

# Impact of Geopolitical Risk on the Maritime Supply Chain: A Regional Analysis of the Effects on Global Trade

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**Abstract**— Geopolitical risks have a substantial impact on the disruption of maritime supply chains, leading to economic, logistical, and security challenges. This study scrutinizes the multifaceted relationship between geopolitical risks and disruptions in maritime supply chains, with a concentration on key influences and their consequences. The research syndicates case studies, data analysis, and current affairs, to provide a comprehensive examination of the matter. The findings highlight that geopolitical risks, such as political instability, conflicts, terrorism, and trade disputes, can disrupt maritime supply chains in numerous ways. These disruptions can be apparent as port closures, commotions like shipping routes, increased insurance expenses, and heightened security dealings. Such disruptions have extensive significance including amplified costs, abridged reliability, supply chain blockages, and a negative influence on international trade streams. The novelty of the study is that it takes a regional approach, inspecting how geopolitical risk influences the maritime supply chain in different geographical areas. This provides a more nuanced and universal understanding of the matter, beyond just a state perspective.

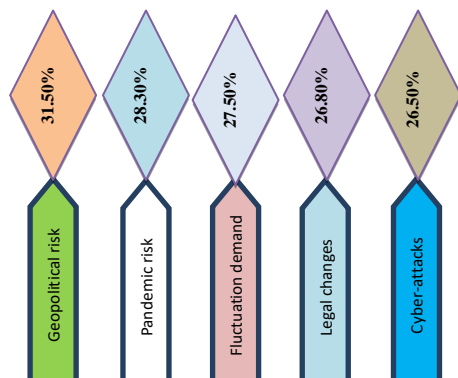
**Keywords**— *Geopolitical Risk; Maritime Supply Chain Disruptions; Regional Disputes*

## 1. Introduction

The worldwide maritime supply chain plays a vital role in smoothing international trade and economic progression. According to a recent study by the Economic Intelligence Unit [8], more than fifty percent of businesses want to make remarkable variations to their supply chains in the next few years. This is significant, but not shocking, as many businesses have resisted handling the disruption. However, this multi-layered network of combined systems is vulnerable to various risks, including geopolitical aspects that can disrupt its procedures. Geopolitical risks stemming from political inconsistency, battles, terrorism, and trade clashes have the power to significantly influence the effectiveness, resoluteness, and safekeeping of maritime supply chains. The survey of senior administrators of EIU is directed toward 2021; it specifies that main corporations are expecting supply chain disruption to persist, and they are seeing vagueness and threats.

The superlative apprehensions resolve around geopolitical risk, including political instability, regional conflicts, and instabilities in trade policies (Figure 1).

Figure 1. The top external risk features likely to influence maritime supply chain up to 2025.



Source: GEP EIU, The Economist [8]

The scale for the above table is between 0.0% and forty percent. Geopolitical risk is in a frightening position throughout the world. In recent years, the world has detected an expansion in geopolitical rigorousness and conflicts, resulting in disruptions in international trade streams and logistics. These disruptions have far-reaching drawbacks for industries and overall business subdivisions. The recent influence has developed quickly after the COVID-19 pandemic, the war in Ukraine, the South China Sea, and the situation in the Middle East. Nevertheless, the impact of the pandemic was ultimately fetched under effective control measures, but the other eruptions of geopolitics are too severe to understand and control the global maritime supply chain disruptions. These risks have become increasingly prominent in recent years, driven by aspects such as territorial disputes, trade conflicts, economic sections, political instability, and regional security threats. As a result, the smooth operations of the maritime supply chain can be disrupted, leading to substantial economic and logistical repercussions. Understanding the impact of these risks on the maritime supply chain at a regional level is critical for policymakers, businesses and stakeholders involved in international trade.

The research questions and the objectives of this research paper are important to mention briefly. The main questions are: (A) how do geopolitical risks and regional security in a precise region influence the maritime supply chain and global trade flow? (B) What are the measures that companies and the government can implement to mitigate the impact of geopolitical risks on the maritime supply chain? The key objectives of this research are (a) to conduct a comprehensive assessment of the specific geopolitical risks in different areas and their potential influence on the maritime supply chain and (b) to classify measures that corporations and governments can adopt to alleviate the impact of geopolitical risks on the maritime supply chain.

To mitigate the impact of these geopolitical risks, it is important to detect effective measures that can be implemented by companies and governments. This paper will explore these strategies and appraise their effectiveness in managing and vindicating geopolitical risks in the maritime supply chain.

### 1.1 War in Ukraine

Europe's logistics had not yet fully enhanced from the pandemic when it was hit by the war in Ukraine in 2022. Numerous countries-imposed sanctions on Russia, affecting its financial activities, trade, aircraft, and shipping domains. The sanctions on Russia by the West are not just upsetting the Russian Federation; they have affected the globe, especially the maritime sector, which transports goods through the Black Sea to developing nations. In Ukraine, there are apprehensions that the war may result in damages to inland transport infrastructure and harbors, as well as storage and processing infrastructure. Both Russia and Ukraine are net exporters of agricultural products, and they both play a significant role in delivering global markets in foodstuffs, for which exportable

supplies are frequently focused in a handful of countries. This situation aggravates overcrowding at terminals, putting maritime logistics and connectivity, as well as maritime shelter and security, at risk. Nevertheless, the disruptions and the higher ton-mile demand instigated by the war in Ukraine contribute stalwartly to higher freight costs (Figure 2).

Figure 2: The rising price of shipping



Source: Report of UNCTD [19]

According to the International Monetary Fund (IMF) March 2022, the war in Ukraine will heighten already extravagant shipping costs this year, and their intensification effects could keep going for a longer period of time.

## 1.2 South China Sea

The South China Sea has a massive geopolitical impact within the broader perspective of international politics. It is a central point for intercontinental sovereignties and their interests because of its strategic position at the intersection of international maritime routes connecting the Indian Ocean and the Pacific Ocean. The South China Sea is dynamic for the worldwide economy as it licenses the annual transfer of products worth trillions of dollars. These waters carry approximately one-third of all worldwide trade, including decisive energy supplies like oil and natural gas. If the neighboring countries try to disrupt this trade, then it would damage the global

supply chain and the health of the economies of other nations. A trade of more than \$5.3 trillion occurs in these waters. It makes up about one-third of all marine traffic [22]. Any kind of disruption to this trade network would be catastrophic for several industries, global supply networks, and consumer prices.

Figure 3: Key Contributors to China's Economy October 2021



Source: Insurance and commercial risk management [4]

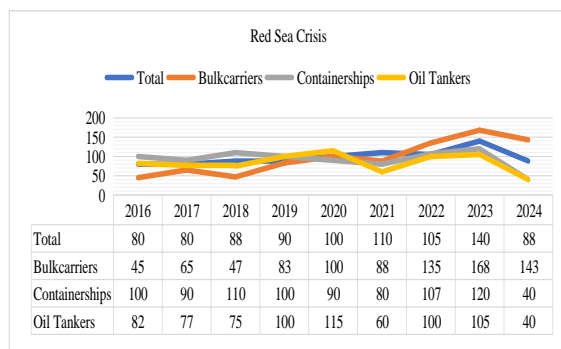
China's exports to the US are valued at some \$481 billion, with \$78 billion going to Germany, \$73 billion to the Netherlands, and \$57 billion to the UK. In Asia, China's exports comprise \$148 billion to Japan, \$110 billion to Korea, \$84 billion to Vietnam, \$50 billion to Singapore, and \$49 billion to Taiwan. Remember that almost sixty percent of all maritime trade and twenty-two percent of all international trade pass through the South China Sea. China is an active and territorial power in the region, with a strong military presence in the South China Sea.

## 1.3 Red Sea & the Middle-East

The Suez Canal, a vigorous passage in the Red Sea, became a principal point of global attention in March 2021 when a container vessel jammed the canal for a week, carrying daily trade valued at up to ten billion US dollars to a standstill [33]. The incident highlighted the susceptibilities of this

significant trade path and raised alarms about the potential influence on European corporations severely reliant on its well-organized operations. For decades, the companies have executed globalized and reorganized supply chain approaches, leveraging the route between Asia and Europe accessible by the Middle East to keep up with client demands and decrease expenses. Nevertheless, growing conflicts in the Middle East are casting a gumshoe of hesitation over global supply chains, and European companies are not immune to the crumpling effects of geopolitical tensions in the area.

Figure 4: Suez Canal Traffic Plummetts



Source: UNCTD [11]

As the chaos unfolds, businesses in Europe and the rest of the world are being advised to take a closer look at their supply chain policies, predominantly those connected to the Suez Canal passageway, to take precautions against possible disruptions. With roughly fifteen percent of the world's maritime trade flowing through this strategic channel, disruptions in the Red Sea have comprehensive drawbacks for the global economy, and the "No Shipping, No Shopping" slogan is already publicized.

## 2. Literature Review

In the geopolitical risk literature, the effects of geopolitical risk on the maritime supply chain have

usually been the foremost subject of research. The supply chain is a combination of organizations and happenings that a merchandise goes through before it arrives at the final customer. Supply chain management consists of coordinating and assimilating the supply chain. The perception of supply chain management can be categorized into three flows: the information flow, product flow, and financial flow. When these three flows are united, it forms supply chain management (34). Geopolitics have always impacted supply chain logistics, but over the last two years they have played an enormous role that will probably remain for the foreseeable future. The oceans are home to ninety four percent of all life on our planet, and they are a progressively important economic and national security resource. A stunning ninety percent of global goods trade is shipped via maritime routes, but many of the world's busiest maritime transit strips are at risk of geopolitical disruption.

The unending conflict between Russia and Ukraine has a noteworthy impact on the maritime supply chain, which has a direct effect on many countries depending on the Russian energy and food-related ingredients from the two countries. As restrained by the Food and Agriculture Organization's (FAO) Food Price Index (FPI) 2021, the war between Russia and Ukraine accounts for more than twenty five percent of the world's trade surge in wheat, more than sixty percent of international sunflower oil, and thirty percent of global barley exports. At the start of the war, around two thousand seafarers were stuck aboard, and ninety-four vessels were in Ukrainian ports [35]. According to the Atlantic Council in June 2022, Russian naval ships have hit at least ten commercial ships since Russia's attack. About eighty commercial ships have been choked in the Black Sea and the Sea of Azov for months [36]. Before the war, Ukrainian Black Sea harbors

accounted for up to ninety percent of the country's grain and oilseed exports, of which one-third were intended for Europe, China, and Africa [37]. During the meeting at the European Parliament's for Transport in May 2022, the Ukrainian Minister of Infrastructure, Oleksandr Kubrakov, said that seventy percent of total exports from Ukraine are usually passed by sea. In this regard, the United Nations has a few times attempted, with the help of Turkey, to resolve the issue of the Black Sea maritime trade route with Russia and to avoid international food crises and hunger, but failed. In response to the above issues, the European Union and the United States implemented further sanctions against Russia. The sanctions predominantly targeted the major Russian maritime companies Novorossiysk Commercial and the United Shipbuilding Corporation. The sanctions imposed on Russia by the EU and its member states have had a significant impact on trade and shipping volume in the north-range ports [29]. This action by the European Union increased the disruptions in supply chain and port operations, the obliteration of infrastructure, and trade restrictions all over the globe. China, considered one of the closest allies of the Russian Federation, is among the most affected nations by the geopolitical risk of the maritime supply chain. According to Gao Zhiguo, a former judge of the United Nations Tribunal for the Law of the Sea, China also anticipated that in necessary situations, precautionary measures such as offshore escorts could be taken to ensure the safety of seaborne cargo transportation. The relationship between trade and territorial conflicts between countries has been examined by many academics and by political and economic security experts, especially in terms of differences between realist and liberal perspectives. The maritime supply chain disruptions caused by the war in Ukraine were raised recently when Russia invaded Ukraine in

February 2022, but there has been a significant impact of the disruptions of the maritime supply chain affected by geopolitical risk in the South China Sea for decades, but the severity of this risk is increased by the current tensions due to territorial claims and contention.

There have been conflicts in the past as a result of China and Vietnam's contradictory claims to this island succession. Scarborough Shoal is the issue of conflicting claims between China and the Philippines. The geopolitical atmosphere of the area makes it challenging to come to a peaceable and friendly treaty. The challenges in the South China Sea are compounded by the considerable trade worth passing through these central maritime routes [30]. China progressively sees the maritime economy as an engine of economic development. In 2016, over sixty four percent of China's maritime trade and Japan's forty two percent took place through the South China Sea. Given its energy resources, some refer to the South China Sea as China's Persian Gulf. Conflicts that have recently broken out in the area are initiating deferments in shipments, higher conveyance costs, and ambiguity about the obtainability of products. This is also impacting production and inventory regulation [22]. Some small companies need help with these increased expenses, which affect their productivity. Transportation trades are having trouble in the area, including the Hudai Group and Sino Shipping. In a research study published by the United States Bureau of Economic Research, major trading economies in the region are projected to suffer GDP damage of over twelve percent if the intensified dispute blocks shipping in the vital waterways in the maritime region. Small economies that are completely dependent on trade for economic growth, like Taiwan, Hong Kong, and Singapore, are more likely to be threatened badly

by maritime disruptions [15]. According to the reports of the United Nations Conference on Trade and Development [11], around eighty percent of universal trade by volume and seventy percent by value of the global trade is carried out by sea. Out of this eighty percent of trade, sixty percent of maritime trade is transported through Asia, and more than one-third of this trade happens through the South China Sea. It is also estimated that among the top ten transport ports, most are only situated in this region, with almost fifty percent of the oil tankers passing through the region only [29]. More than a billion people live in the South China Sea and are mostly dependent on the maritime supply chain, but the dispute is impacting them economically in the form of disruptions [31]. According to the Executive Director of the Institute for China-America Studies (ICAS), Nong Hong, in 2023, the South China Sea practiced a period of relative firmness and manageability, but in 2024, it is set to persevere as a prominent focal point of contention between the geopolitical rivalry of the United States and China, as well as among the coastal states in the region. The South China Sea in 2024 is thus poised for continued volatility and multifaceted dynamics as geopolitical forces vie for influence in this strategically substantial maritime expense. The maritime supply chain disruption at the South China Sea is the long-standing geopolitical risk facing the sector and yet another most noteworthy maritime supply chain disruption that erupted in the Red Sea by the end of 2023.

The Suez Canal is one of the most important artificial waterways in the world. It was built in 1869 in Egypt, then a British colony. Being one hundred and ninety-three km long and three hundred sixty-five meters wide, it tolerates a well-organized maritime connection between the European and Asian continents [13]. A fundamental feature of this vagueness is the current

disruptions arising from attacks by Yemen's Iran-aligned Houthi fighters on vessels in the Red Sea in December 2023. The eruptions on the maritime vessels began after the war started between Israel and Hamas in Gaza. The Houthi rebellion is a supporter of Palestine and is trying to cut off the sea supply lane to Israel. The maritime trade between Asia and Europe contains a large portion of global trade. The Suez Canal Route (SCR) stands out as the main maritime route for trade between the continents. Currently, twelve percent of global cargo transportation and thirty percent of container trade pass through the SCR [10]. This route has not just significance for the European maritime supply chains but is vitally important for the rest of the world [14]. As the chaos unfolds, businesses in Europe are being directed to take a closer look at their supply chain policies, predominantly those associated with the Suez Canal passageway, to take precautions against possible disruptions. Shipping prices had already been on the rise recently, owing to increased fuel and insurance costs. The alteration has caused delays that have disrupted global supply chains, with certain companies choosing to halt production in their factories. There has been a seventy-seven percent increase in route deviations in Red Sea by all vessels from January 2024 to February 4, 2024, with a huge seven hundred percent increase in fastening for over five hours in the north Suez port waiting area on January 27 and 28. If the situation persists or worsens, it could further affect energy supplies and prices, all this hypothetically contributing to higher inflation [12]. According to the Suez Canal Authority (SCA), in 2019, fifty three percent of the total cargo transported through the canal was done by container ships. In that regard, maritime trade on the landmasses route increased by 31.1% from 2017 to 2022 [20]. This situation is projected to worsen due to an estimated

increase of seventy-three percent in the volume of international trade between continents by 2030 and thirty percent by 2050 [38]. In the last week of December 2023, average container spot freight rates increased by US\$500, the highest-ever weekly increase, according to the United Nations Conference on Trade and Development [11]. The rupture of one of the world's busiest shipping routes has also uncovered the vulnerability of China's export-reliant economy to supply snarls and international demand shudders. This maritime route is a crucial way for the exchange of Chinese goods with the European market. According to the businessmen from Fujian Province in China, disruptions to Red Sea merchandise are frightening the survival of their car exporting businesses to African countries. The price of shipping a container to Europe had surged to roughly seven thousand US dollars from three thousand in December 2023 [39]. Freight rates from Rotterdam to Shanghai increased by fifty percent, or \$323, to \$975 per 40-foot container [3]. In another report, according to windwards data February 2024, the cost to ship containers from East Asia to Northern Europe soared by two hundred and forty-three percent, reaching \$5456 between December 2023 and January 2024. Extra costs include higher pay for crew, more fuel, and the huge increase in "war risk" insurance that ships need to navigate the Red Sea region. This also has an impact on the cost of insurance for the vessels. According to the insurance broker, Marsh, rates have risen as much as seventy-fold since early December. The cost to insure a hundred-meter container ship has soared from \$10,000 to about \$700,000 [3]. In response to this situation, the US and the UK have launched airstrikes in areas of Yemen under Houthi control in February 2024. These strikes are intended to weaken Houthi capabilities used to continue their irresponsible and illegal attacks on US and UK

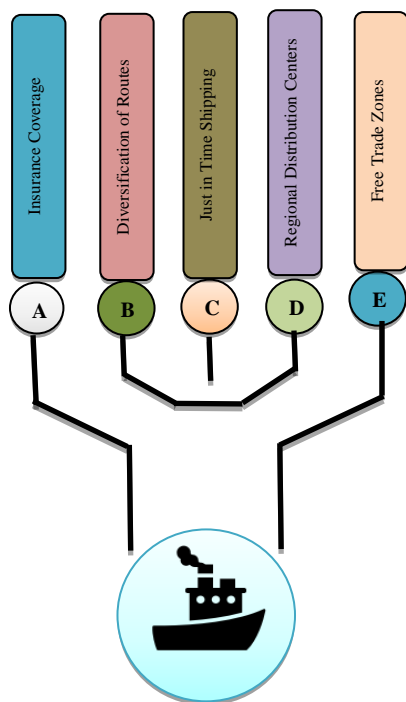
ships as well as international commercial shipping in the Red Sea, Bab al-Mandeb Strait, and the Gulf of Aden. The Houthis have also declared war against the US and UK. Iran and China have condemned these attacks by the United States and the UK, called these actions disheartening international peace and will have more effect on the maritime trade.

### 3. Methodology

This research paper provides a comprehensive and extensive overview of the practices of maritime supply chains (MSC) and ocean logistics and investigates them using primary and secondary data analysis. The primary data comprises comprehensive discussions with supply chain and geopolitical experts, and in addition, the secondary data is obtained from a wide range of reputable publications, including business and supply chain magazines, current affairs, and books. Geopolitical risks are some of the most problematic risks to manage and mitigate because of their highly distinctive and uncertain nature. Their time and harshness are unpredictable, and they often lack transparency because of insufficient data. Traditional risk management methods, such as antique analysis, may therefore fail to capture the intricacy and exponential nature of these risks. Instead, risk managers should implement a process-based approach. The first phase is to classify the impact channels through which geopolitical risks may affect the economy and specific industries. As we can see, geopolitical risks can brutally disrupt international shipping lanes, causing delays or terminations of shipments and significant financial losses. Therefore, maritime businesses need to implement effective strategies to proactively anticipate geopolitical risks.

Currently, there are five measures to mitigate or minimize the severity of maritime geopolitical risks in global shipping.

Figure 5. Approaches to mitigate maritime disruptions.



Source: Designed by author

#### A. Insurance Coverage

Marine cargo and logistics businesses insurance coverage is extremely impacted by worldwide inflation and the geopolitical risk of supply chain disruption. Insurance coverage is one of the most forthright and efficient risk management measures to mitigate potential geopolitical impacts on shipping. It qualifies businesses to transfer a momentous portion of a possible monetary loss to the insurer. According to the global head of intercontinental claims at Sompo International, Paul Burgess, speaking in London February 2022, the catastrophe has underscored the need for elasticity and agility in supply chain management among organizations and the need for innovation and resourceful thinking in the insurance industry.

For insurers, the potential surge in insurance claims could deteriorate their financial challenges in an unpredictable and inflationary world. According to the Willis Towers Watson (WTW) survey in December 2023, most shipping companies lack adequate supply chain risk data and the tools to manage their risks. If industries work together with the insurance sector to solve their specific data challenges, superior access to reliable supply chain data could create opportunities to build indices for new parametric insurance products. In the wake of a disjointed supply chain, companies should look to their business interruption insurance programs to normalize if they might have coverage for resultant financial losses. Business interruption insurance generally provides coverage for financial losses experienced by the insured that have appropriately forced it to terminate, suspend, or reduce normal operations. Moreover, enhanced communication and transparency between insurers and policyholders are critical to building trust and enhancing alliances.

#### B. Diversification of shipping routes

Global maritime supply chain disruptions can lead to a reassessment of trade routes, as seen in the notion of diversions, due to the ongoing geopolitical risks in the Red Sea, South China Sea, and Black Sea. The maritime businesses may seek alternative routes or diversify their supply chains to alleviate risks, potentially altering traditional trade designs and opening up new markets or logistics hubs. In circumstances where there is a high expectation of geopolitical uncertainties, diversifying shipping routes can act as an effective measure to mitigate possible shipping disruptions. In such a situation where vital sea routes are hampered due to geopolitical disputes, finding alternative sea routes might be advantageous to bypass the geopolitical hotspots.



The geopolitical risks are always handled with great impact when they are distributed, preferably across the varied network built with 3PL or 4PL partners [40]. Relying on a unimodal solution in 2024 is not the solution; building as many options as possible is the best way to diminish the freight supply chain disruption. Modification enables companies to adapt swiftly to changing conditions. When disruptions occur, they can influence alternative shipping routes to bypass affected areas and reroute shipments. This agility helps in minimizing disruptions and maintaining the continuity of supply. Throughout extreme times when ocean freight becomes infeasible, businesses can even consider alternative transportation methods such as air or rail freight.

#### *C. Just in time shipping*

Another way to address shipping risks is to implement the just-in-time (JIT) approach. JIT is a supply chain management strategy that orchestrates production with demand in an accurate manner, aiming to distribute products precisely when needed. This approach can be stretched to shipping by coordinating the arrival of cargo to match the definite needs of the consignee rather than carrying large shipments in advance. Acknowledgement of the possible challenges of JIT and proactively addressing them enables companies to adore the advantages of JIT while minimizing the connected risks. The maritime operation has the prospect of boosting a modified form of JIT. According to the Harvard Business Review, October 2022, the formation of buffers at the points where the segments meet is really important during JIT. It can improve the cost efficiency of using a single buffer to service two different JIT segments that face dissimilar geopolitical risks. In that case, if one artifact line is vulnerable to geopolitical risk, it will have a single buffer rather than two separates.

Overall, while JIT shipping can augment efficiency and cost savings, it is important to identify and manage the risks related to supply chain disruptions to safeguard the smooth functioning of the JIT process.

#### *D. Regional distribution centers*

Another way for businesses to proactively accomplish geopolitical turmoil is by amending their international shipping networks to comprise regional distribution centers (RDCs). These strategically located warehousing facilities are considered to receive, store, and allocate goods within a defined geographical region. Geopolitical risks can introduce reservations and disruptions to maritime supply chains and the processes of regional distribution centers. The RDCs are basically responsible for assessing geopolitical risks and their latent impact on the supply chain. By understanding the geopolitical landscape, these midpoints can develop possibility plans and risk mitigation strategies in collaboration with their stakeholders. The RDCs can also help to recognize alternative sourcing positions, transportation routes, and distribution networks. Their proactive approach and capability to assume geopolitical risks help alleviate disruptions and certify the resilience of the maritime supply chain.

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#### *E. Free trade zones*

The mitigation approaches we have discussed so far primarily address the risks of political variability that could lead to barriers or threaten shipping routes. Geopolitical risks can also impact free trade zones (FTZs) and their role in maritime supply chain disruptions. FTZs, also known as free trade zones, special economic zones, or free ports, are nominated areas within a country where goods can be imported, stored, processed, or re-exported with certain advantages, such as duty exemptions or reduced customs procedures. Companies operating in FTZs need to evaluate the geopolitical and security risks connected with the region and implement suitable risk management measures. By establishing operations within FTZs, businesses can expand their supply chain and decrease reliance on high-risk regions. If geopolitical risks disrupt one region, companies can spin their operations to FTZs in other locations, certifying continuity in the supply chain and diminishing the impact of disruptions.

## **4. Conclusion**

The impact of geopolitical risks on maritime supply chain disruptions is a multifaceted and serious matter that has noteworthy consequences for worldwide trade and economic stability. This study has explored the complicated relationship between geopolitical risks and disruptions in maritime

supply chains, shining light on crucial factors and their consequences. The findings highlight the geopolitical risks, including political variability, conflicts, terrorism, and trade disputes, which have extensive effects on maritime supply chains. These disruptions are obvious, such as port closures, disruptions in shipping methods, delays in cargo management, surged insurance costs, and sensitive security measures. The consequences are considerable, leading to increased costs, reduced reliability, supply chain blocks, and damaging impacts on worldwide trade movements.

Overall, these findings highlight the need for policymakers, industry practitioners, and researchers to be conscious of the vulnerabilities and intricacies associated with geopolitical dynamics. By developing effective strategies and fostering collaboration, stakeholders can mitigate the possible risks of promoting global economic stability. The geopolitical risks and conflicts are increasing day by day. This is the only type of risk that can be more easily addressed through dialogue. Any of the disputed regions, territories, or conflicts are easy to discuss through bilateral discussion. There is no military solution to any disputed region because once the military engages, it will head towards further conflicts. The novelty of the study is that it takes a regional approach, inspecting how geopolitical risk influences the maritime supply chain in different geographical areas and to provide a more nuanced and universal understanding of the matter, beyond just a state perspective is widely explained.

Finally, it is important to note that the impact of geopolitical risks on maritime supply chain disruptions is a dynamic and evolving issue. Ongoing research and attentiveness are mandatory to monitor geopolitical expansions, assess their consequences on maritime supply chains, and adapt

approaches accordingly. There are a few other reasons, including climate change and labor shortages, by which the maritime industry is badly affected and will have more consequences in the near future. Therefore, the geopolitical risk is the most important factor in the overall concept to solve the issue and have special trade policies and coordination between the nations. The conflict over the Red Sea is the vital, among other geopolitical issues. The closure of the Suez Canal has already had an effect on the cost of fuel because of the supply chain disruptions of fossil fuel exportation between continents. The United States and United Kingdom must deescalate the situation against the Houthi despite their attacks on their positions. The maritime department has the opportunity to diversify their trade routes, but it will take time to effectively implement the measures and strategies for a better trade solution. The war in Ukraine has had a significant impact on European maritime transportation to cross the Black Sea. The maritime business of Finland is among the most affected after the central conflict zone of Ukraine. Finland is 70% dependent on maritime transportation that crosses their goods through Baltic and Black Seas. The concept of trade diversion from the South China Sea is also possible to cross goods through Australia via the Indian Ocean, but the cost and time consumption and cost surge will surprise the world if it is implemented on regular basis.

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