

# Geopolitical Conflicts and its Challenges to SMEs in Malaysia: A Conceptual Paper

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## ABSTRACT

Geopolitical conflicts have increasingly influenced global economic stability and international business environments. Small and medium enterprises (SMEs), particularly in emerging economies such as Malaysia, are highly vulnerable to these disruptions due to their dependence on global supply chains, limited financial resources, and exposure to international market volatility. This conceptual paper examines the key challenges faced by Malaysian SMEs during periods of geopolitical instability. Drawing on existing literature, the study identifies four major challenges affecting SMEs: supply chain disruptions, rising operational costs, market uncertainty, and financial constraints. The paper discusses how geopolitical tensions and global economic uncertainties can negatively impact SME operational performance and long-term sustainability. The study contributes to the growing literature on SMEs and global economic uncertainty by highlighting geopolitical conflict as a critical external risk factor influencing SME resilience. The findings provide insights for researchers, policymakers, and business stakeholders to better understand the implications of geopolitical instability on SMEs in Malaysia and emphasize the need for further empirical research to explore SME resilience strategies in uncertain global environments.

**Keywords:** Geopolitical conflicts; Small and medium enterprises (SMEs); Supply chain disruption; Market uncertainty; SME resilience; Malaysia

## INTRODUCTION

Small and Medium Enterprises (SMEs) are widely recognized as key drivers of economic growth, employment, and innovation in many countries including Malaysia (OECD, 2023; United Nations, 2024). SMEs represent a substantial portion of business establishments and contribute significantly to national economic development. Small, and medium-size enterprises (SMEs) are vital to economies around the world. SMEs account for more than 90 percent of all businesses, roughly half of value added, and more than two-thirds of business employment (United Nations, 2024). However, SMEs are particularly vulnerable to external shocks such as global crises, geopolitical tensions, and economic instability due to their limited financial and organizational resources (Saad et al., 2021; Asgary et al., 2020).

In recent years, geopolitical conflicts have become increasingly prominent in shaping global economic environments (International Monetary Fund [IMF], 2026). Wars, trade disputes, and political tensions can disrupt international trade flows, increase commodity prices, and destabilize supply chains (Bretas & Tippman, 2025; Grosse et al., 2021). These disruptions pose significant challenges for SMEs that depend on international markets and imported resources (Choudhury, 2025). Moreover, geopolitical risks and economic uncertainty are considered among the major global threats affecting SME sustainability and business continuity (Asgary et al., 2020; Fajarika et al., 2024).

In the Malaysian context, SMEs play a crucial role in national economic development. According to SME Corporation Malaysia, SMEs represent approximately 97% of total business establishments in Malaysia and contribute significantly to employment generation, exports, and gross domestic product (GDP). These enterprises operate across various sectors including services, manufacturing, agriculture, and construction, making them essential contributors to Malaysia's economic resilience and inclusive growth. The Malaysian government has also introduced various initiatives such as digitalization programs, financing schemes, and entrepreneurship development policies to strengthen SME competitiveness and sustainability (SME Corporation Malaysia, 2023).

In the Malaysian context, SMEs play a critical role in supporting national economic growth and employment. According to the Small and Medium Enterprises (SMEs) 2024 Report published by the Department of Statistics Malaysia, SMEs contributed 39.5% to Malaysia's Gross Domestic Product (GDP) and 48.7% to total employment in 2024. The SME sector generated approximately RM652.4 billion in GDP at constant 2015 prices, highlighting its importance in Malaysia's economic structure. SMEs are also active across several sectors including services, manufacturing, construction, agriculture, and mining, with the services sector accounting for the largest share of SME employment.

Despite their economic importance, Malaysian SMEs remain highly exposed to global economic uncertainty and geopolitical instability. As a trade-dependent economy, Malaysia is significantly influenced by fluctuations in international markets, trade restrictions, and geopolitical tensions. Disruptions caused by geopolitical conflicts can affect supply chains, increase production costs, and create market volatility for Malaysian SMEs that rely on global trade networks and imported inputs (Grosse et al., 2021; Choudhury, 2025).

Given these challenges, it is essential to understand how geopolitical conflicts affect SME operations and sustainability in Malaysia. Examining the challenges faced by SMEs and identifying strategic responses can help policymakers and business practitioners develop effective strategies to enhance SME resilience in an increasingly uncertain global environment.

Despite the growing body of literature on SMEs and global economic uncertainty, limited studies have specifically examined the impact of geopolitical conflicts on SMEs within the Malaysian context. Existing research primarily focuses on global or developed economies, with less attention given to emerging economies that are highly dependent on international trade. Furthermore, prior studies tend to examine individual challenges such as supply chain disruptions or financial constraints in isolation, rather than providing an integrated conceptual understanding of how geopolitical conflicts simultaneously affect multiple dimensions of SME operations. Therefore, this study aims to address this gap by developing a comprehensive conceptual framework that explains the key challenges faced by Malaysian SMEs in the context of geopolitical instability.

## **THEORETICAL FRAMEWORK**

To strengthen the analytical foundation of this conceptual paper, the study is anchored in SME resilience theory and dynamic capabilities theory. SME resilience refers to the ability of firms to anticipate, respond to, and recover from external disruptions while maintaining operational continuity (Saad et al., 2021). In the context of geopolitical conflicts, resilience becomes a critical capability that enables SMEs to withstand supply chain disruptions, financial constraints, and market volatility. Resilient SMEs are not only able to absorb shocks but also adapt their operations and strategies to sustain performance under uncertain conditions. This is particularly important for Malaysian SMEs, which operate in a highly open and trade-dependent economy exposed to global economic fluctuations.

In addition, dynamic capabilities theory explains how firms integrate, build, and reconfigure internal and external resources to respond to rapidly changing environments (Teece et al., 2016). This theory emphasizes three key processes: sensing opportunities and threats, seizing opportunities through strategic decisions, and transforming organizational resources to maintain competitiveness. SMEs with strong dynamic capabilities are better able to adapt their strategies, restructure supply chains, adopt digital technologies, and respond

effectively to geopolitical risks. These capabilities allow firms to remain flexible and innovative in the face of external disruptions.

The integration of SME resilience and dynamic capabilities provides a comprehensive theoretical lens for understanding how SMEs navigate geopolitical instability. While resilience focuses on the ability to withstand and recover from shocks, dynamic capabilities emphasize the strategic processes that enable firms to adapt and transform in response to environmental changes. Together, these perspectives explain not only how SMEs survive disruptions but also how they can sustain long-term performance and competitiveness. By integrating these theoretical perspectives, this study provides a stronger analytical explanation of how geopolitical conflicts influence SME performance and highlights the importance of resilience and adaptability in uncertain environments.

## **Challenges Faced by SMEs During Geopolitical Conflicts**

### **Supply Chain Disruption**

One of the major consequences of geopolitical conflicts is disruption in global supply chains. Conflicts between nations can interrupt transportation routes, delay shipments, and restrict access to raw materials. These disruptions increase production delays and operational risks for SMEs, particularly those that depend on global suppliers (Karmaker et al., 2022). Research shows that geopolitical tensions can significantly affect supply chain stability by increasing costs, delivery delays, and production interruptions (Su et al., 2025).

Supply chains today are highly interconnected across countries and industries, which makes them vulnerable to geopolitical risks and international conflicts. When geopolitical instability arises, disruptions in logistics networks, trade regulations, and cross-border transportation can propagate through global supply chains and affect businesses worldwide. This interconnected structure means that disruptions occurring in one region may create cascading effects across multiple industries and countries (Ivanov & Dolgui, 2020).

For SMEs, these disruptions are particularly challenging because they typically lack diversified supplier networks and strategic inventory buffers compared to large multinational corporations. SMEs often rely on limited suppliers due to financial constraints and economies of scale. Consequently, supply chain interruptions caused by geopolitical tensions can severely affect their production continuity and market competitiveness (Safari et al., 2023). Furthermore, geopolitical risks such as wars, political instability, and trade disputes create uncertainty in global supply chain management and threaten the reliability of international production networks (Liu, 2024).

### **Rising Operational Costs**

Geopolitical conflicts often lead to significant increases in operational costs, particularly through fluctuations in energy prices, transportation expenses, and currency exchange rates. These cost pressures can severely affect SMEs, which typically operate with limited financial resources and narrow profit margins (Asgary et al., 2020). In many cases, SMEs lack the financial flexibility to absorb sudden cost increases, making them more vulnerable to external economic shocks compared to larger firms.

Empirical studies indicate that geopolitical instability contributes to volatility in global energy markets, resulting in higher fuel and logistics costs (Maitra et al., 2021). Additionally, exchange rate fluctuations caused by geopolitical uncertainty can increase the cost of imported inputs, further intensifying financial burdens on SMEs engaged in international trade (Grosse et al., 2021). For Malaysian SMEs that rely heavily on imported raw materials and intermediate goods, such fluctuations can significantly increase production costs and disrupt pricing strategies.

Furthermore, rising operational costs may force SMEs to adjust their business operations, such as reducing production levels, cutting operational expenses, or increasing product prices. However, increasing prices may reduce competitiveness in price-sensitive markets, especially when SMEs compete with larger firms that

benefit from economies of scale. This creates a strategic dilemma for SMEs in balancing cost management and market competitiveness.

The literature suggests that rising operational costs not only reduce profitability but also constrain SMEs' ability to invest in innovation, digital transformation, and business expansion. Limited investment capacity may weaken SMEs' long-term competitiveness and resilience in dynamic market environments. This highlights the need for SMEs to develop effective cost management strategies and improve operational efficiency to cope with economic uncertainty and sustain business performance.

### **Market Uncertainty and Demand Instability**

Market uncertainty is another major challenge faced by SMEs during geopolitical conflicts. Economic instability, trade disruptions, and political tensions can significantly reduce consumer confidence and investment activities, leading to fluctuations in market demand (Choudhury et al., 2025).

Research indicates that geopolitical risks increase market volatility, creating unpredictable business environments for SMEs (Bretas & Tippmann, 2025). For export-oriented SMEs, disruptions in international trade relationships and sanctions may result in reduced demand and loss of market access (Yan & Piao, 2025). This can weaken SME competitiveness and affect long-term business sustainability.

Moreover, uncertainty often leads firms to delay investment decisions and reduce production levels due to unclear economic prospects. This situation is particularly challenging for SMEs that depend on stable demand to maintain operational continuity.

### **Financial Constraints**

Access to financing is another significant challenge for SMEs during geopolitical instability. Financial institutions often adopt more conservative lending policies during uncertain economic conditions (Ashraf & Qian, 2026). SMEs may face difficulties obtaining loans or investment funding, limiting their ability to sustain operations or expand their businesses. Financial resilience is therefore critical for SMEs to survive market disturbances and economic shocks (Legenzova et al., 2025).

SMEs frequently encounter barriers in accessing financial resources due to limited collateral, insufficient credit history, and higher perceived risk by financial institutions (Bu et al., 2024). These challenges may become more severe during geopolitical crises when financial markets become more volatile and risk-averse (Yan & Piao, 2025).

In addition, reduced investor confidence during geopolitical conflicts may decrease the availability of venture capital and external investment for small businesses. Limited access to financing can restrict SMEs' ability to adopt new technologies, diversify supply chains, and develop innovative strategies needed to adapt to global disruptions (Saad et al., 2021).

## **RECOMMENDATIONS**

### **Strengthening Supply Chain Resilience**

To mitigate the risks associated with geopolitical conflicts, SMEs should focus on strengthening supply chain resilience. Supply chain resilience refers to the ability of firms to anticipate, prepare for, respond to, and recover from disruptions while maintaining business continuity (Ivanov & Dolgui, 2020). One effective strategy is supplier diversification, which involves sourcing materials and components from multiple suppliers located in different geographical regions. This approach reduces dependency on a single supplier and minimizes the risk of supply disruptions during geopolitical crises (Ismail et al., 2026).

SMEs can also develop alternative logistics networks to reduce reliance on specific transportation routes that

may be affected by geopolitical conflicts. For example, firms may consider alternative shipping routes, regional distribution hubs, or local sourcing strategies to maintain operational continuity when international trade routes are disrupted. Building stronger relationships with suppliers and logistics partners is also essential for improving coordination and information sharing across supply chains.

In the Malaysian context, strengthening supply chain resilience is particularly important because many SMEs rely heavily on imported raw materials and components for production. Malaysia's integration into global manufacturing networks means that disruptions in international trade may significantly affect SME production and operational performance. Therefore, developing flexible and diversified supply chain strategies is essential for improving SME resilience in uncertain global environments (Grosse et al., 2021).

### **Promoting Digital Transformation**

Digital transformation represents another critical strategy for improving SME resilience in the face of geopolitical conflicts. Digital technologies enable SMEs to operate more efficiently, reduce operational costs, and access broader markets beyond physical geographic boundaries. The adoption of digital platforms such as e-commerce systems, cloud computing, digital payment systems, and data analytics can significantly enhance the operational flexibility of SMEs (Hokmabadi et al., 2024).

During geopolitical disruptions, digital technologies allow businesses to maintain communication with suppliers, customers, and partners even when physical trade routes are disrupted. Online marketplaces and digital platforms enable SMEs to continue selling products and services through virtual channels, reducing dependence on traditional physical markets. Digital technologies can also improve supply chain visibility by enabling firms to monitor inventory levels, track shipments, and coordinate logistics activities in real time (Nambisan et al., 2019).

In Malaysia, digital transformation has become an important policy priority to enhance SME competitiveness. Government initiatives such as digitalization grants and SME technology adoption programs aim to encourage businesses to integrate digital technologies into their operations. Studies indicate that digital ecosystems and technological adoption significantly improve SME resilience and adaptability during crises by enabling firms to respond more effectively to environmental disruptions (Hokmabadi et al., 2024).

### **Developing Crisis Management Capabilities**

Developing effective crisis management capabilities is essential for SMEs to respond proactively to geopolitical disruptions. Crisis management refers to the strategic processes organizations use to anticipate potential disruptions, manage risks, and implement recovery strategies during unexpected events. Firms that develop structured crisis management plans are better equipped to respond to external shocks such as geopolitical conflicts, economic crises, or supply chain disruptions (Koporcic et al., 2025).

Key elements of crisis management include risk assessment, contingency planning, and strategic flexibility. Risk assessment enables businesses to identify potential threats and vulnerabilities within their operations, such as dependence on specific suppliers or markets. Contingency planning involves preparing alternative strategies that can be implemented when disruptions occur, such as switching suppliers or adjusting production schedules (Herbane, 2019).

Strategic flexibility also plays an important role in enabling firms to adapt quickly to changing circumstances. SMEs that cultivate flexible business models and adaptive leadership are better positioned to navigate uncertain environments. Research suggests that proactive crisis management strategies significantly enhance the ability of firms to respond to geopolitical uncertainty and economic turbulence (Koporcic et al., 2025).

### **Strengthening Government Support**

Government support plays a critical role in helping SMEs navigate geopolitical instability and economic uncertainty. Policymakers can implement targeted policies and institutional support mechanisms to strengthen

SME resilience and competitiveness. Financial assistance programs, tax incentives, and low-interest loan schemes can help SMEs manage operational challenges and maintain financial stability during periods of geopolitical disruption (Satpathy et al., 2025).

In addition to financial support, governments can provide training programs and advisory services to help SMEs improve managerial capabilities, digital literacy, and international market strategies. Export promotion initiatives and trade facilitation programs may assist SMEs in accessing new international markets and reducing dependence on specific trading partners (OECD, 2023).

In Malaysia, government institutions have introduced various initiatives aimed at strengthening SME development, including funding programs, digitalization grants, and entrepreneurship training schemes. These initiatives aim to enhance SME productivity, innovation, and competitiveness in global markets. Effective collaboration between government agencies, financial institutions, and SME support organizations is therefore essential for creating a supportive ecosystem that enables SMEs to overcome the challenges posed by geopolitical conflicts (SME Corporation Malaysia, 2023).

## CONCLUSION

Geopolitical conflicts are increasingly shaping the global economic landscape and creating significant challenges for SMEs worldwide. Malaysian SMEs are particularly vulnerable to these disruptions due to their dependence on international supply chains, limited financial resources, and exposure to global market volatility. As an open and trade-oriented economy, Malaysia is highly influenced by global geopolitical developments, including trade disputes, economic sanctions, and regional conflicts that may disrupt international trade flows and global production networks. These disruptions may significantly affect SMEs' operational stability, financial sustainability, and long-term competitiveness. This conceptual paper highlights four major challenges faced by SMEs during geopolitical conflicts: supply chain disruptions, rising operational costs, market uncertainty, and financial constraints.

Supply chain disruptions represent one of the most critical challenges for SMEs operating in globalized markets. Interruptions in transportation routes, delays in logistics, and restricted access to raw materials can significantly affect SME production processes and delivery performance. At the same time, geopolitical conflicts often lead to rising operational costs due to increases in fuel prices, transportation expenses, and currency exchange rate fluctuations. These financial pressures are particularly challenging for SMEs because they generally operate with limited financial reserves and narrower profit margins compared to large multinational corporations.

In addition to operational challenges, geopolitical conflicts also create substantial market uncertainty. Economic instability and political tensions can reduce consumer confidence, delay investment decisions, and disrupt export markets. For Malaysian SMEs that rely on both domestic and international markets, such uncertainty can lead to declining demand for goods and services, making it difficult for businesses to maintain stable revenue streams. Furthermore, financial constraints remain a major barrier for SMEs during periods of geopolitical instability. Financial institutions may adopt stricter lending policies during uncertain economic conditions, limiting SME access to financing and reducing their ability to invest in innovation, digital transformation, or market expansion.

From a theoretical perspective, this conceptual paper contributes to the growing literature on SMEs and global economic uncertainty by highlighting geopolitical conflict as a critical external factor influencing SME sustainability and resilience. The discussion provides insights into how external environmental turbulence can affect SME operational performance, financial stability, and market competitiveness, particularly in emerging economies such as Malaysia. By identifying key challenges associated with geopolitical instability, this study contributes to a deeper understanding of how global economic disruptions may influence SME development.

However, this study has several limitations. As a conceptual paper, the analysis is primarily based on existing literature and theoretical perspectives rather than empirical investigation. Therefore, future research should examine the relationship between geopolitical conflicts and SME performance using empirical data.

Quantitative or mixed-method approaches could be employed to investigate how SMEs respond to geopolitical risks and how these external shocks influence their strategic decision-making and business sustainability.

Future studies may also explore sector-specific impacts of geopolitical conflicts on SMEs, particularly in industries such as manufacturing, logistics, and export-oriented sectors that are highly dependent on global supply chains. Additionally, researchers could examine how internal organizational capabilities, including innovation, digital adoption, and entrepreneurial orientation, influence SME resilience during geopolitical instability.

Overall, understanding the challenges created by geopolitical conflicts is essential for strengthening the sustainability of SMEs in Malaysia. As global economic uncertainty continues to increase, further research is needed to provide deeper insights into how SMEs can navigate external disruptions and sustain long-term growth in an increasingly volatile global environment.

## REFERENCES

1. Asgary, A., Ozdemir, A. I., & Özyürek, H. (2020). Small and medium enterprises and global risks: Evidence from manufacturing SMEs in Turkey. *International Journal of Disaster Risk Science*, 11(1), 59–73. <https://doi.org/10.1007/s13753-020-00247-0>
2. Ashraf, B. N., & Qian, N. (2026). The effect of economic policy uncertainty on banks: Distinguishing short- and long-term effects. *Risks*, 14(1), 18. <https://doi.org/10.3390/risks14010018>
3. Bretas, V. P., & Tippmann, E. (2025). Geopolitical tensions: Risks and challenges for internationally scaling businesses. *Multinational Business Review*, 33(4), 585–603. <https://doi.org/10.1108/MBR-07-2025-0244>
4. Bu, Y., Du, X., Wang, Y., Liu, S., Tang, M., & Li, H. (2024). Digital inclusive finance: A lever for SME financing? *International Review of Financial Analysis*, 93, 103115. <https://doi.org/10.1016/j.irfa.2024.103115>
5. Choudhury, T., Fadli, A. A., Butros, N., & Fadul, A. (2025). SME, crisis and geopolitical risk: Lessons from COVID-19 and war. *Journal of Risk and Financial Management*, 18(11), 645. <https://doi.org/10.3390/jrfm18110645>
6. Fajarika, D., Trapsilawati, F., & Sopha, B. M. (2024). Influential factors of small and medium-sized enterprises growth across developed and developing countries: A systematic literature review. *International Journal of Engineering Business Management*, 16. <https://doi.org/10.1177/18479790241258097>
7. Grosse, R., Gamso, J., & Nelson, R. C. (2021). China's rise, world order, and the implications for international business. *Management International Review*, 61(1), 1–26. <https://doi.org/10.1007/s11575-020-00433-8>
8. Hien, D. T. (2025). Managing supply chain disruption risks amidst global instability. *International Journal of Advanced Multidisciplinary Research Studies*.
9. Herbane, B. (2019). Rethinking organizational resilience and strategic renewal in SMEs. *Entrepreneurship & Regional Development*, 31(5–6), 476–495. <https://doi.org/10.1080/08985626.2018.1541594>
10. Hokmabadi, H., Rezvani, S. M. H. S., & De Matos, C. A. (2024). Business resilience for small and medium enterprises and startups by digital transformation and the role of marketing capabilities: A systematic review. *Systems*, 12(6), 220. <https://doi.org/10.3390/systems12060220>
11. International Monetary Fund. (2026). World economic outlook update: Global economy—Steady amid divergent forces. <https://www.imf.org/en/publications/weo/issues/2026/01/19/world-economic-outlook-update-january-2026>
12. Ismail, V. B. A., Gölgeci, I., Pokharel, S., Safari, A., & Parast, M. (2026). Alternative paths to supply chain resilience: A contextualised processual analysis of SMEs and large enterprises facing external shocks and geopolitical tensions. *Production Planning & Control*. <https://doi.org/10.1080/09537287.2026.2625173>

13. Ivanov, D., & Dolgui, A. (2020). Viability of intertwined supply networks: Extending the supply chain resilience angles towards survivability. *International Journal of Production Research*, 58(10), 2904–2915. <https://doi.org/10.1080/00207543.2020.1750727>
14. Karmaker, C. L., Aziz, R. A., Palit, T., & Bari, A. B. M. M. (2022). Analyzing supply chain risk factors in SMEs under a fuzzy environment: Implications towards sustainability for emerging economies. *Sustainable Technology and Entrepreneurship*, 2(1), 100032. <https://doi.org/10.1016/j.stae.2022.100032>
15. Koporcic, N., Kukkamalla, P. K., Markovic, S., et al. (2026). Resilience of small and medium-sized enterprises in times of crisis: An umbrella review. *Review of Managerial Science*, 20, 301–329. <https://doi.org/10.1007/s11846-025-00883-0>
16. Legenzova, R., Leckè, G., & Lupeikytė, E. (2025). How prepared are SMEs for market disturbances? *Cogent Business & Management*, 12(1). <https://doi.org/10.1080/23311975.2025.2520463>
17. Liu, S. (2024). The impact of geopolitical risks on global supply chains: The example of the Palestinian-Israeli conflict. *International Journal of Global Economics and Management*, 4(1), 222–227. <https://doi.org/10.62051/ijgem.v4n1.30>
18. Maitra, D., Rehman, M. U., Dash, S. R., & Kang, S. H. (2021). Oil price volatility and the logistics industry: Dynamic connectedness with portfolio implications. *Energy Economics*, 102, 105499. <https://doi.org/10.1016/j.eneco.2021.105499>
19. Monge, M., Rojo, M. F. R., & Gil-Alana, L. A. (2023). The impact of geopolitical risk on the behavior of oil prices and freight rates. *Energy*, 269, 126779. <https://doi.org/10.1016/j.energy.2023.126779>
20. Nambisan, S., Wright, M., & Feldman, M. (2019). The digital transformation of innovation and entrepreneurship: Progress, challenges and key themes. *Research Policy*, 48(8), 103773. <https://doi.org/10.1016/j.respol.2019.03.018>
21. OECD. (2023). *SMEs and entrepreneurship*. OECD Publishing.
22. Saad, M. H., Hagelaar, G., Van der Velde, G., & Omta, S. W. F. (2021). Conceptualization of SMEs' business resilience: A systematic literature review. *Cogent Business & Management*, 8(1), 1938347.
23. Safari, A., Ismail, V. B. A., Parast, M., Gölgeci, I., & Pokharel, S. (2023). Supply chain risk and resilience in startups, SMEs, and large enterprises: A systematic review and directions for research. *The International Journal of Logistics Management*, 35(2), 680–709. <https://doi.org/10.1108/IJLM-10-2022-0422>
24. Satpathy, A. S., Sahoo, S. K., Mohanty, A., & Mohanty, P. P. (2025). Strategies for enhancements of MSME resilience and sustainability in the post-COVID-19 era. *Social Sciences & Humanities Open*, 11, 101223. <https://doi.org/10.1016/j.ssaho.2024.101223>
25. SME Corporation Malaysia. (2023). *SME annual report*.
26. Su, C. W., Dong, R., & Qin, M. (2025). Do geopolitical risks impede the global supply chain? *Finance Research Letters*. <https://doi.org/10.1016/j.frl.2025.107811>
27. United Nations. (2024). *Micro-, small and medium-sized enterprises day*. <https://www.un.org/en/observances/micro-small-medium-businesses-day>
28. Yan, X., & Piao, L. (2025). The effect of global geopolitical risks on trade openness. *International Review of Economics & Finance*, 102, 104366. <https://doi.org/10.1016/j.iref.2025.104366>