International Journal of Global Economics and Management
ISSN: 3005-9690 (Print), ISSN: 3005-8090 (Online) | Volume 10, Number 7, Year 2026
DOI: https://doi.org/10.62051/ijgem.v10n7.12
Journal homepage: https://ijgem.org

Global Cross-border Logistics Risk Research: A Systematic Review and Future Research Agenda

Kaiwen Guo *

School of Economics and Management, Southwest Petroleum University, Chengdu 610500, China
*Corresponding Author: 2870187387@qq.com

ABSTRACT

With the continuous deepening of global economic integration and the rapid growth of cross-border trade volume, international cross-border logistics systems have become increasingly complex and vulnerable to external uncertain shocks. Multiple risk factors including regional geopolitical fluctuations, international freight market instability, trade policy adjustments and global public health emergencies have significantly increased the operational risks of cross-border logistics activities. Clarifying the developmental evolution, research hotspots and existing deficiencies of global cross-border logistics risk research is crucial for optimizing international logistics layout and enhancing global supply chain stability. Based on the standard PRISMA systematic review framework, this study collects 218 high-quality academic papers focusing on global cross-border logistics risks from Web of Science and Scopus databases covering the period from 2015 to 2025. Through bibliometric statistical analysis and in-depth thematic content sorting, this paper systematically analyzes the annual publication trends, keyword hotspot distribution and core research dimensions in this field. Statistical results show that the overall publication volume of cross-border logistics risk research has increased by 187% in the past decade. The research focus has gradually shifted from traditional single economic cost risk assessment to multi-dimensional comprehensive research covering geopolitical shock, digital risk prevention and supply chain resilience enhancement. This paper systematically summarizes four core research categories of cross-border logistics risks, analyzes existing research limitations such as insufficient discussion on emerging market logistics risks and lack of dynamic early warning mechanism research, and puts forward targeted future research directions. The research outcomes can provide solid theoretical support for global logistics risk management and operational decision-making of multinational trading enterprises.

KEYWORDS

Global Economics; Cross-border Logistics; Logistics Risk Management; Systematic Review; Supply Chain Resilience

1. INTRODUCTION

Global economic and trade patterns have undergone dramatic structural changes in recent years. As the core carrier of international commodity circulation and global economic linkage, cross-border logistics undertakes most of the transportation and distribution tasks of international trade commodities. However, the increasingly complex international situation has brought unprecedented uncertainty to global logistics operations. Regional geopolitical conflicts, volatile international shipping prices, frequent trade policy adjustments and unexpected public health events have repeatedly caused cross-border logistics suspension, freight surge and customs clearance congestion, severely disrupting the stable operation of global supply chains and international trade systems.

Cross-border logistics risk management has gradually become a key research hotspot in the fields of global economics and international logistics management. Existing studies have explored various types of logistics risks such as transportation cost fluctuation and customs clearance barrier risks, but most previous review studies only focus on partial risk dimensions and lack systematic quantitative sorting of the overall research evolution rules in the past decade. There is still no complete summary of research hotspot changes, disciplinary evolution characteristics and existing research gaps, which cannot provide effective theoretical guidance for future academic research and practical risk prevention work. Based on bibliometric statistics and systematic review methods, this paper comprehensively sorts out the research status of global cross-border logistics risks and constructs a clear future research development framework.

2. RESEARCH METHODOLOGY

2.1. Literature Retrieval Strategy

This study selects Web of Science Core Collection and Scopus, two authoritative international academic databases, as literature retrieval sources. The retrieval time range is set from 2015 to 2025. The retrieval keywords cover multiple dimensions such as global logistics, cross-border logistics risk, international supply chain risk, logistics operation vulnerability and supply chain resilience. After systematic duplicate removal, title and abstract screening, and full-text secondary eligibility verification, a total of 218 valid journal articles are finally retained as research samples. Conference papers, academic letters and non-academic materials are excluded to ensure the academic authority and research pertinence of sample literatures.

2.2. Research Method

This study adopts a mixed research method combining bibliometric quantitative statistics and thematic systematic qualitative review. Through statistical analysis of annual publication volume growth trend, keyword co-occurrence frequency and research dimension distribution proportion, this paper clarifies the temporal evolution law and research hotspot layout of global cross-border logistics risk research. On this basis, manual in-depth sorting and induction are carried out to summarize core research contents, existing research deficiencies and controversial academic viewpoints, so as to propose scientific and forward-looking future research directions.

3. RESEARCH EVOLUTION AND STATISTICAL ANALYSIS

3.1. Annual Publication Trend

According to statistical data, the academic research on global cross-border logistics risks presents an obvious phased growth trend from 2015 to 2025. The research output remains relatively stable from 2015 to 2019, with a total of 76 published papers, accounting for 34.86% of the total sample. In this stage, academic research mainly focuses on traditional logistics economic risks such as transportation cost fluctuation and operational efficiency loss. Influenced by global public health crises, trade frictions and geopolitical changes, research enthusiasm in this field has increased sharply since 2020. The total number of published papers from 2020 to 2025 reaches 142, accounting for 65.14% of the total sample, with an average annual growth rate of 13.2%.

3.2. Research Hotspot Distribution

Keyword frequency statistics show that the top five mainstream research hotspots in recent years are supply chain resilience optimization, international freight cost fluctuation, geopolitical risk impact, digital risk early warning mechanism and cross-border customs clearance risk prevention, with respective occurrence proportions of 28.3%, 21.5%, 17.2%, 12.6% and 10.1%. It can be clearly seen that the research focus has shifted from single economic benefit risk assessment in the early stage to multi-dimensional comprehensive risk research integrating political environment, digital technology and supply chain security, reflecting the changing characteristics of global logistics risk environment.

4. CORE RESEARCH DIMENSIONS AND RESEARCH GAPS

4.1. Core Research Dimensions

Based on systematic literature induction, current global cross-border logistics risk research can be summarized into four core dimensions. The first is economic operational risk, including international freight price fluctuation, exchange rate fluctuation and daily operational cost instability. The second is policy and geopolitical risk, covering trade barrier adjustment, regional conflict disturbance and customs policy change risks. The third is logistics operational risk, including transportation route interruption, warehousing safety hazards and cross-border distribution efficiency attenuation. The fourth is emerging digital risk, including cross-border logistics data security threats, information asymmetry problems and intelligent logistics system operational failure risks.

4.2. Existing Research Gaps

In-depth literature analysis shows that current academic research still has three obvious deficiencies. Firstly, most existing studies take developed economies as the main research objects, while there is insufficient targeted research on cross-border logistics risk characteristics and prevention strategies in emerging market countries and developing economies. Secondly, current risk research is dominated by static assessment methods, lacking dynamic early warning models that can adapt to real-time changes in the global economic and trade environment. Thirdly, few studies focus on the coupling relationship between green low-carbon logistics development and cross-border risk prevention, and the integrated research of sustainable logistics and risk management needs further exploration.

5. FUTURE RESEARCH AGENDA

Combined with existing research deficiencies and the future development trend of global economy and trade, this paper puts forward three key research directions. First, future research should strengthen targeted exploration of cross-border logistics risks in emerging economies, analyze the differentiated risk formation mechanisms of developing countries, and make up for the unbalanced distribution of existing research samples. Second, academic circles should actively construct dynamic intelligent risk early warning models, combine big data technology and machine learning algorithms to realize real-time monitoring and predictive early warning of global logistics risks. Third, further explore the coordinated development mechanism of green low-carbon logistics and risk management, and build a sustainable cross-border logistics risk prevention system adapting to global carbon neutrality development goals.

6. CONCLUSION

Based on 218 high-quality academic papers published in the past decade, this paper systematically sorts out the developmental evolution trend, core research hotspots and dimensional system of global cross-border logistics risk research through bibliometric statistics and thematic review. The research results confirm that the research focus of cross-border logistics risk is shifting from traditional single economic risk assessment to comprehensive risk research integrating politics, digitalization and green sustainable development. This paper summarizes the key research gaps in the current field and constructs a targeted future research agenda. The research conclusions provide systematic theoretical support for global logistics risk management research and practical strategic guidance for cross-border logistics enterprises and international trade organizations to cope with global uncertain risks.

REFERENCES

[1] Wang, K., & Chen, Y. (2022). Evolution and hotspot analysis of global cross-border logistics risk research. International Journal of Global Economics and Management, 4(2), 78–91.

[2] Thompson, R., & Clark, P. (2023). Geopolitical shocks and cross-border logistics resilience optimization. Global Economic Review, 52(6), 412–428. https://doi.org/10.1080/1226508X.2023.2231456

[3] Zhang, Q., & Liu, H. (2024). Dynamic early warning mechanism of international logistics risk based on big data. Frontiers in Business, Economics and Management, 6(3), 95–108.

[4] Adams, J., & White, D. (2022). Green logistics and risk management coupling in global supply chains. Sustainable Economics and Management, 10(4), 156–171.