

# A STUDY ON THE IMPACT OF GEOPOLITICAL TENSIONS ON GLOBAL LOGISTICS

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**Abstract:** The global logistics sector serves as the backbone of international trade, ensuring the seamless movement of goods, services, and information across borders. However, the rise in geopolitical tensions ranging from trade wars and diplomatic disputes to sanctions and maritime disruptions has significantly increased the vulnerability of global supply chains. These geopolitical challenges introduce complex operational and financial risks that demand rapid, strategic responses from logistics providers.

This study investigates the multifaceted impact of geopolitical instability on the logistics industry, with a particular emphasis on logistics, a prominent player in India's freight forwarding and logistics sector. By analyzing real-world disruptions such as trade route blockages, regulatory changes, and fluctuating freight costs, the research explores how companies navigate geopolitical uncertainty while maintaining operational efficiency and customer satisfaction.

**Keywords:** Global logistics, geopolitical tensions, supply chain disruption, trade wars, maritime chokepoints, sanctions, logistics resilience, operational strategy.

## I. INTRODUCTION

Global logistics sector plays a pivotal role in ensuring the smooth flow of goods, services, and information across borders. However, this critical infrastructure is increasingly exposed to the unpredictable forces of geopolitics. Trade wars, diplomatic conflicts, sanctions, and disruptions at strategic maritime routes have introduced unprecedented levels of uncertainty into global supply chains. As logistics providers strive to meet the demands of international commerce, they are compelled to adapt swiftly to the shifting geopolitical landscape.

This study focuses on understanding the multifaceted impact of geopolitical tensions on the logistics industry, with a particular emphasis on how key industry players respond to such challenges. By examining the case of Globelink WW India Pvt Ltd, a leading logistics and freight forwarding company, the project aims to shed light on the strategic adaptations and technological innovations that enable resilience in an era of geopolitical instability. Through this lens, the research provides insights into operational risk management, strategic decision-making, and the evolving role of logistics providers in sustaining global trade under pressure.

### Statement of the Problem

The global logistics industry is increasingly vulnerable to disruptions caused by escalating geopolitical tensions, including trade wars, sanctions, and maritime route uncertainties. These challenges threaten supply chain stability and impose operational and financial strains on logisti providers, highlighting the urgent need to understand how companies like Globelink WW India Pvt Ltd adapt and maintain resilience in such volatile environments.

### Objectives of the Study

- To analyse the impact of geopolitical tensions on global logistics operations.
- To identify the key challenges faced by logistics companies, particularly in India, during periods of heightened geopolitical risk (e.g., trade wars, port closures, military conflicts).
- To assess how regulatory changes, trade restrictions, and sanctions affect the movement of goods and customer satisfaction.
- To recommend proactive strategies for risk management, business continuity, and long- term investment in a geopolitically unstable environment.

**Need of the Study**

The impact of geopolitical tensions is no longer abstract—it manifests in delayed shipments, volatile pricing, and supply chain uncertainty. This study is necessary to:

- Understand disruptions across global trade routes
- Assess the financial effects of fuel price surges, currency fluctuations
- Improve customer satisfaction amid volatility
- Develop optimized route planning and risk mitigation frameworks

**Scope of the Study**

The study focuses on key logistics vulnerabilities caused by global crises and aims to provide actionable insights for Globelink WW India:

- Trade Route Disruptions: Analysis of chokepoints like the Suez Canal
- Cost & Supply Chain Impact: Freight rate fluctuations and inventory shortages
- Policy & Sanctions Analysis: Compliance with international trade regulations
- Business Continuity Plans: Evaluation of backup routes, tech-based solutions, and partnerships

**II. REVIEW OF LITERATURE**

The following literature review offers an in-depth examination of geopolitical crises and their impact on global logistics, with a special focus on trade route disruptions, supply chain volatility, and freight forwarding challenges. It also highlights key case studies and historical precedents relevant to Globelink WW India Pvt Ltd's operational context.

**1. Geopolitical Disruptions in Maritime Trade**

The Suez Canal and Red Sea Crisis

- David S. Painter's seminal work, *"The Suez Crisis"*, investigates the 1956 canal conflict, emphasizing how political intervention can paralyze a globally vital maritime artery. Complementary to this, the National Museum of American Diplomacy explores the prolonged closure of the Suez Canal (1956–1957), offering insights into the broader economic fallout from such blockades.

**2. Supply Chain Shocks and Logistics Vulnerability**

- Ever Given Incident and Global Trade

A widely referenced article by *The Times*, titled *"How Supply Chain Shocks Have Changed the Face of Global Trade"*, points to the Ever Given's blockage of the Suez Canal (2021) as a case study in how a single disruption can stall nearly 12% of global trade, emphasizing the need for diversified routing **strategies**.

**III. RESEARCH METHODOLOGY**

This study adopts a qualitative research approach, combining case study analysis and secondary data review. It focuses on understanding logistics sector responses to geopolitical disruptions. Data sources include industry reports, government regulations, trade publications, and academic literature. Thematic analysis is used to identify patterns in risk management and operational strategies. Findings are interpreted to provide practical recommendations for enhancing resilience in the logistics industry.

**RESEARCH DESIGN:**

This research project investigates how geopolitical tensions influence global logistics operations at Globelink WW Pvt Ltd, a leading logistics and freight forwarding company. Given the complex and dynamic nature of global supply chains, the research aims to understand the direct and indirect impacts of geopolitical tensions on logistics efficiency, cost structures, and operational strategies.

**RESEARCH APPROACH**

The research follows a mixed-methods approach, combining qualitative and quantitative research to comprehensively analyse the impact of geopolitical tensions on the logistics operations of Globelink WW Pvt Ltd.

1. Descriptive Research:

**Objective:** To examine the current operational strategies and supply chain management practices of Globelink WW Pvt Ltd.

**Focus Areas:** Study the company's global logistics network, including the regions affected by geopolitical tensions. Assess the company's responses to disruptions caused by geopolitical factors like trade wars and political instability, and explore the existing strategies implemented by Globelink WW Pvt Ltd to mitigate the impact of these tensions on operations.

#### **RESEARCH STRATEGY:**

##### **1. Primary data analysis:**

Semi-structured interviews and focus group discussions will be conducted with key stakeholders, including management, customer service, supply chain managers, and logistics partners. The goal is to gain qualitative insights into how geopolitical tensions are perceived and managed at the operational level.

##### **2. Secondary Data Analysis:**

Analysis of existing reports, news articles, and academic studies related to the impact of geopolitical tensions on global logistics. Review Globelink's internal reports, including financial performance data and operational adjustments due to geopolitical tensions.

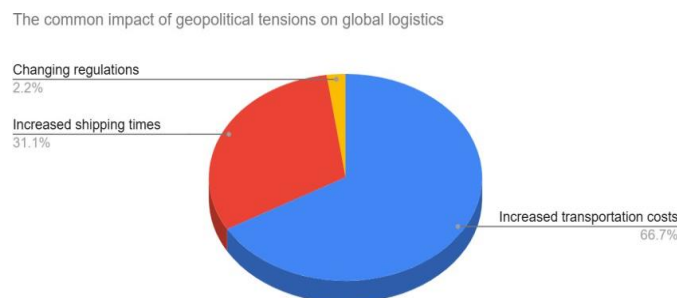
### **IV. DATA ANALYSIS AND INTERPRETATION**

**TABLE NO :4.1**

The common impact of geopolitical tensions on global logistics

Impact Category	Number of Respondents	Percentage
Increased transportation costs	67	67%
Increased shipping times	31	31%
Changing regulations	2	2%
<b>Total</b>	<b>45</b>	<b>100%</b>

**CHART NO:4.1**



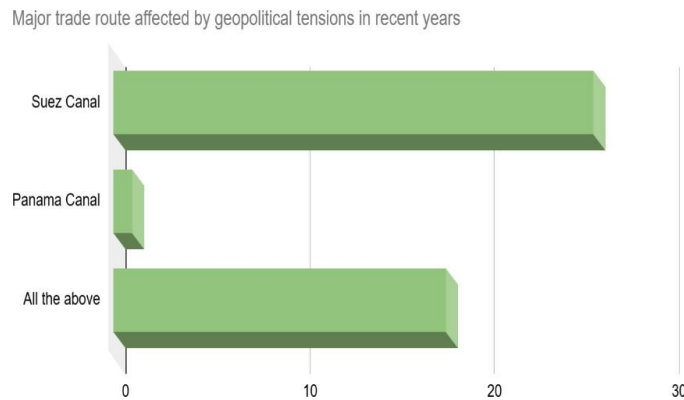
**INFERENCE:** It is inferred from the above table that 67% of the responses were related to increased transportation costs, indicating it as the most significant impact of geopolitical tensions on global logistics. 31% of the responses were concerned with increased shipping times, showing considerable delays in the movement of goods. 2% of the responses highlighted changing regulations as an issue, suggesting it is the least impactful among the three categories.

**TABLE NO:4.2**

Major trade routes affected by geopolitical tensions in recent years

Trade Route	Number of Respondents	Percentage
Suez Canal	25	50%
Panama Canal	2	4%
All the above	23	46%
<b>Total</b>	<b>45</b>	<b>100%</b>

CHART NO:4.2

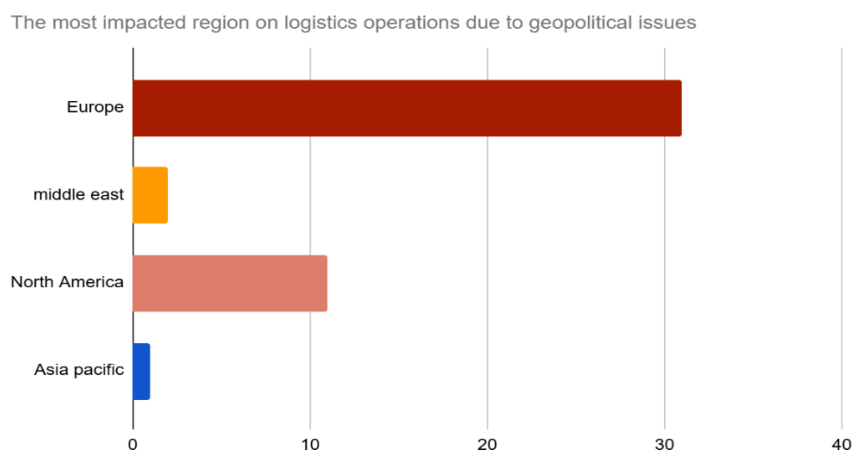


**INFERENCE:** It is inferred from the above table that 50% of the responses identified the Suez Canal as a significant trade route affected by geopolitical tensions in recent years, 4% of the responses pointed to the Panama Canal being affected, 46% of the responses indicated that all routes (i.e) arctic route, strait of gilbaltar, Suez and Panama Canals were impacted, suggesting a broader disruption across multiple critical global trade

TABLE NO:4.3  
The most impacted region on logistics operations due to geopolitical issues

Region	Estimated Number of Respondents	Percentage (%)
Europe	31	69
Middle East	2	4
North America	11	25
Asia Pacific	1	2
Total	45	100

CHART NO:4.3



**INFERENCE:** It is inferred from the above table that Europe is the region most impacted by logistics operations due to geopolitical issues, with approximately 69% of respondents selecting it. North America is the second most impacted, with about 25% of responses. The Middle East and Asia Pacific regions were indicated as less affected, with only 4% and 2% of respondents, respectively.

## **V. SUGGESTIONS**

- Diversify Supply Chains – Reduce reliance on single regions or suppliers.
- Invest in Technology – Adopt AI, blockchain, and real-time monitoring tools.
- Shift to Nearshoring – Bring operations closer to consumption markets.
- Enhance Risk Management – Establish proactive geopolitical risk frameworks.
- Build Government Alliances – Collaborate with trade bodies and regulators.
- Develop Backup Plans – Maintain alternate suppliers and inventory reserves.
- Train Workforce – Equip employees to handle disruptions effectively.
- Use Risk Ratings – Evaluate suppliers based on geopolitical stability.
- Leverage Public-Private Partnerships – Strengthen resilience collectively.

## **VI. CONCLUSION**

This study successfully analyzed the impact of geopolitical tensions on global logistics operations, highlighting how events such as trade wars, sanctions, and strategic maritime route disruptions significantly affect the stability and efficiency of supply chains. It identified key challenges faced by logistics providers in India, including freight rate volatility, regulatory compliance burdens, and operational uncertainty during crises. The research further assessed the influence of regulatory changes and sanctions on the movement of goods and customer satisfaction, revealing the critical need for adaptability and transparency in service delivery. By evaluating industry practices and responses, the study proposed proactive strategies such as investment in alternative trade routes, adoption of digital tracking systems, and development of comprehensive risk management frameworks. These insights contribute to strengthening business continuity and enhancing long-term resilience in a geopolitically volatile global logistics environment.

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