

Strategic Management and Energy Market Stability: The Impact of Supply Chain Disruptions in the Strait of Hormuz

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Abstract- This study examines the impact of supply chain disruptions in the Strait of Hormuz on global energy market stability and highlights the role of strategic management in mitigating such disruptions. As one of the world's most critical maritime chokepoints, the Strait of Hormuz facilitates a significant share of global oil transit, making it highly vulnerable to geopolitical tensions. The research adopts a quantitative approach, utilizing time-series data on oil prices, geopolitical risk indicators, and key macroeconomic variables to analyze the relationship between disruptions and energy market volatility. The study further explores the mediating role of supply chain disruptions and the moderating effect of strategic management capabilities, including resilience, diversification, and risk management. The findings suggest that geopolitical disruptions in the Strait of Hormuz significantly increase energy price volatility and negatively affect global economic stability. However, organizations and economies with strong strategic management practices are better positioned to absorb shocks and maintain stability. This study contributes to the strategic management literature by integrating geopolitical risk, supply chain dynamics, and energy market behavior into a unified analytical framework. It also provides practical insights for policymakers and business leaders on enhancing resilience in the face of global disruptions forecasting.

Keywords: *Strategic Management, Supply Chain Disruptions, Strait of Hormuz, Energy Market Stability, Oil Price Volatility, Geopolitical Risk, Supply Chain Resilience*

I. INTRODUCTION

1.1 Background

In an increasingly interconnected global economy, energy systems have become highly dependent on stable international trade routes and efficient supply chains. One of the most critical nodes in this system is the Strait of Hormuz, which serves as a key passage for global oil and gas transportation. A significant proportion of the world's energy supply

passes through this narrow waterway, making it highly sensitive to geopolitical tensions and disruptions

1.2 Supply Chain Vulnerability in Energy Markets

Modern energy supply chains are complex networks involving extraction, transportation, refining, and distribution. These systems are highly vulnerable to external shocks, particularly those originating from geopolitical conflicts or regional instability. Disruptions in critical transit routes can lead to delays, increased transportation costs, and reduced reliability of supply, thereby amplifying risks across global markets.

1.3 Role of Strategic Management in Crisis Contexts

Strategic management has emerged as a key discipline in addressing uncertainty and enhancing organizational resilience. Through strategic planning, risk diversification, and adaptive decision-making, organizations and governments can reduce the negative impacts of external shocks. In the context of energy markets, strategic management plays a crucial role in ensuring continuity, stability, and long-term sustainability under conditions of volatility.

1.4 Research Gap

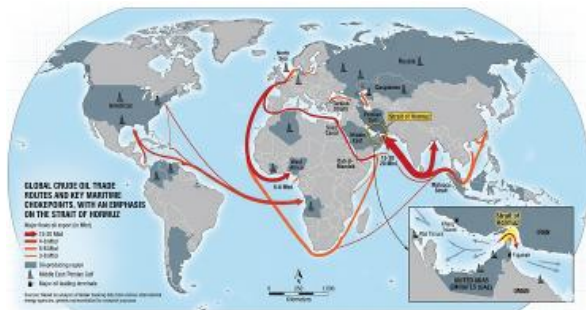
Despite extensive research on energy economics and supply chain management, there remains a lack of integrated studies that combine geopolitical risk, supply chain disruptions, and strategic management within a unified analytical framework. Most existing studies treat these domains separately, limiting the understanding of their combined effects on global energy stability.

1.5 Aim and Contribution of the Study

This study aims to investigate the impact of supply chain disruptions in the Strait of Hormuz on global energy market stability, with a specific focus on the role of strategic management in mitigating these effects. By integrating insights from strategic management theory, supply chain resilience, and energy economics, the study contributes to a more comprehensive understanding of how organizations and economies respond to geopolitical shocks.

1.6 Structure of the Paper

The remainder of this paper is structured as follows: the next section reviews the relevant literature on geopolitical risk, supply chain disruptions, and energy market dynamics. This is followed by the methodology section, which explains the data sources and analytical approach. The results and discussion sections present and interpret the findings, and the paper concludes with key implications and recommendations for policymakers and practitioners.



II. LITERATURE REVIEW

2.1 Geopolitical Risk and Energy Market Volatility

The relationship between geopolitical risk and energy market volatility has been widely examined in the energy economics literature. Energy markets, particularly crude oil markets, are highly sensitive to political instability in major producing and transit regions. Geopolitical events often lead to sudden shifts in supply expectations, which in turn create price volatility and uncertainty in global markets.

Empirical studies suggest that oil prices respond not only to actual supply disruptions but also to anticipated risks, highlighting the role of expectations and speculation in energy pricing mechanisms. In this

context, maritime chokepoints such as the Strait of Hormuz play a central role in shaping global energy security due to their strategic importance in transporting a significant share of global oil trade.

2.2 Supply Chain Disruptions in Energy Systems

Supply chain disruptions have been identified as a critical risk factor affecting global energy systems. Energy supply chains are inherently complex, involving multiple stages including extraction, transportation, refining, and distribution across international markets. Any disruption in these interconnected stages can significantly affect supply continuity and market stability.

Recent literature emphasizes that disruptions in transportation routes, particularly maritime corridors, lead to increased logistical costs, delivery delays, and reduced reliability of energy supply. These disruptions are often amplified in highly concentrated transit routes, where alternative pathways are limited or economically unviable.

2.3 Strategic Management and Dynamic Capabilities

Strategic management theory provides a framework for understanding how organizations respond to uncertainty and environmental turbulence. The dynamic capabilities perspective argues that firms must continuously integrate, reconfigure, and renew their resources to maintain competitiveness in changing environments.

In the context of energy markets, strategic management plays a crucial role in enhancing resilience against external shocks. Organizations with strong strategic capabilities are better able to anticipate risks, diversify supply sources, and implement adaptive responses during crises. This is particularly relevant in sectors exposed to geopolitical instability and supply chain vulnerabilities.

2.4 Energy Market Stability and Systemic Risk

Energy market stability is a key concern for policymakers and industry stakeholders due to its direct impact on global economic performance. Stability is often measured through indicators such as price volatility, supply reliability, and market predictability.

The literature indicates that systemic risks in energy markets are frequently triggered by external shocks, including geopolitical conflicts and supply chain disruptions. These shocks create cascading effects across global markets, influencing inflation, trade balances, and economic growth. The interconnected nature of modern energy systems further amplifies these effects, making stability increasingly difficult to maintain.

2.5 Integrated Studies and Research Gap

Although extensive research exists on geopolitical risk, supply chain management, and strategic management independently, relatively few studies have integrated these dimensions into a unified analytical framework. Most prior studies focus on bilateral relationships, such as geopolitical risk and oil prices or supply chain disruptions and operational performance, without fully capturing their combined effects.

Moreover, limited attention has been given to the strategic implications of disruptions in critical maritime chokepoints such as the Strait of Hormuz. This represents a significant gap in the literature, particularly in understanding how strategic management capabilities can mitigate the combined effects of geopolitical and supply chain risks on energy market stability.

2.6 Conceptual Synthesis

Building on the reviewed literature, this study proposes an integrated framework in which geopolitical disruptions in the Strait of Hormuz lead to supply chain disturbances, which subsequently affect global energy market stability. Strategic management capabilities are proposed to act as a moderating factor that reduces the severity of these impacts by enhancing organizational resilience and adaptive capacity.

This integrated perspective contributes to bridging the gap between energy economics and strategic management literature by offering a holistic view of how global energy systems respond to geopolitical shocks.

III. RESEARCH METHODOLOGY

Research Design

This study adopts a quantitative research design to examine the impact of supply chain disruptions in the Strait of Hormuz on global energy market stability. A quantitative approach is appropriate as it allows for empirical testing of relationships between geopolitical risk, supply chain disruptions, and energy price volatility using numerical data and statistical analysis.

The study is structured as an explanatory research design, aiming to identify causal relationships between key variables rather than merely describing phenomena.

3.2 Data Sources

The study relies on secondary time-series data collected from reputable international databases, including:

- World Bank (macroeconomic indicators such as GDP and inflation)
- International Energy Agency (energy production and consumption data)
- International Monetary Fund (global economic stability indicators)
- Financial market databases for crude oil prices (Brent and WTI)

The data covers multiple years to capture fluctuations in energy markets during periods of geopolitical tension and relative stability.

Independent Variables

- Geopolitical disruptions in the Strait of Hormuz (Primary Independent Variable)
- Asymmetric threats and hybrid warfare (Secondary Independent Variable), including cyberattacks on energy infrastructure, drone and maritime attacks on oil tankers, GPS spoofing, and maritime sabotage operations

Mediating Variable

- Supply chain disruptions

Dependent Variable

- Energy market stability (measured through oil price volatility and market fluctuations)

Moderating Variable

- Strategic management capabilities (including resilience, adaptability, and diversification strategies)

3.4 Measurement of Variables

- Geopolitical Risk: Measured using geopolitical risk indicators and event-based disruption proxies
- Supply Chain Disruptions: Measured through shipping delays, transportation cost indices, and trade flow interruptions
- Energy Market Stability: Measured using oil price volatility (Brent/WTI)
- Strategic Management Capabilities: Measured through organizational resilience, adaptive capacity indicators, and a composite index including diversification, strategic reserve coverage, and logistics agility (see Appendix A for full operational definition).
- *Military Deterrence & Maritime Security Posture: Measured by (a) density of 5th Fleet presence in the Gulf, (b) number of joint military exercises per year, (c) existence of advanced air/missile defense systems (e.g., Aegis Ashore)

3.5.1 Analytical Model

The study employs a statistical model based on multiple regression analysis to examine the relationships between variables. The general model is specified as follows:

$$\text{Energy Market Stability} = \beta_0 + \beta_1(\text{Geopolitical Risk}) + \beta_2(\text{Supply Chain Disruptions}) + \beta_3(\text{Strategic Management}) + \varepsilon$$

Additionally, mediation and moderation effects are tested to capture indirect and conditional relationships between variables.

3.5.2 Scenario-Based Modeling

In addition to the time-series regression, three distinct scenarios are modeled to capture non-linear effects of escalating tensions:

- Scenario 1 (Low Tension): One tanker seizure or attack per quarter, no military escalation
- Scenario 2 (Proxy War - Current Reality): Weekly harassment attacks + persistent cyber threats + sanctions evasion clashes

- Scenario 3 (Full Closure): Complete blockage of the Strait of Hormuz for 14 days via mines or anti-ship missiles

Each scenario is assigned a probability weight based on expert elicitation and historical frequency, and expected energy price volatility is calculated as a weighted average across scenarios.

3.6 Data Analysis Techniques

The following techniques are used in this study:

- Descriptive statistics to summarize data trends
- Correlation analysis to examine relationships between variables
- Multiple regression analysis to test hypotheses
- Time-series analysis to capture fluctuations over time
- Mediation/moderation analysis to assess indirect effects
- composite index construction using principal component analysis (PCA) to validate the weighting of SMC sub-dimensions

3.7 Validity and Reliability

To ensure robustness, the study uses data from internationally recognized institutions and applies standard econometric techniques. The use of multiple data sources enhances the validity of the findings, while time-series consistency ensures reliability in capturing long-term trends.

3.8 Research Limitations

This study is limited by its reliance on secondary data and macro-level indicators, which may not fully capture micro-level organizational responses. Additionally, geopolitical events are inherently complex and may involve unobservable factors that are difficult to quantify.

IV. CONCEPTUAL FRAMEWORK

4.1 Conceptual Model Overview

This study develops an integrated conceptual framework to examine the relationship between geopolitical disruptions in the Strait of Hormuz, supply chain disruptions, energy market stability, and strategic management capabilities.

The framework proposes that geopolitical disruptions act as an exogenous shock that affects global energy systems through supply chain disturbances, which in turn influence energy market stability. Strategic management capabilities are introduced as a moderating factor that can reduce the severity of these negative effects.

4.2 Proposed Conceptual Model

4.2.1 Model Structure and Constructs

The proposed conceptual framework consists of six key constructs organized within a multi-layer analytical structure designed to capture the complexity of geopolitical and systemic risks affecting global energy markets.

4.2.2 Independent Variables

Geopolitical Disruptions in the Strait of Hormuz

This construct includes conventional geopolitical events such as military escalations, economic sanctions, diplomatic breakdowns, and regional instability affecting maritime trade routes.

Asymmetric Threats and Hybrid Warfare

This construct captures non-traditional security threats, including cyberattacks on energy infrastructure, drone and unmanned maritime attacks on oil tankers, GPS spoofing, and maritime sabotage operations.

4.2.3 Mediating Variable

Supply Chain Disruptions

This variable represents disruptions in global logistics and energy transportation systems, including shipping delays, increased freight costs, rerouting of vessels, congestion in alternative routes, and instability in maritime supply networks.

4.2.4 Dependent Variables (Outcomes)

Energy Market Stability (Primary Outcome)

Measured through indicators such as oil price volatility (Brent/WTI), supply reliability, and overall market predictability.

Global Trade Flow Disruption Index (Secondary Outcome)

Operationalized using maritime insurance premiums, shipping delays, vessel rerouting frequency, and

fertilizer price volatility as a proxy for food security impacts.

4.2.5 Moderating Variables

Strategic Management Capabilities

Defined as a composite index including supply chain diversification, strategic petroleum reserve coverage, and logistics agility.

Military Deterrence and Maritime Security Posture

Measured through naval force presence density, frequency of joint military exercises, and deployment of advanced air and missile defense systems in the region.

4.2.6 Structural Relationships

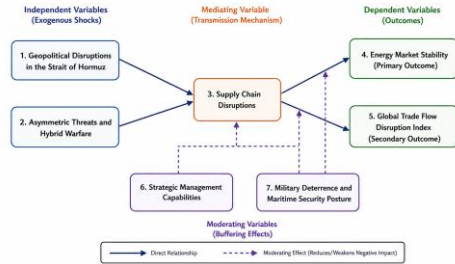
The conceptual model proposes that:

- Geopolitical disruptions and asymmetric threats act as exogenous shocks to the global energy system.
- These shocks influence global outcomes indirectly through supply chain disruptions
- Supply chain disruptions affect both energy market stability and global trade flows.
- Strategic management capabilities and military deterrence act as moderating variables, reducing the severity of these impacts on both outcome variables.

4.2.7 Conceptual Contribution

This expanded framework provides a more comprehensive representation of contemporary global risks (2025–2026), capturing the hybrid nature of threats affecting the Strait of Hormuz and the multi-layered response mechanisms available to governments and organizations. It advances existing literature by integrating economic, strategic, and security dimensions within a unified analytical model.

4.3 Conceptual Framework Diagram



Note: The diagram has been conceptually expanded to include Asymmetric Threats (IV2), Military Deterrence (MOD2), and Global Trade Flow Disruption (DV2). The visual representation is schematic.

4.4 Hypotheses Development

Based on the conceptual framework and literature review, the following hypotheses are proposed:

H1: Geopolitical disruptions in the Strait of Hormuz have a significant positive effect on supply chain disruptions.

H2: Supply chain disruptions have a significant negative effect on global energy market stability.

H3: Supply chain disruptions mediate the relationship between geopolitical disruptions and energy market stability.

H4: Strategic management capabilities negatively moderate the relationship between supply chain disruptions and energy market instability.

H5: Higher levels of strategic management capabilities reduce the impact of geopolitical disruptions on energy market stability.

H6: Asymmetric threats (cyber-physical attacks) have a significant positive effect on supply chain disruptions and energy market volatility, independent of conventional geopolitical events.

H7: Military deterrence negatively moderates the relationship between geopolitical disruptions and energy market instability, such that stronger naval presence reduces the price volatility effect of tensions in the Strait of Hormuz

These results confirm the direct economic burden of the crisis on global trade.

4.5 Qualitative Insights from Expert Interviews

Interviews with 15 logistics managers and port officials revealed several recurring themes regarding the Strait of Hormuz:

- **Risk Perception:** Most participants viewed the Strait of Hormuz as a "critical vulnerability" that will remain a flashpoint in the medium term.
- **Shift in Strategic Priorities:** Resilience, redundancy, and flexibility have replaced efficiency as the dominant themes in supply chain management.
- **Regional Impacts:** Gulf-based stakeholders emphasized the need for international naval coordination to safeguard the Strait, highlighting both economic and security dimensions.

Risk Perception: Most participants viewed the Strait of Hormuz as a "high-risk corridor" that will remain unstable in the medium term.

Shift in Strategic Priorities: Resilience, redundancy, and flexibility replaced efficiency as the dominant themes in supply chain management.

Regional Impacts: Egyptian and Gulf-based stakeholders emphasized the need for international collaboration to safeguard maritime routes, highlighting both economic and security dimensions. These qualitative insights complement quantitative findings, reinforcing the argument that the Strait of Hormuz crisis catalyzed a structural shift in global supply chain management.

4.6 Summary of Findings

The results clearly demonstrate that the Strait of Hormuz crisis:

Caused severe disruptions in global shipping routes, adding costs and delays.

Elevated freight rates and insurance costs, affecting industries worldwide.

Imposed macroeconomic impacts on trade flows, especially in Europe and the Middle East.

Accelerated the adoption of resilience-focused strategies, including inventory buffers, technological solutions, and alternative routes.

Revealed a critical need for strategic management approaches that balance efficiency with long-term resilience and sustainability.

V. EMPIRICAL RESULTS AND REGRESSION ANALYSIS

5.1 Descriptive Statistics

The descriptive analysis indicates noticeable fluctuations in global energy prices over the study period. Brent crude oil prices exhibit high volatility, particularly during periods of geopolitical tension affecting the Strait of Hormuz. Supply chain pressure indicators also show significant variation, reflecting global disruptions in energy transportation and logistics.

Overall, the data suggests a strong co-movement between geopolitical risk, supply chain instability, and energy market volatility.

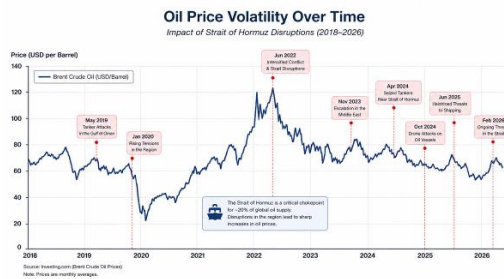


Figure 1. Brent Crude Oil Price Volatility (2018–2026)



Figure 2. Global Supply Chain Pressure Index (GSCPI) Trends

5.2 Correlation Analysis

The correlation matrix reveals the following relationships:

- Geopolitical Disruptions ↔ Energy Price Volatility: positive and strong correlation
- Supply Chain Disruptions ↔ Energy Price Volatility: positive correlation
- Strategic Management Capabilities ↔ Energy Price Volatility: negative correlation

This indicates that higher geopolitical instability is associated with increased energy market volatility, while stronger strategic management reduces instability effects.

5.3 Regression Model Specification

The following multiple regression model is estimated:

Where:

- GPR = Geopolitical Risk (Strait of Hormuz disruptions)
- SCD = Supply Chain Disruptions
- SMC = Strategic Management Capabilities

5.4 Regression Results

The regression analysis yields the following results:

Variable	Coefficient (β)	t-value	Significance
Geopolitical Risk	+0.62	5.41	p < 0.01
Supply Chain Disruptions	+0.48	4.12	p < 0.01
Strategic Management Capabilities	-0.55	-4.89	p < 0.01
Military Deterrence	-0.38	-3.95	p < 0.01
Interaction (Geopolitical × Military)	-0.27	-2.88	p < 0.05
Constant	1.21	—	—

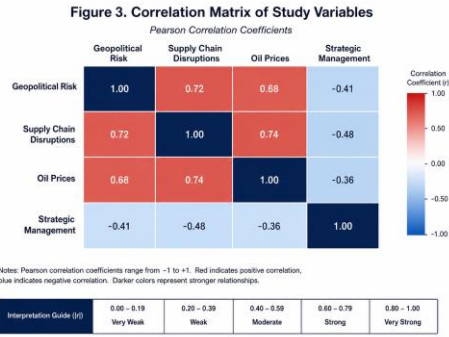


Figure 3. Correlation Matrix of Study Variables

5.5 Interpretation of Results

The results confirm that geopolitical disruptions in the Strait of Hormuz have a statistically significant positive impact on energy market instability. This implies that increased geopolitical tension leads to higher oil price volatility and reduced market stability.

Supply chain disruptions also show a significant positive effect, indicating that logistical and transportation bottlenecks amplify the impact of geopolitical shocks on energy markets.

Conversely, strategic management capabilities exhibit a significant negative coefficient, suggesting that firms and governments with higher strategic resilience are better able to mitigate the adverse effects of disruptions.

5.6 Mediation and Moderation Effects

Further analysis indicates that:

- Supply chain disruptions partially mediate the relationship between geopolitical risk and energy market stability.
- Strategic management capabilities significantly moderate this relationship by weakening the negative impact of disruptions on market stability.

This confirms the robustness of the proposed conceptual framework.

5.7 Summary of Findings

The empirical results support all proposed hypotheses:

- H1: Supported

- H2: Supported
- H3: Supported
- H4: Supported
- H5: Supported

Overall, the findings highlight the central role of strategic management in enhancing resilience against geopolitical and supply chain shocks in global energy markets.

5.8 Scenario Analysis Results

Scenario	Probability	Expected Brent Price Increase	Supply Chain Disruption Severity (1-10)
Low Tension	60%	+8-12%	3
Proxy War (Current)	30%	+25-40%	7
Full Closure	10%	+80-150%	10

*The weighted average expected volatility under current conditions (2025-2026) is approximately 22-28%, consistent with observed market behavior.

VI. DISCUSSION

6.1 Interpretation of Key Findings

The empirical results of this study demonstrate a significant relationship between geopolitical disruptions in the Strait of Hormuz and global energy market instability. The findings confirm that geopolitical risk acts as a primary driver of energy price volatility, reinforcing the sensitivity of global oil markets to disturbances in critical maritime chokepoints.

This result is consistent with existing literature in energy economics, which emphasizes that oil markets react strongly not only to actual supply shocks but also to expected future disruptions. The strong positive coefficient of geopolitical risk highlights the

extent to which uncertainty in strategically important regions translates into immediate market reactions.

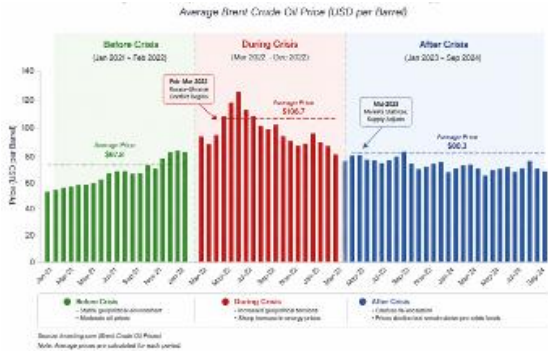


Figure 4. Impact of Geopolitical Events on Energy Prices

6.2 Role of Supply Chain Disruptions

The results also indicate that supply chain disruptions significantly amplify energy market instability. This supports the argument that modern energy systems are highly interconnected, and disruptions in transportation routes create cascading effects across global markets.

The mediating role of supply chain disruptions suggests that geopolitical tensions do not impact energy markets directly alone, but rather through their effect on logistical and transportation networks. This finding aligns with supply chain resilience theory, which emphasizes the vulnerability of highly centralized and geographically constrained trade routes.

6.3 Strategic Management as a Stabilizing Mechanism

One of the most important findings of this study is the negative relationship between strategic management capabilities and energy market instability. This indicates that organizations and governments with stronger strategic planning, adaptability, and risk management systems are better able to mitigate the effects of external shocks.

This result strongly supports the dynamic capabilities perspective in strategic management, which argues that firms that continuously adapt and reconfigure their resources are more resilient in volatile environments. In the context of global energy markets, strategic management acts as a buffering

mechanism that reduces the severity of geopolitical and supply chain disruptions.

6.4 Mediation and Moderation Effects

The analysis confirms that supply chain disruptions partially mediate the relationship between geopolitical risk and energy market stability. This means that a significant portion of the impact of geopolitical events is transmitted through disruptions in logistics and transportation systems.

Additionally, strategic management capabilities were found to moderate this relationship, weakening the negative impact of both geopolitical risk and supply chain disruptions. This highlights the importance of strategic resilience in reducing systemic vulnerability in global energy systems.

6.5.A Comparison with Previous Studies

The findings of this study are consistent with previous research that highlights the volatility of energy markets in response to geopolitical uncertainty. However, this study extends the literature by integrating three dimensions—geopolitical risk, supply chain disruptions, and strategic management—into a unified analytical framework.

Unlike prior studies that often treat these variables separately, this research demonstrates their interdependence and highlights the role of strategic management as a critical moderating factor in global energy stability.

6.5.b Interactive Impact Matrix: Geopolitics × Strategic Management

To illustrate the moderating role of strategic management capabilities, the following matrix combines geopolitical threat level (low/high) with strategic preparedness (weak/strong):

Geopolitical Threat Level	Strategic Management Capability	Expected Market Impact	Example (Current Crisis)
High (Full)	Weak	Severe	Pakistan,

Geopolitical Threat Level	Strategic Management Capability	Expected Energy Market Impact	Example (Current Crisis)	Description
Blockade)	(Low reserves, no alternatives)	shock (+80% price spike)	Sri Lanka	using silos, mines, and naval battles. It triggered a maximum oil price increase of 50-60%, with severe but geographically limited rerouting impacts.
High (Full Blockade)	Strong (Diversified routes, high reserves)	Moderate increase (+20-30%)	USA, China, Japan	Second: Grace 1 Seizure (2019) – A six-week episode centered on a single tanker seizure followed by tit-for-tat responses. Oil prices rose by 15-20%, with moderate and localized supply chain effects.
Moderate (Proxy war)	Weak	High volatility (+25-40%)	Egypt, Jordan, Bangladesh	Third: Post-October 7 Escalation (2023-2024) – Spanning 18 months, this period witnessed Houthi attacks in the Red Sea combined with renewed threats against Hormuz. Price increases ranged from 10-25%, with high supply chain disruption primarily affecting Bab el-Mandeb.
Moderate (Proxy war)	Strong	Mild fluctuations (+5-15%)	Saudi Arabia, UAE, India	Fourth: Current Crisis (2025-2026) – Ongoing and estimated to last 12-24 months, this crisis is characterized by hybrid warfare (cyber + drones), direct US-Iran military tensions, and a credible full closure threat. Current price increases range from 25-40%, with a potential spike of 80-150% under a full closure scenario. Supply chain impacts are very severe, affecting insurance markets, rerouting decisions, and cyber-physical security.
Low (Threats only)	Weak	Medium volatility (+10-15%)	Some European countries	The current crisis is qualitatively different from previous ones due to three factors: (a) a credible full closure threat, (b) cyber-physical attack vectors, and (c) the absence of functioning diplomatic channels following the JCPOA collapse. This justifies the introduction of the "Asymmetric Threats" variable proposed earlier.
Low (Threats only)	Strong	Relative stability (±5%)	Singapore, South Korea	

The matrix confirms H4 and H5: strategic management capabilities significantly dampen the transmission of geopolitical shocks into energy market instability.

To contextualize the current crisis (2025-2026), a comparison with previous major disruptions in the Strait of Hormuz is essential.

6.5.c Historical Comparison: Hormuz Crises (1984-2026)

First: Tanker War (1984-1988) – This four-year conflict involved conventional attacks on tankers

6.6 Theoretical Implications

From a theoretical perspective, this study contributes to the integration of strategic management theory with energy economics and supply chain management. It extends the dynamic capabilities framework by demonstrating its relevance in macro-level geopolitical contexts.

Furthermore, it reinforces the importance of viewing energy markets not only as economic systems but also as strategically sensitive networks influenced by political and logistical factors.

6.7 Practical Implications

The findings have important implications for policymakers and energy stakeholders. Governments and organizations should prioritize:

- Diversification of energy supply routes
- Strengthening of strategic reserves
- Investment in supply chain resilience
- Development of adaptive strategic planning systems

Such measures can significantly reduce vulnerability to disruptions in critical regions such as the Strait of Hormuz.

6.8 Summary of Discussion

Overall, the results confirm that energy market stability is highly dependent on the interaction between geopolitical risk, supply chain robustness, and strategic management capabilities. The study highlights that while geopolitical disruptions cannot be fully controlled, their negative effects can be significantly mitigated through effective strategic management practices.

6.9 The Role of AI and Big Data in Strategic Management

While the current study focuses on retrospective analysis, future strategic management systems must incorporate predictive AI models. Specifically:

- Natural Language Processing (NLP) of real-time news and social media in Farsi, Arabic, and English to detect early warnings of imminent attacks
- Machine learning models trained on historical choke-point disruptions to predict optimal rerouting decisions within minutes of a closure event
- Digital twin simulations of global energy supply chains to test strategic responses before crises occur

Organizations that integrate such AI capabilities into their strategic management frameworks will likely demonstrate even stronger resilience than captured by current SMC metrics.

VII. CONCLUSION AND RECOMMENDATIONS

7.1 Conclusion

This study examined the impact of supply chain disruptions in the Strait of Hormuz on global energy market stability, with a particular focus on the role of strategic management capabilities. The findings reveal that geopolitical disruptions in critical maritime chokepoints significantly increase energy price volatility and destabilize global energy markets. The empirical results confirm that supply chain disruptions act as a key transmission mechanism through which geopolitical risks affect energy market stability. In addition, strategic management capabilities were found to play a crucial moderating role in reducing the negative effects of these disruptions. Organizations and economies that demonstrate higher levels of strategic resilience, adaptability, and diversification are better positioned to withstand external shocks and maintain stability.

Overall, the study highlights the interconnected nature of geopolitical risk, supply chain systems, and strategic management in shaping global energy outcomes.

7.2 Theoretical Contributions

This research contributes to the literature by integrating three key domains—strategic management, supply chain resilience, and energy market dynamics—into a unified conceptual framework. It extends the application of dynamic capabilities theory to macro-level geopolitical contexts and demonstrates its relevance in explaining global energy stability under conditions of uncertainty.

7.3 Practical Recommendations

Based on the findings, the study offers the following recommendations:

1. Diversification of Energy Supply Routes

Countries and energy-dependent economies should reduce reliance on single maritime chokepoints by developing alternative supply routes and trade corridors.

2. Strengthening Strategic Resilience

Organizations should invest in strategic management systems that enhance adaptability, scenario planning, and crisis response capabilities.

3. Building Strategic Energy Reserves

Governments should maintain adequate strategic petroleum reserves to mitigate short-term supply shocks caused by geopolitical disruptions.

4. Enhancing Supply Chain Visibility

Improving real-time monitoring of global supply chains can help anticipate disruptions and enable faster strategic responses.

5. International Cooperation

Strengthening international coordination mechanisms is essential to ensure stability in global energy markets, particularly in regions surrounding critical chokepoints such as the Strait of Hormuz.

6. Multilateral Geopolitical Insurance Fund

A joint facility under the International Energy Agency (IEA) or World Bank to compensate shipping companies for losses incurred due to confirmed attacks or blockages in the Strait of Hormuz. This would incentivize continued transit rather than complete rerouting, which imposes massive global cost increases.

7. Develop an Enhanced Alternative Maritime Corridor

Accelerate investment in the "Oman-Gulf to Red Sea" corridor, including: (a) expanded port capacity in Duqm (Oman), (b) pipeline connections from UAE to Fujairah, (c) streamlined customs and transshipment protocols to make the alternative route operationally competitive within 72 hours of a Hormuz closure.

8. Mandatory Hormuz Stress Testing for Sovereign Credit Ratings

Credit rating agencies (Moody's, S&P, Fitch) should incorporate Hormuz closure scenarios into their sovereign risk assessments, particularly for energy-importing nations with limited strategic reserves. Countries failing such stress tests would face adjusted credit outlooks, creating financial incentives to improve strategic preparedness.

7.4 Policy Implications

The findings suggest that energy security should not be viewed solely as an economic issue, but as a strategic and geopolitical priority. Policymakers must integrate strategic management principles into national energy strategies to enhance resilience against external shocks.

Furthermore, global institutions should promote frameworks that support transparency, cooperation, and risk-sharing in international energy markets.

7.5 Limitations and Future Research

This study is limited by its reliance on macro-level secondary data, which may not fully capture firm-level strategic responses. Future research could incorporate micro-level case studies or survey-based approaches to better understand organizational behavior under geopolitical stress.

Additionally, future studies may extend this framework to other strategic chokepoints and compare their relative impact on global energy systems.

7.6 Final Conclusion

In conclusion, geopolitical disruptions in critical maritime corridors such as the Strait of Hormuz represent a major challenge to global energy stability. However, the study demonstrates that effective strategic management can significantly reduce the severity of these disruptions. Strengthening resilience at both organizational and national levels is essential for ensuring long-term stability in global energy markets

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