted through the Suez Canal in the last 26 months from October 2023 cost huge losses to refinery companies. All the experts in supply chain and logistics companies know that the

Suez Canal is significant and valuable for the global economy (Curran *et al.*, 2024). Finally, a ceasefire agreement between Israel and Hamas was achieved on 19th January 2025 after more than 2 years of geopolitical conflicts. Israel releases 90 Palestinian prisoners to Gaza at the same time, Hamas releases 6 Israeli people to Israeli forces.

4.5. Strategies to Mitigate Supply Chain Disruptions

To mitigate the disruption caused by wars and pandemics in global supply chains, companies must diversify their supplier base geographically. This allows companies to reduce their reliance on suppliers in conflict zones and minimize the risk of disruptions. Furthermore, companies can implement contingency plans and develop alternative supply routes to ensure the continuity of their supply chains in the event of conflict (Jahre, 2017). These strategies can include:

- 1. Establish dual sourcing strategies by identifying and qualifying alternative suppliers outside conflict zones to ensure a stable supply of critical components or resources.
- Implementing robust risk assessment and management systems to identify potential disruptions and develop contingency plans.
- Investing in advanced technology and automation to improve supply chain visibility and agility, allowing for real-time monitoring and rapid response to disruptions.
- Strengthening relationships and collaborations with key stakeholders such as suppliers, transportation providers, and government agencies to foster open communication and coordination during conflict.
- 5. Engaging in proactive monitoring and intelligence gathering to stay informed about potential conflict zones and their potential impact on supply chains.
- Retailers need to augment their inventories due to upcoming demands in areas where there is a lack of warehouses and advanced storage systems.

4.6. Recommendations for Building Resilient Supply Chains

Nowadays, it is mandatory that supply chains should be highly dynamic to confront vulnerabilities, crises, and sudden demand for products. The country's exports should have critical models and algorithms to prepare strategies and predict demands irrespective of geopolitical conflicts and natural disasters. However, one of the methods adopted by logistics companies is agile and resilient supply chain management. There are the following recommendations for building resilient supply chains during times of war:

- conducting thorough risk assessment to identify potential vulnerabilities in the supply chain related to conflict zones;
- implementing diversification strategies to minimize dependence on one or a few suppliers from specific regions or war zones;
- 3. establishing strong relationships and communication channels with suppliers, transportation providers, and

- other stakeholders to enhance coordination and flexibility during times of conflict;
- modern technologies such as blockchain, AI ML and IoT can be used to improve transparency, traceability, and real-time visibility in the supply chain, enabling companies to quickly identify disruptions and implement timely alternative solutions;
- developing contingency plans and backup alternatives to address potential disruptions in the supply chain, such as identifying alternative transportation routes and warehouses;
- 6. collaborating with industry peers and sharing best practices for supply chain resilience in war situations;
- 7. investing in local sourcing and production capabilities in areas not directly affected by the conflict can provide a buffer against supply chain disruptions.

5. Conclusion

The influences of geopolitical conflicts such as the Israel-Palestine and Russia-Ukraine supply chains have been studied in this research paper through a comprehensive review of research papers, magazines, newspapers, and other news platforms. Asian supply has been abruptly affected by this conflict. In this study, five major areas were chosen for analysis: agriculture and food sector, automobile sector, manufacturing sector, metals and minerals, oil, gas, and energy sectors, as these areas are most significant to the survival and operation of any country. In conclusion, managing global supply chains during war requires a proactive approach that focuses on risk management. Companies must prioritize risk management and invest in proactive strategies to mitigate disruptions caused by conflicts. This can include strengthening relationships with key stakeholders, enhancing

supply chain visibility, implementing contingency plans and redundancies, investing in advanced technology, conducting risk assessments, and maintaining open lines of communication with suppliers, transportation providers, and government agencies.

Additionally, actively fostering collaboration and cooperation among supply chain partners can contribute to minimizing the effects of war on global supply chains. These strategies may include having backup suppliers, establishing multiple transportation routes, and maintaining buffer stocks of critical materials. Furthermore, scenario planning exercises and risk assessments can help companies anticipate potential disruptions and develop appropriate mitigation strategies. Through this review, the authors have concluded the following points:

- 1. The Israel-Palestine and Russia-Ukraine wars have been observed to adversely impact the supply chains of various sectors of the Asian economy.
- 2. India has alternative countries and resources to supply raw materials, accessories, and machinery.
- India should develop alternative resources for such raw materials and finished goods in these sectors to avoid supply chain disruptions in the future due to such a war situation.
- 4. India should develop live tracking systems of such raw materials, goods, and machinery using data analytics, AI and ML, robotics, and technologies to impose preventive action before reaching the condition of supply chain disruptions and shortages.
- 5. It is also evident that India should develop more manpower in the field of supply chain management and logistics through rigorous training and comprehensive education to deal with such supply chain crises.

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