

REVIEW of STUDIES CONDUCTED in the FIELD of RETAIL LOGISTICS and RETAIL SUPPLY CHAIN

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ABSTRACT

In this study, research on retail logistics and the retail supply chain has been reviewed. The literature review was conducted on February 28, 2025, using the Web of Science (WOS) database with the keywords “retail logistics and retail supply chain.” A total of 514 articles, conference papers, and book chapters published between 2007 and the present were identified through a search in the topics field (keywords, abstracts, and titles). Among the 397 articles analyzed, 246 were indexed in SSCI, 183 in SCIE, 76 in ESCI, and 76 in CPCI-S. In terms of research categories, most studies were found in the fields of “Management (213), Operations Research & Management Science (151), Business (90), Engineering Industrial (78), and Engineering Manufacturing (61).” Regarding subcategories, the majority of studies focused on “Supply Chain & Logistics (233) and Management (102).” The highest number of studies were conducted in the USA (130) and China (92). In the present study, a bibliometric analysis of the literature was conducted based on quantitative data, aiming to provide a visual summary. The accessed publications were examined through author, country, keyword, and source analyses.

- **Bibliometric Analysis and Methodology:** Academic studies in the field of retail logistics and supply chain from 2007 onwards were examined through a bibliometric analysis based on 514 publications retrieved from the Web of Science database. The analysis was conducted using VOSviewer software, focusing on co-authorship, country distribution, keyword trends, and source analysis.
- **Distribution of Academic Publications:** The number of studies conducted between 2016 and 2025 did not show significant fluctuations, although a relative increase was observed in 2018 and 2021. In terms of publication types, journal articles were the most common format (397 publications), followed by conference papers (91 publications) and book chapters (26 publications), indicating a strong preference for journal articles and conference proceedings.
- **Academic Productivity by Country:** The United States (130 publications) and China (92 publications) ranked highest in terms of academic output in this field, with other significant contributions from the UK, Germany, and India. Additionally, co-authorship analysis revealed that the most collaborative countries were the USA, China, Germany, India, the UK, and France.
- **Keyword and Source Analysis:** The most frequently used keywords included "supply chain management," "retail supply chain," "retail logistics," and "logistics," with increasing interest in innovative technologies such as RFID.

The most cited academic sources were *International Journal of Physical Distribution & Logistics Management* and *International Journal of Retail & Distribution Management*, highlighting their prominence in the field.

Keywords: retail logistics, retail supply chains, bibliometric analysis

INTRODUCTION

Supply chain management and logistics are key factors for success in today's highly competitive environment. Supply chain management involves planning, monitoring, and controlling all processes of products or services from raw materials to final consumers (Eymen, 2007).

Retailers, who were once passive buyers supplying products to stores based on demand determined by manufacturers, have now become active actors who manage and control the supply chain. McKinnon explained the transformation in retail logistics through six main trends (McKinnon, 1996):

- **Increased control over secondary distribution:** Retailers have strengthened their control over product supply by directing them through distribution centers.
- **Restructured logistics systems:** Inventory levels have been reduced, and efficiency has been enhanced.
- **Adoption of Quick Response (QR) systems:** Faster delivery systems have been developed to increase product flow speed and reduce inventory levels.
- **Rationalization of primary distribution:** Retailers have improved supply chain efficiency from manufacturers to distribution centers.
- **Reverse logistics and recycling:** Logistics systems have been developed for the recycling and reuse of packaged materials.
- **Supply chain management and Efficient Consumer Response (ECR):** Retailers have focused on increasing supply chain efficiency by collaborating with suppliers.

These trends in retail logistics have shifted from merely focusing on product transportation and the functional aspects of logistics processes to a more holistic and integrated management approach encompassing all stages of the supply chain. This perspective emphasizes that each part of the supply chain is interconnected and must be optimized together. This transformation is commonly referred to as **Supply Chain Management (SCM)** (Ferne & Sparks, 2004).

The origins of supply chain management can be traced back to Drucker's 1962 article, "**The Dark Continent of Economics.**" At that time, distribution was discussed as a critical area for efficiency and cost savings. In its early years, the supply chain was viewed as separate functions. However, over time, the necessity of integrating these functions became evident. Through this integration, demand-driven supply chains were established, the role of information systems was enhanced, and unnecessary inventory was eliminated (Ferne et al., 2010).

In recent years, supply chains have undergone a significant transformation due to rapid technological advancements. Artificial intelligence (AI), the Internet of Things (IoT), blockchain technology, and robotic automation systems have enabled supply chains to become more efficient, flexible, and transparent. These technologies have not only increased efficiency but have also made supply chains faster, more agile, and more adaptable (De Giovanni, 2020).

LITERATURE SURVEY

Numerous studies have been conducted in the field of retail logistics and supply chain management, focusing on various aspects. The increasing number of these studies is driven by rapid technological advancements, changes in consumer behavior, the evolution of supply chain strategies, and the growing importance of environmental factors. These elements have significantly contributed to both the quality and quantity of research. Below are summaries of a few selected studies:

- **Abushaikha et al. (2020)** examined the impact of logistics clustering on inbound supply performance. Based on data from 26 interviews conducted in a logistics cluster in Jordan, findings indicated that clustering increased delivery speed, enhanced physical supply flexibility, and reduced costs. Additionally, logistics clustering improved operational efficiency, shortened supply response times, and enhanced material flow through shared knowledge.
- **Wen et al. (2019)** analyzed operational research studies on fashion retail supply chain management. Due to its consumer demand-driven nature and high uncertainty, fashion retail supply chain management faces unique operational challenges. The study systematically reviewed operational research models addressing key functional areas: manufacturer, retailer, consumer, and supply chain system.
- **Gawankar et al. (2020)** investigated how the retail 4.0 context in India influences current supply chain performance metrics and corporate performance. The study, based on a survey of 380 participants from Indian retail firms, examined the regulatory effects of governance structures on supply chain performance.
- **Kamble et al. (2019)** explored the potential benefits of IoT in food retail supply chains and the barriers to its adoption in India. Although IoT contributes to quality control, waste management, energy efficiency, and equipment monitoring, its adoption remains in its early stages. The study identified government regulations and weak internet infrastructure as significant barriers.
- **Choi (2016)** analyzed the impact of inventory service targets on fast-response fashion retail supply chains. The study highlighted that fashion retailers adopt fast-response strategies to maintain service levels without excessive stock. It examined the effects of this approach on profitability and risk in inventory planning, as well as its impact on social welfare.
- **Gopal et al. (2024)** investigated the impact of big data analytics on retail supply chains. Using an Interactive Multi-Criteria Decision Making approach, the study evaluated nine big data applications (data science, neural networks, ERP, cloud computing, machine learning, data mining, RFID, blockchain, IoT, and business intelligence) across seven performance criteria. Findings revealed challenges in balancing customer loyalty and cost efficiency.
- **Srivastava et al. (2015)** analyzed risks and performance metrics in fresh food retail supply chains using an interpretive structural modeling approach. The study classified risks into a hierarchical structure based on industry expert inputs, identifying gaps in government regulations as the most significant risk driver.
- **Mohanty et al. (2018)** aimed to improve the operational efficiency of outbound retail logistics using clustering approaches. The study modeled retail chain logistics processes with Kohonen Self-Organizing Maps (KSOM) to determine optimal retail locations, reducing delivery times, transportation costs, and carbon emissions.
- **Adivar et al. (2019)** presented a roadmap for evaluating successful retailers and proposed a framework for performance management. By comparing physical and omnichannel retail supply chains across four competitive dimensions and seven perspectives, the study provided insights into key success factors in U.S. retail firms.
- **Chan and Zailani (2024)** examined the integration of sustainability into business strategies and its connection to business value. Through literature reviews, exploratory interviews, and a case study of the Malaysian retailer ALPHA, the study analyzed mechanisms for creating sustainable shared value and outlined a framework supporting green retail supply chain development. Following this literature analysis, the next section will present the methodology and findings of this study.

METHODS and FINDINGS

To achieve the objectives of this study, a bibliometric analysis of academic research on retail supply chain/logistics published since 2007 was conducted. Before presenting the bibliometric analysis results, the key themes emerging from the literature are categorized and summarized in the following tables.

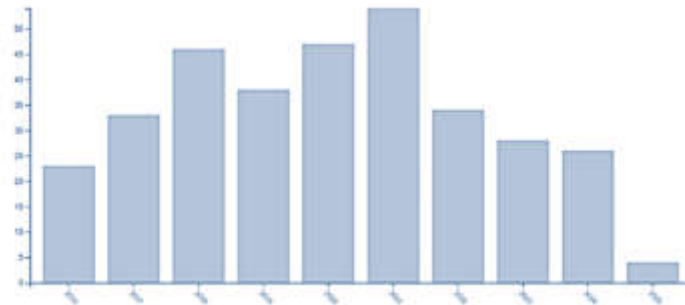


Figure 1: Distribution of Studies by Years

Between 2016 and 2025, the distribution of studies over the years does not indicate any significant changes. Although there is a relative increase in the number of studies conducted in 2021 and 2018, the overall trend suggests a balanced distribution over the years. This indicates that academic studies in the examined period have been conducted in a structured manner without major fluctuations.

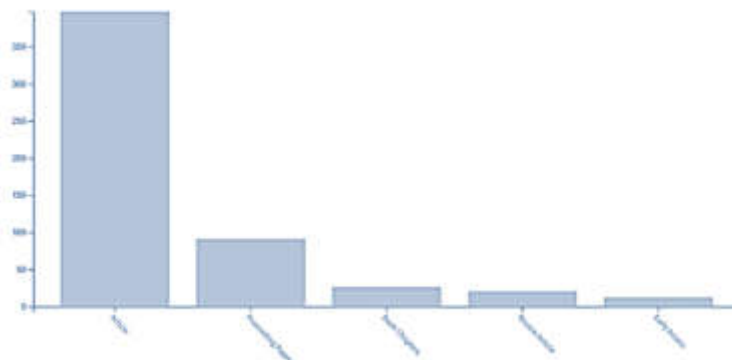


Figure 2: Distribution of Studies by Type

Figure 2 presents the distribution of publication types, revealing that the majority of studies were published in article format. A total of 397 articles constitute the highest number, followed by 91 conference papers. In contrast, book chapters are significantly fewer in number, with only 26 publications. This indicates that academic research is predominantly concentrated in article and conference paper formats, while book chapters are relatively less preferred.

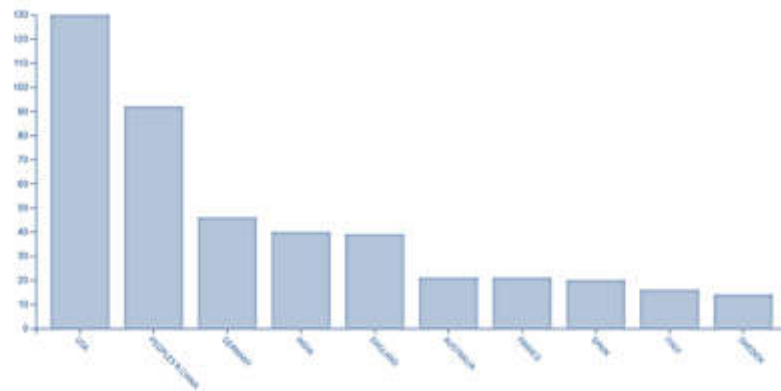


Figure 3: Distribution of Studies According to Countries

Figure 3 illustrates the countries with the highest number of academic studies during the examined period. According to this data, the United States (USA) ranks first with 130 publications, followed by China with 92 publications. These figures indicate that these countries have a high level of academic productivity in the field and make significant contributions to scientific literature.

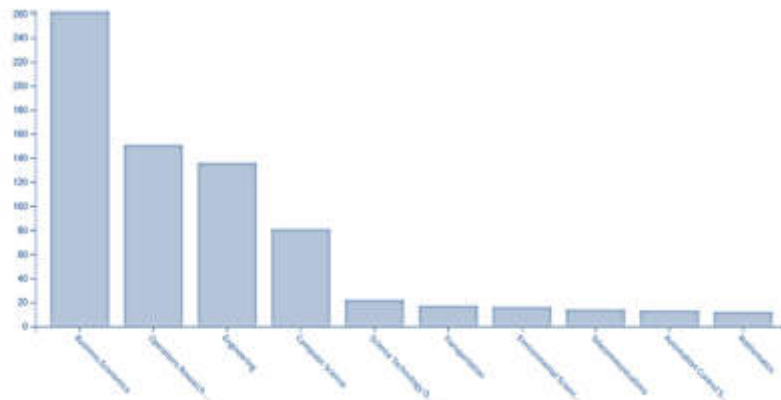


Figure 4: Distribution of Studies According to Research Area

Figure 4 shows the distribution of studies across different academic fields. The findings reveal that the highest number of publications belongs to the Business Economics field, with 262 studies. This is followed by Operations Research Management Science with 151 publications. Additionally, Engineering (136 publications) and Computer Science (81 publications) are also notable contributors to academic research. This suggests that these fields receive considerable academic interest and are the focus of a significant number of studies compared to other fields.

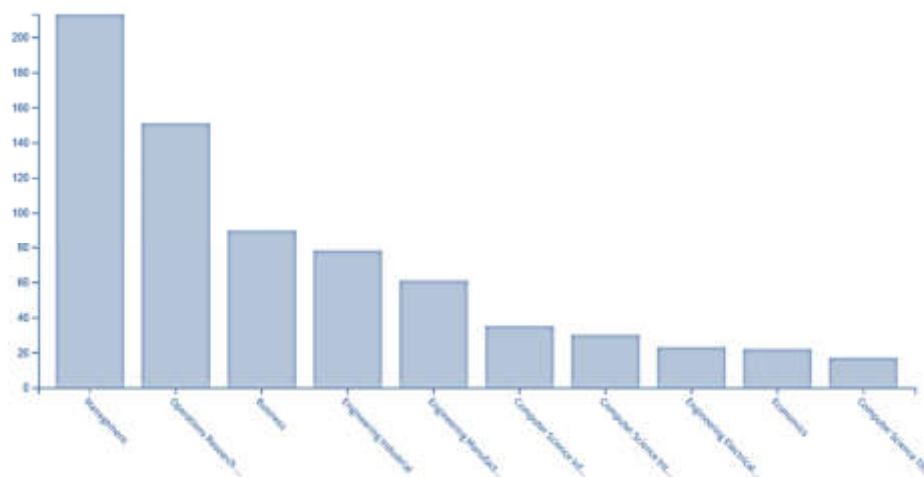


Figure 5: Distribution of Studies According to WOS Category

Figure 5 displays the distribution of publications across Web of Science (WOS) categories. According to this data, the Management category has the highest number of publications, with a total of 213 studies. This is followed by Operations Research Management Science with 151 publications. Furthermore, the Business category (90 publications) and the Engineering Industrial category (78 publications) also exhibit significant academic productivity. These findings indicate that these categories attract substantial academic attention and that researchers predominantly focus on these areas.

To achieve the objective of this study, a bibliometric analysis was conducted on academic studies in the field of retail supply chain/logistics published since 2007. Bibliometric analysis is an analytical technique that facilitates the monitoring of academic literature by utilizing visualization software to illustrate the current state of the field. This method assists in conducting a comprehensive literature review, guiding the direction of research, and identifying areas where contributions can be made (Donthu, Kumar et al., 2021).

Accordingly, a search using keyword combinations in the Web of Science database yielded 514 publications. These publications were analyzed using VOSviewer. The keyword combination used in the Topics field search was as follows: (TS=("retail logistics") OR TS=("retail supply chains") OR TS=("retail logistic") OR TS=("retail supply chain")). The retrieved publications were examined through co-authorship, country, keyword, and source analyses, with the results presented in the following figures.

Co-Authorship / Authors Analysis

In the co-authorship analysis type and authors analysis unit, a graphical representation was obtained, as shown in Figure 6. Based on this data, the author with the highest number of studies and the strongest total link strength is Brent D. Williams, followed by Matthew A. Waller.

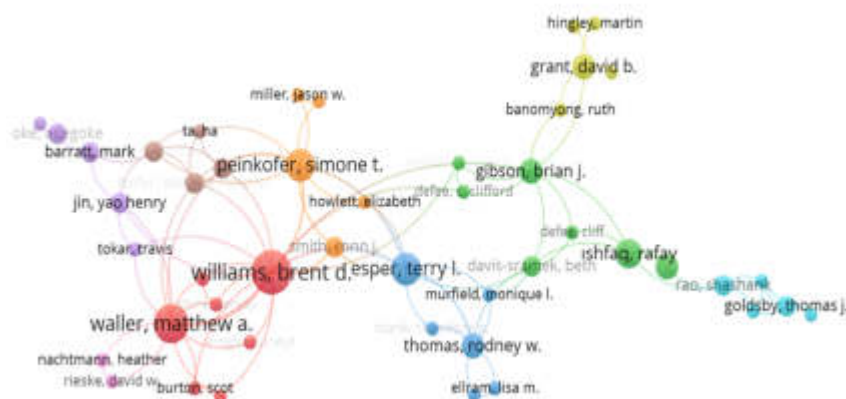


Figure 6: Co-authorship / authors analysis

Co-Authorship / Countries Analysis

In the co-authorship analysis type and countries analysis unit, a graphical representation was obtained, as shown in Figure 7. The results indicate that the countries with the highest total link strength are, in order, the USA, England, China, Germany, India, and France. While the countries with the most collaborative studies are nearly the same, their rankings differ slightly. The countries with the highest number of co-authored publications are, in order, the USA, China, Germany, India, England, and Australia.

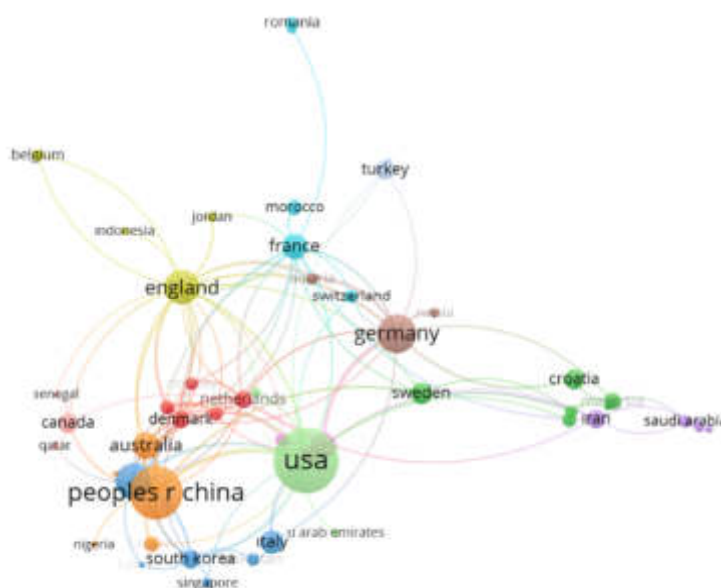
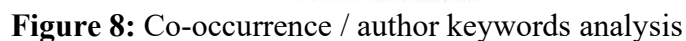


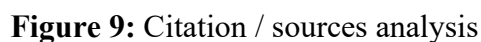
Figure 7: Co-authorship / countries analysis

Co-Occurrence / Author Keywords Analysis

In the co-occurrence analysis type and author keywords analysis unit, a graphical representation was obtained, as shown in Figure 8. The results indicate that the keywords with the highest total link strength are, in order, supply chain management, retail supply chain, retail logistics, retail, logistics, and supply chain. When considering occurrence frequency, the keywords remain the same with minor ranking differences, and the keyword RFID is additionally included.



In the citation analysis type and sources analysis unit, a graphical representation was obtained, as shown in Figure 9. The results indicate the most influential sources in the field based on citation metrics.



CONCLUSION

This study examines the academic literature on retail supply chain and logistics based on bibliometric analysis of publications from 2007 onwards. The primary aim of the study was to determine the general trends, publication types, country-based distributions, and most frequently researched keywords in academic studies related to retail logistics and supply chains. The bibliometric analysis was conducted using VOSviewer software, and a total of 514 publications were analyzed.

The majority of analyzed publication types were articles, followed by conference papers, while book chapters were relatively few. This indicates that the field is largely concentrated on journal articles and conference papers, where academic discussions predominantly take place.

The country-based analysis revealed that the United States (USA) and China are the leading contributors to research in this field. While the USA is at the forefront, other countries such as Germany, India, and the United Kingdom also hold significant positions in the literature.

Keyword analysis highlighted that terms such as "supply chain management," "retail supply chain," and "retail logistics" are among the most used terms in the retail logistics field. Additionally, it was observed that innovative concepts such as RFID technology have increasingly found a place in research.

The author-based analysis identified Brent D. Williams and Matthew A. Waller as the most prolific researchers in this field. Moreover, the most collaborative countries in research were found to be the USA, China, and Germany.

Among the most frequently cited journals, the "International Journal of Physical Distribution & Logistics Management" and the "International Journal of Retail & Distribution Management" stand out. This suggests that research on retail logistics and supply chains is highly concentrated in these prestigious journals.

This bibliometric analysis reflects the general trends in academic advancements in retail logistics and supply chains. The relatively balanced annual publication distribution indicates the continuous development of the field. The dominance of journal articles suggests that the academic community is engaging in more detailed and in-depth studies in this domain. Additionally, the growing global collaborations in retail logistics and supply chains, particularly in the USA and China, are evident.

Keyword and source analysis indicate that future research in retail supply chains will focus more on innovative technologies and systems. It is foreseeable that RFID technology and other digital systems will continue to be among the core research topics in retail logistics.

In conclusion, the findings of this study suggest that research in retail logistics and supply chains will increasingly focus on collaboration, the use of innovative technologies, and the improvement of management strategies. Future studies are expected to explore the integration of elements such as digitalization and automation into supply chain processes.

LIMITATIONS and FUTURE SCOPE

Limitations

This study has several limitations. First, the analysis is limited to publications indexed in the Web of Science database. This may have resulted in the exclusion of some academic studies, as different databases and sources provide varying insights into retail logistics and supply chain research.

Second, this bibliometric analysis is based solely on specific keywords. This means that literature beyond the selected keywords has not been considered. Since research on retail logistics and supply chains covers a broad area, keyword-based analysis may not fully represent all aspects of the field.

Another limitation is that the visualization software used (VOSviewer) analyzes data based only on specific parameters. This software focuses on topics such as authors and keywords, reflecting only certain academic trends. Therefore, not all dimensions of supply chain and logistics research can be fully explored using this tool.

Future Scope

Future research can expand the scope by collecting data from other academic databases such as Google Scholar and Scopus in addition to Web of Science. This would allow for a more comprehensive analysis of a greater number of academic studies and publication types.

Similarly, broader keyword sets could be used to better represent research on retail logistics and supply chains. This would provide more insights, especially on emerging topics such as digitalization, artificial intelligence, blockchain, and the Internet of Things (IoT).

The increasing number of studies in retail logistics and supply chains focuses on the integration of new technologies into these processes. Further research on how artificial intelligence, machine learning, robotics, IoT, and blockchain technology are transforming this field is essential. Studies examining the impact of such technological innovations on logistics processes will make significant contributions to the domain.

This study highlighted that countries such as the USA and China dominate research in this area. Future studies could focus more on retail logistics and supply chain practices in developing countries. Increasing research in regions such as Africa, Latin America, and Southeast Asia would contribute to a better understanding of the global perspective.

Future studies can also delve into the impact of sustainability and environmental concerns on retail logistics and supply chains. Topics such as eco-friendly practices, reducing carbon footprints, and green logistics could gain more prominence in academic research.

In conclusion, the diverse nature of research in retail logistics and supply chains will continue to expand and deepen. These recommendations are intended to guide future research and enhance academic contributions to the field of retail logistics.

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