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Geopolitical Disruption and Supply Chain Resilience: The Impact of the Iran-US-Israel Conflict on Indonesia's Plastic Naphtha Crisis

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Abstract

Background: The escalation of armed conflict between Iran, the United States, and Israel since February 2026 has triggered massive disruptions in global supply chains, acutely manifesting in a naphtha crisis, the primary raw material for the plastic packaging industry. As a country that imports approximately 60–70% of its naphtha requirements from the Middle East, Indonesia faces extreme price volatility and supply uncertainty that threatens national manufacturing stability.

Objective: This study aims to analyze the impact of such geopolitical disruptions on the supply chain resilience of the plastic packaging industry in Indonesia, focusing on crisis transmission through the naphtha supply route.

Methods: The research methodology employed a qualitative case study approach through document analysis, in-depth interviews with industry stakeholders, and a comprehensive literature review.

Results: Key findings indicate that companies implementing dynamic capabilities, specifically in the aspects of sensing, seizing, and reconfiguring, have demonstrated stronger and more adaptive mitigation responses compared to companies relying on a single sourcing strategy. The discussion highlights that operational flexibility and supplier diversification are critical determinants in maintaining production continuity.

Conclusion: This study highlights the importance of developing an adaptive geopolitical supply chain resilience framework for manufacturing industries in developing countries that have a high dependency on imported energy commodities.

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INTRODUCTION

Culminating in the escalation of tensions in the Middle East in early 2026. The armed conflict involving Iran, the United States, and Israel has intensified geopolitical tensions (Wang et al., 2026) and transcended conventional geopolitical friction, manifesting as profound disruptions to global petrochemical raw material flows, particularly naphtha. As a vital derivative of crude oil, naphtha serves as the primary building block for ethylene and propylene production. Technically, Bao et al. (2026) explain that naphtha is dominated by C7–C10 n-, iso-, and cycloalkane compounds, as well as BTEX, whose specific composition is critical in determining processing efficiency in the plastic packaging industry. In this regard, the stability

of naphtha supply becomes a crucial factor determining the operational continuity of the plastic packaging industry, which is inherently highly dependent on hydrocarbon-based raw materials. This dependency places the industry in a highly vulnerable position with respect to global supply chain disruptions, especially when disruptions occur along strategic energy distribution routes.

This vulnerability is further compounded by the concentration of global logistics routes passing through active conflict zones, creating high dependency on specific geographic chokepoints that are simultaneously strategic and fragile. One concrete manifestation of this geographic risk is the potential blockage at the main chokepoint of the Strait of Hormuz, through which approximately 21% of global petroleum trade passes and which has become the epicenter of a supply crisis threatening industrial stability worldwide ([Rizkiyani et al., 2025](#)). When this route is disrupted whether through military conflict, shipping restrictions, or heightened security risks the impact is not only felt by major energy-producing and consuming nations but also rapidly cascades into downstream industrial sectors dependent on energy as a production input.

Furthermore, the Strait of Hormuz, as part of the global economic network, also carries complex security consequences, as it increases the level of interdependence among nations that were previously relatively autonomous ([Farrell & Newman, 2019](#); [Nguyen, 2026](#)). This interdependence creates conditions in which disruptions in one region can quickly spread to other regions through market mechanisms and supply chains. This means that globalization, previously regarded as a driver of economic efficiency, has now also become a risk transmission channel that accelerates the spread of crisis impacts. This phenomenon underscores the existence of a critical intersection between geopolitical volatility and industrial survival, where the operational stability of companies is no longer solely determined by internal factors but also by global political and security dynamics beyond their direct control.

The impact of these global shocks has begun to manifest clearly in domestic markets across various countries, including Indonesia, where pressure on the international naphtha supply chain has begun to disrupt local market equilibrium. Price increases, delivery delays, and supply uncertainty have become the primary challenges faced by industry players, particularly in the manufacturing sector, which is heavily dependent on energy-based raw materials. This situation creates layered pressures on production costs as well as on the stability of final product prices and industrial competitiveness. Thus, a crisis that was originally global in nature has transformed into a domestic problem requiring strategic responses from both companies and the government.

Previous research also reinforces this finding by demonstrating that the impact of geopolitical conflicts is not limited to a single country or region but has broad implications for the global economy. [Sharma et al. \(2026\)](#) observed that heightened tensions between Israel and Iran have a significant impact on India as an emerging player in the global market, particularly in terms of energy security. Disruptions to oil and gas shipments through the Strait of Hormuz have the potential to raise energy prices, trigger inflation, and undermine national economic stability. These findings suggest that countries with high dependence on energy imports face similar risks, confirming that the geopolitical crisis in the Middle East carries significant cross-border impacts on various economic sectors at both global and domestic levels.

In Indonesia, this geopolitical crisis has exposed significant structural vulnerabilities in the national plastic packaging sector. The crisis has heightened geopolitical uncertainty, as events arising from global or regional conflicts create instability in international relations and affect interstate economic stability ([Gao & Xu, 2024](#)). Despite being one of Southeast Asia's largest plastic producers, Indonesia remains heavily dependent on naphtha imports and polymer derivatives, with 60–70% of its supply sourced from Middle Eastern producers such as Saudi Arabia, Qatar, and Iran. Following the surge in conflict since February 2026, domestic polymer prices soared by 80–100% within just two months. This volatility was exacerbated by force majeure declarations from regional petrochemical giants, leaving national producers with critical raw material reserves barely sufficient for 2–3 months of production. While prior literature on supply chain resilience in Indonesia has extensively covered operational

disruptions such as natural disasters or pandemic-related logistics (Dunke & Nickel, 2026; Ivanov, 2020; Nyoman Pujawan & Geraldin, 2009), there is a scarcity of research specifically addressing geopolitical supply chain resilience. Most existing studies focus on recovery from internal shocks rather than the proactive reconfiguration required to withstand prolonged geopolitical conflicts affecting global commodity routes.

This research addresses this critical gap by integrating dynamic capabilities theory comprising sensing, seizing, and reconfiguring into the discourse of geopolitical risk management. The novelty of this study lies in its focus on the naphtha transmission channel, analyzing how specific geopolitical triggers in the Middle East translate into survival crises for Indonesian manufacturing industries. Unlike generic supply chain studies, this research argues that resilience in the geopolitical context of 2026 is not merely about robustness or the ability to “bounce back,” but about rapid reconfiguration of supply bases and material substitution driven by advanced geopolitical sensing. By moving beyond a singular focus on logistics, this study adopts a multidisciplinary perspective integrating international relations, industrial economics, and operations management to provide a comprehensive resilience framework.

The primary objective of this research is to analyze how the 2026 Iran-US-Israel conflict impacts the availability and cost structure of naphtha in Indonesia and to identify adaptation strategies employed by companies to maintain production continuity. This study seeks to understand the factors that differentiate resilient companies from those crippled by crisis, particularly through the lens of sensing geopolitical signals before they manifest as physical supply shortages. Accordingly, this research contributes a new conceptual framework for geopolitical supply chain resilience tailored for developing countries that are highly dependent on imported strategic commodities. Ultimately, this study aims to position Indonesia's experience within the broader global discourse on industrial sovereignty and supply chain security, offering theoretical insights for academics and strategic recommendations for industry practitioners and policymakers navigating an increasingly fragmented global order.

METHOD

This study employed a multiple case study design with a descriptive qualitative approach to explore dynamic phenomena in supply chain management amid a geopolitical crisis. This approach was selected for its capacity to capture the complexity of causal relationships that could not always be explained through quantitative methods, especially in rapidly evolving and non-linear crisis situations. The primary focus of the research was directed at gaining an in-depth understanding of how organizations responded to external pressures in real time, including decision-making processes, strategy adjustments, and internal dynamics affecting supply chain resilience. Consistent with its interdisciplinary orientation, this research design integrated perspectives from operations management, organizational sociology, and industrial economics to provide a more comprehensive picture of the interaction between technical, social, and economic factors in the face of global disruption.

The research subjects focused on managerial entities in the downstream manufacturing sector, particularly the plastic packaging industry, which has a high level of dependence on petroleum-derived raw materials such as naphtha. This sector was selected based on its cost structure characteristics, which are highly sensitive to global energy price fluctuations, enabling the impacts of geopolitical crisis to be observed more concretely and measurably. Moreover, this sector has close linkages with various other industries as part of a broader value chain, meaning that disruptions have the potential to create ripple effects across other industrial sectors. Thus, this study represented the specific conditions of one industry while also providing a broader picture of systemic vulnerabilities in global supply chains.

Table 1. Case Profile of Studied Companies

Company	Size Category	Naphtha Dependency	Primary Supply Region	Value Chain Position	Crisis Response Strategy
A	Large Enterprise	>80% imported	Middle East (Saudi Arabia, Qatar)	Downstream manufacturer	Supplier diversification (East Asia, North America)
B	Large Enterprise	70–80% imported	Middle East (Iran, UAE)	Downstream manufacturer	Emergency stock build-up + alternative sourcing

Company	Size Category	Naphtha Dependency	Primary Supply Region	Value Chain Position	Crisis Response Strategy
C	Medium Enterprise	60–70% imported	Middle East + Southeast Asia	Downstream manufacturer	Production volume reduction
D	Medium Enterprise	65–75% imported	Middle East (Saudi Arabia)	Downstream manufacturer	Temporary production halt + renegotiation
E	Medium Enterprise	60–70% imported	Middle East + South Korea	Downstream manufacturer	Partial sourcing shift to South Korea

Source: Field research data, 2026 (company names anonymized per ethical research standards)

Data collection was conducted through source triangulation to enhance the validity and reliability of the research findings. Primary data were obtained through semi-structured, in-depth interviews with operations directors and procurement managers who held strategic roles in company supply chain management. These interviews were designed to elicit information related to direct experiences in managing the crisis, strategies employed, and challenges faced during the disruption period. Secondary data were obtained through the analysis of internal company documents, official industry reports such as INAplac, and Bloomberg publications covering the period from February to April 2026. The combination of multiple data sources enabled the researchers to achieve a more holistic understanding and to minimize potential bias arising from any single data source.

The research instrument consisted of an interview guide validated by supply chain management experts, which was used to ensure the consistency and depth of the information obtained. The research process was conducted in stages, beginning with a pre-field phase to identify and map key actors, followed by a field data collection phase, and concluding with a data verification phase using triangulation and member-checking techniques. Data analysis was carried out iteratively using an interactive model encompassing data condensation, data presentation in narrative and matrix form, and drawing reflective conclusions. The interpretation of findings was then linked to the dynamic capabilities theoretical framework, which provided a conceptual basis for evaluating how sensing, seizing, and reconfiguring capabilities were implemented by companies in effectively responding to geopolitical disruptions.

RESULTS AND DISCUSSION

This section presents the empirical findings obtained through the analysis of global commodity price documents, industry reports, and in-depth interviews with supply chain practitioners in Indonesia. The presentation begins with an objective account of the impact of conflict escalation on the availability and pricing structure of naphtha in the Results section. Subsequently, the Discussion section interprets these findings through the lens of dynamic capabilities theory to explain the resilience mechanisms of the plastic packaging industry in the face of geopolitical disruption.

Results

The findings of this study indicate that geopolitical dynamics are strongly correlated with the stability of global economic variables, particularly in the energy sector and its derivatives. Caldara & Iacoviello (2022) explain that adverse geopolitical events and threats can affect macroeconomic variables such as commodity prices, inflation, and market uncertainty. These findings are consistent with the empirical conditions observed in early 2026, when the escalation of the Iran–US–Israel conflict triggered rising global tensions that were directly reflected in energy price volatility. Relevant to this conflict, naphtha, as a petroleum derivative, became highly sensitive to geopolitical changes, given its position as a primary raw material in the petrochemical and plastics industries.

Market price monitoring data show that the conflict escalation in February 2026 triggered an immediate and significant surge in naphtha spot prices in Asian markets. This surge did not occur gradually but instead unfolded within a relatively short period in response to mounting risks of supply disruption, particularly along strategic distribution routes such as the Strait of Hormuz. Uncertainty regarding the security of shipping lanes, rising maritime insurance

premiums, and potential distribution bottlenecks were the primary factors driving the price increase. This situation illustrates how global markets react swiftly to geopolitical signals, even before actual physical disruptions to supply have materialized.

The impact of rising naphtha prices was directly felt by the plastic packaging industry in Indonesia through increased production input costs. High dependence on imported raw materials renders the domestic industry highly vulnerable to global price fluctuations. As disruptions in the Strait of Hormuz intensified, production input costs for plastics in Indonesia underwent significant changes (Figure 1).



Figure 1. Naphtha Commodity Price Movements

Source: Tradingeconomics 2026. Naphtha commodity price data. Retrieved April 15, 2026, from <https://id.tradingeconomics.com/commodity/naphtha>

This price increase had a direct impact on the capacity utilization rates of domestic plastic packaging plants. Based on internal reports from the sampled companies, there was an average production capacity decline of 35% due to raw material stock shortages that were increasingly difficult to fulfill within normal timeframes. Interview results also revealed unilateral contract cancellations by Middle Eastern suppliers citing force majeure, further exacerbating supply uncertainty. These conditions led to dwindling raw material inventories at the plant level, and in some cases, companies were forced to temporarily halt production activities when no alternative supply sources could be immediately secured. These findings indicate that the impact of the crisis is not limited to financial aspects such as rising costs, but also extends to the physical dimension of material availability constraints that directly disrupt operational continuity.

Furthermore, the research data reveal a significant difference in responses between large and medium-sized companies in managing this crisis. Large companies with global networks and access to international market information tended to be more adaptive, redirecting procurement sources to alternative regions such as East Asia and North America, albeit with the consequence of higher logistics and raw material costs. In contrast, medium-sized companies, constrained by limited network access and contract flexibility, preferred a defensive strategy by reducing production volumes to align with available raw material supply. This difference indicates that resource capacity, market access, and managerial capability are determining factors in the level of a company's resilience against supply chain disruptions stemming from global geopolitical crises.

Discussion

The findings of this study confirm that the 2026 naphtha crisis triggered by the escalation of the Iran-US-Israel conflict is not merely an ordinary market disruption but a systemic shock that tests the very foundations of the global supply chain model that has long been oriented toward cost efficiency. Over recent decades, the plastic packaging industry in Indonesia has predominantly relied on a lowest-cost sourcing approach, assuming that global

markets would always provide stable and sustainable supply. However, this crisis demonstrates that such an assumption is no longer tenable in an increasingly uncertain geopolitical environment. Yang (2026) explains that the maritime logistics sector faces increasingly complex pressures due to geopolitical conflicts, compelling industry players to consider not only operational efficiency but also sustainability and resilience against external disruptions. Accordingly, this crisis represents a turning point that demands a redefinition of the supply chain paradigm, from efficiency toward adaptive resilience.

Furthermore, analysis of company responses reveals that resilience cannot be understood as a static condition achieved through a single strategy but rather as a dynamic process that continuously evolves. Resilience is built from organizational capacity to learn, adapt, and transform in the face of uncertainty (Kromidha & Bachtiar, 2024). In this context, organizational capability maturity plays a pivotal role, as companies with integrated risk management systems, flexible governance, and adaptive organizational cultures tend to be more capable of survival compared to those that remain rigid and reactive to change.

Research findings indicate that companies with higher levels of supply chain resilience generally possess adaptive capabilities reflected in dynamic capabilities. This concept, as developed by Teece et al. (1997), emphasizes that a company's competitive advantage is determined not solely by resource ownership but by the ability to dynamically reconfigure those resources. In the context of the naphtha crisis, the three primary dimensions) sensing, seizing, and reconfiguring (prove to be a highly relevant framework for explaining variations in company responses, while also serving as indicators of organizational readiness in the face of global disruption (Patrício et al., 2022).

In the sensing dimension, this study reveals a fundamental transformation from traditional market intelligence approaches toward more complex and multidimensional geopolitical intelligence. Companies that managed to survive did not merely rely on historical data such as price trends or market demand but also actively monitored geopolitical developments, international policies, and global security dynamics that could potentially affect energy supply. In this regard, the findings of Wahyuni (2024), demonstrating a significant positive correlation between crude oil prices and plastic pellet raw material prices, provide an empirical basis showing that changes in the energy sector have direct implications for downstream industries. Therefore, the ability to detect early signals becomes crucial in minimizing crisis impact.

Effective sensing activities are reflected in practices such as real-time monitoring of global oil price trends, tracking trade policies and international sanctions, and maintaining intensive communication with cross-border supplier networks. Companies with comprehensive monitoring systems are able to identify potential disruptions before they materialize, thereby gaining sufficient time to prepare mitigation measures. In contrast, companies lacking such systems tend to rely on delayed information and adopt a reactive stance, ultimately increasing the risk of operational disruption and financial losses (Aljohani, 2023).

Moreover, resilient companies expand the scope of sensing to incorporate geopolitical variables as an integral part of their risk management systems. This aligns with the findings of Brandon-Jones et al. (2014), which emphasize the importance of risk visibility in global supply chains (Salam et al., 2026). During the 2026 crisis, this capability extended beyond quantitative data analysis to include interpretation of qualitative phenomena such as military movements in the Strait of Hormuz, diplomatic rhetoric in international forums, and shifts in energy policies of oil-producing nations (Ji, 2026). Teece (1997) affirms that in highly dynamic environments, the ability to identify threats before they materialize is a prerequisite for organizational survival (Patrício et al., 2022).

The failure of some companies to develop sensing capabilities reflects the phenomenon of organizational myopia, a limitation in perceiving environmental changes holistically due to excessive reliance on historical data and past assumptions. The research of Rehman et al. (2018) shows that the Middle East carries high complexity influenced by conflicts, radicalism, and global political dynamics that directly impact oil prices and production (Rizkiyani et al., 2025). Thus, ignoring geopolitical factors in risk analysis means overlooking one of the primary

determinants of supply chain stability.

In the seizing dimension, this study demonstrates that the ability to make rapid and precise decisions is a significant differentiating factor in crisis management (Coccia, 2020; Pourdavoud, 2026). Companies that were able to respond promptly through strategies such as securing alternative contracts, increasing raw material inventories, and adjusting production strategies exhibited higher levels of resilience. This process requires not only accurate information but also the organizational capacity to translate that information into concrete action within a short timeframe, often under high risk and uncertainty.

The reconfiguring dimension proves to be the most decisive element in building long-term resilience, as it directly relates to the organizational ability to undertake structural transformation. This capability encompasses supply chain restructuring, shifting to alternative suppliers, and developing raw material substitutes that are more adaptive to external environmental changes. Nair et al. (2024) emphasize that companies capable of rapidly and effectively reconfiguring their resources will have a competitive advantage in the face of systemic disruption. In the Indonesian plastic packaging industry, high dependence on imported naphtha from the Middle East creates significant vulnerability, particularly when geopolitical disruptions affect global distribution routes. Therefore, companies capable of supplier diversification not only reduce dependency risks but also increase flexibility in maintaining production continuity amid uncertainty.

Furthermore, the reconfiguring process is not limited to changes in supplier sources but also encompasses internal organizational adjustments such as distribution network redesign, procurement contract revisions, and technology integration to enhance supply chain visibility. Resilient companies tend to periodically reassess their supply chain structures and make adjustments based on continuously evolving global dynamics. In practice, this may include strengthening relationships with alternative suppliers, developing more flexible contract schemes, and exploring the use of substitute raw materials.

This study also reveals a paradigm shift from efficiency toward agility in supply chain management. Companies that previously focused on cost minimization are now beginning to adopt a more balanced approach between efficiency and supply security in response to increasing global uncertainty. Efforts to redirect supply sources to countries such as South Korea and the United States, despite the consequence of higher costs, reflect a strategic priority shift that places operational sustainability as the primary objective. This shift affirms that in crisis conditions, the ability to maintain production continuity holds greater value than mere cost efficiency, requiring companies to be more adaptive and flexible in managing their supply chains.

These findings are consistent with Ivanov's (2020) concept of the ripple effect, whereby disruptions at one point in a supply chain can spread widely and rapidly throughout the entire system (Dunke & Nickel, 2026). However, in the 2026 geopolitical crisis, the characteristics of the disruption exhibited greater intensity and speed compared to previous crises such as the COVID-19 pandemic. This demands that companies possess contractual and operational flexibility that enables rapid adaptation to changing market conditions.

From a macro perspective, the naphtha crisis also highlights the importance of industrial sovereignty and national energy security. Dependence on imported strategic raw materials places industries in a vulnerable position vis-à-vis global geopolitical dynamics. Therefore, the development of strategic petrochemical raw material reserves and industrial policies supporting domestic substitution becomes critical to reducing long-term risks. This phenomenon reinforces the concept of geopolitics of supply chains, where geopolitical factors exert a direct influence on national economic and industrial stability.

Although this study provides strong theoretical contributions through the integration of dynamic capabilities with geopolitical risk management, there are limitations related to the relatively short observation period. Data collected during the still-ongoing crisis have not fully captured the long-term dynamics of strategies employed by companies. Further longitudinal research is strongly needed to evaluate the long-term effectiveness of these strategies. This study affirms that in an era of global uncertainty, resilience is no longer merely an operational option but a strategic imperative that determines the future survival of industries.

CONCLUSION

This study concludes that the supply chain resilience of Indonesia's plastic packaging industry amid the 2026 Iran-US-Israel conflict escalation can no longer rest on the traditional cost-efficiency paradigm but must instead be grounded in strategic agility based on geopolitical intelligence. The synthesis of arguments in this study affirms that the naphtha crisis acts as a turning point, compelling organizations to transform their dynamic capabilities, wherein sensing capacity toward international political turbulence becomes the primary determinant before disruptions manifest as physical raw material shortages. The academic position of this research reinforces Dynamic Capabilities theory by providing empirical evidence that rapid and proactive supply chain reconfiguration significantly mitigates ripple effects triggered by uncertainty along strategic global shipping routes. The principal contribution of this study lies in proposing a geopolitical supply chain resilience framework that integrates energy security with operational management, a perspective that is critically important for manufacturing industries in developing countries that are highly dependent on strategically imported commodities.

On a practical level, these findings emphasize the urgency for industry players and policymakers to shift strategies from single sourcing dependency toward broader geographic diversification to strengthen national industrial sovereignty. As a closing message, this study highlights that the novelty in contemporary supply chain management lies in the integration of macro-political risk analysis with micro-level operational flexibility. Given the limitations of the observation period during an ongoing crisis, future research is recommended to conduct longitudinal studies to evaluate the long-term impact of diversification costs on the profitability and competitiveness of the plastics industry. Furthermore, the exploration of new variables, such as the role of artificial intelligence in predicting geopolitical disruptions in real time or the application of a circular economy approach as a naphtha-based raw material substitution strategy, represents a crucial research direction for expanding the resilience horizon of global manufacturing industries in the future.

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AUTHOR CONTRIBUTION STATEMENT

Muhamad Agung and Dharmajaya jointly contributed to the conception and design of the study, literature review, data collection, data analysis, interpretation of findings, manuscript preparation, revision, and final approval of the manuscript. Both authors have read and approved the final version of the manuscript and agree to be accountable for all aspects of the work, ensuring its accuracy, integrity, and originality.

REFERENCES

- Aljohani, A. (2023). Predictive analytics and machine learning for real-time supply chain risk mitigation and agility. *Sustainability*, 15(20), 15088.
- Bao, H., Wang, C., & Slater, G. F. (2026). Characterization, Quantification and Distribution Assessment of Naphtha-Range Compounds in Oil Sands-Related Samples. *Journal of Hazardous Materials: Organics*, 100012.
- Brandon-Jones, E., Squire, B., Autry, C. W., & Petersen, K. J. (2014). A contingent resource-based perspective of supply chain resilience and robustness. *Journal of Supply Chain Management*, 50(3), 55–73.
- Caldara, D., & Iacoviello, M. (2022). Measuring geopolitical risk. *American Economic Review*, 112(4), 1194–1225.
- Coccia, M. (2020). Critical decisions in crisis management: Rational strategies of decision

- making. *Journal of Economics Library*, 7(2), 81–96.
- Dunke, F., & Nickel, S. (2026). Simulation-based multi-criteria decision making: an interactive method with a case study on infectious disease epidemics. *Annals of Operations Research*, 360(1), 67–96.
- Farrell, H., & Newman, A. L. (2019). Weaponized interdependence: How global economic networks shape state coercion. *International Security*, 44(1), 42–79.
- Gao, B., & Xu, Z. (2024). Adjustment of supply chain investment by transnational corporations in the Ukrainian crisis and geopolitical risks–Taking the three levels as the analytical framework. *Transnational Corporations Review*, 16(3), 200076.
- Ivanov, D. (2020). Predicting the impacts of epidemic outbreaks on global supply chains: A simulation-based analysis on the coronavirus outbreak (COVID-19/SARS-CoV-2) case. *Transportation Research Part E: Logistics and Transportation Review*, 136, 101922.
- Ji, S. (2026). *Operational and Supply Chain Resilience During Geopolitical Disruptions: A Multiple Perspective Analysis*. University of Dublin.
- Kromidha, E., & Bachtiar, N. K. (2024). Developing entrepreneurial resilience from uncertainty as usual: a learning theory approach on readiness, response and opportunity. *International Journal of Entrepreneurial Behavior & Research*, 30(4), 1001–1022.
- Nair, A., Manohar, S., & Mittal, A. (2024). Reconfiguration and transformation for resilience: Building service organizations towards sustainability. *Journal of Services Marketing*, 38(4), 404–425.
- Nguyen, A. (2026). *Trouble by Design?–Weaponized Interdependence as Economic Coercion Under International Law*. Springer.
- Nyoman Pujawan, I., & Geraldin, L. H. (2009). House of risk: a model for proactive supply chain risk management. *Business Process Management Journal*, 15(6), 953–967.
- Patrício, V., Costa, R. L. da, Carvalho, H., Pereira, L., Dias, Á., & Gonçalves, R. (2022). Investigation model of sensing, seizing and reconfiguring capabilities. *International Journal of Value Chain Management*, 13(4), 395–421.
- Pourdavoud, S. (2026). & Tahmasebi, S.(2026). The Relationship Between Decision-making Styles and Attitude in Shaping Middle-Level Managers' Intention to Take Disaster Risk Management Actions Based on the Theory of Reasoned Action. *Disaster Prevention and Management Knowledge*, 15(4), 600–619.
- Rehman, M. Z. U., Bashir, Z., & Baig, A. (2018). Economic Turmoil–Oil Prices and the Middle East Crisis. *Global Economics Review*, 3(1), 71–80.
- Rizkiyani, H., Trismadi, T., Supriyadi, A., Widodo, P., Saragih, H., & Suwarno, P. (2025). Geopolitical dynamics of maritime security in the Strait of Hormuz. *International Journal of Humanities Education and Social Sciences (IJHESS)*. <https://ijhess.com/Index.Php/Ijhess/Article/View/1351>.
- Salam, M. A., Jahed, M. A., Alabdali, M. A., & Abourobah, S. H. (2026). Unpacking the Protective Role of Supply Chain Resilience and Robustness: The Mediating Influence of Absorptive Capacity Within a Resource Orchestration Framework. *Logistics*, 10(4), 89.
- Sharma, D. M., Royit, D. A., & Mishra, D. P. (2026). Impact of Global Economic Crisis Raises in Middle East Asia War: A Critical Study on Indian Financial Market. *Available at SSRN* 6517938.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533.
- Wahyuni, M. T. (2024). Analysis of the Effect of Oil Prices on Prices of Plastic Seed Raw Materials. *International Journal of Economic Integration and Regional Competitiveness*, 1(4), 28–38.
- Wang, J. L., Fan, J. J., Liu, Y., Guo, H. T., & Guo, M. Y. (2026). Geopolitical turbulence in the Middle East: Reshaping global energy landscape? *Petroleum Science*.
- Yang, C. S. (2026). Geopolitical disruptions and sustainability imperatives: a structural model of value chain and supply chain transformation in maritime logistics. *Transportation Research Part E: Logistics and Transportation Review*, 209, 104733.