

Bibliometric Analysis on SCF Adoption: A Key to Growth for Cross-Border E-Commerce SMEs

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ABSTRACT

In recent times, supply chain finance (SCF) has garnered significant attention from scholars, policymakers, and practitioners alike due to its potential to address the financial challenges faced by small and medium-sized enterprises (SMEs), especially within the realm of cross-border e-commerce. However, there is no bibliometric study in this filed. This study employs bibliometric analysis to reveal theories, methodologies, how SCF influence SEMs in cross boarder e-commerce, and its factors. The findings show that adoption of SCF by SMEs in cross-border e-commerce facilitates improved cash flow, streamlined financial processes, reduced transaction costs, shorter payment cycles, and risk management. It also fosters stronger relationships between buyers, suppliers, and financial institutions, contributing to a more collaborative and resilient supply chain. As a result, SCF is considered a strategic imperative for SMEs aiming to succeed in the global e-commerce landscape. SCF plays a critical role in enhancing the financial health, operational efficiency, and competitive positioning of SMEs in the global e-commerce arena. Its transformative impact is further amplified by digital advancements such as blockchain and AI, which increase transparency, reduce fraud, and simplify compliance with international regulations. The integration of SCF into business models positions SMEs for long-term success in the digital economy. Policymakers and financial institutions must promote SCF by developing tailored products and creating a supportive regulatory environment to encourage its adoption. Understanding the adoption of SCF by SMEs in cross-border e-commerce requires a comprehensive bibliometric analysis, which can provide theoretical depth and practical guidance for leveraging SCF for growth and competitiveness in the global marketplace.

Keywords: SCF, SMEs, cross border e-commerce

1. INTRODUCTION

Supply chain finance (SCF) has emerged as a pivotal strategy for addressing the financing challenges faced by small and medium-sized enterprises (SMEs), particularly within the context of cross-border e-commerce. This financial mechanism enables SMEs to leverage their relationships within the supply chain to secure financing on improved terms compared to traditional financing methods (Xu et al., 2018). SCF is not merely a financing tool but also a strategic lever for enhancing supply chain effectiveness (SCE) and operational performance (Ali et al., 2019)

SCF's evolution can be traced back to the 1970s, with research initially focusing on inventory models under trade credit policies, such as the Economic Order Quantity (EOQ) and Economic Production Quantity (EPQ) models (Xu et al., 2018). Over time, SCF research diversified into two main streams: one focusing on internal operations management within a firm's boundaries, and the other on financing mechanisms influencing operations throughout the entire supply chain. The latter stream, characterized by Cluster four in the bibliometric analysis by (Xu et al., 2018), represents an emerging research area that emphasizes the value creation for the whole supply chain under conditions of uncertain demand and information asymmetry.

The adoption of SCF by SMEs is influenced by a range of factors. Collaboration, negotiation, trade digitization, and the role of financial institutions have been identified as critical adoption factors that positively impact SCF and SCE.

These factors facilitate the alignment of physical and financial flows within the supply chain, creating a win-win situation for buyers, suppliers, and financial institutions. Additionally, SCF reduces transaction costs and offers risk-free financing options to SMEs, thereby improving their liquidity and SCM (Ali et al., 2019).

Existing studies predominantly investigate one-level or two-level trade credit scenarios (Xu et al., 2018). However, there is a need to expand this focus to multi-tier supply chains and consider more complex forms of trade credit policies. Empirical research on SCF's effects on supply chain performance, including the coordination of entire supply chains, has been limited. There is also a gap in understanding the impact of SCF programs on supply chain financial performance and the selection of SCF solutions for different supply chains and objectives.

Empirical evidence from a study by (Ma et al., 2020) demonstrates the importance of supply chain collaborative factors in SCF, as viewed by financial service providers in China. This research highlights the significance of inter-company collaboration, trade process digitalization, and the financial attractiveness of focal companies in the successful adoption of SCF solutions (Ma et al., 2020). These findings align with the literature that emphasizes the role of collaboration and digitalization in enhancing the effectiveness of SCF (Ali et al., 2019).

The advent of blockchain technology has transformed the landscape of SCF, offering a secure, transparent, and efficient platform for managing supply chain transactions (Zhu et al., 2019). Blockchain-driven SCF has been found to lower operational risks and improve the expected profit margins for supply chains (Choi, 2023). Moreover, the integration of blockchain with SCF can reduce the time required for verifying supplier transactions and obtaining funding (Zhu et al., 2019). This digital transformation is crucial for cross-border e-commerce SMEs, where the complexity of international transactions and the need for secure and efficient financing are paramount.

Blockchain technology also facilitates the assessment of credit risk in SCF for SMEs, enabling more accurate forecasting and risk management (Zhu et al., 2019). The use of blockchain in SCF supports the flow of financial resources, reduces costs, and increases transparency across all business activities (Mahaboob Basha H., 2023). Digital technologies, such as big data analysis, blockchain, the Internet of Things, machine learning, and artificial intelligence, have collectively propelled the market towards greater adoption of SCF.

Furthermore, SCF can act as a risk mitigation strategy for SMEs, reducing their exposure to supply chain risk (Mahaboob Basha H., 2023). This is particularly relevant for cross-border e-commerce SMEs, which often face higher uncertainties and risks due to fluctuating exchange rates, geopolitical tensions, and regulatory changes. SCF can help mitigate these risks by providing more stable and predictable financing options (A. A. & Basha, 2023).

The adoption of SCF by SMEs, especially in the context of cross-border e-commerce, is a multifaceted process influenced by internal and external factors. Collaboration, negotiation, trade digitization, and the role of financial institutions are critical determinants of SCF adoption. The integration of digital technologies, such as blockchain, is transforming SCF by enhancing transparency, reducing risks, and improving financial performance. Empirical research and theoretical frameworks suggest that SCF can significantly contribute to the growth and resilience of cross-border e-commerce SMEs by improving their access to finance and optimizing supply chain operations.

The field of supply chain finance (SCF) has grown in significance due to its potential to alleviate financing constraints for small and medium-sized enterprises (SMEs) and improve the overall efficiency of supply chains. Despite the increasing volume of research on SCF, there remains a critical gap in understanding the evolution, trends, and thematic areas of SCF research, particularly in relation to its adoption by SMEs in the context of cross-border e-commerce. This gap is evident in the absence of a comprehensive bibliometric analysis that maps out the knowledge structure, identifies influential authors and journals, and traces the development of SCF as a discipline.

Existing literature reviews on SCF either focus narrowly on specific themes or adopt qualitative content analysis methods, which may not capture the breadth and depth of the research landscape effectively. For instance, (Gelsomino et al., 2016) concentrate on SCF concepts and solutions, while (Xu et al., 2018) provide a systematic literature review combined with bibliometric analysis, but their analysis is not specifically tailored to the adoption of SCF by SMEs in the e-commerce sector.

To address these gaps, conducting a bibliometric analysis in the field of SCF adoption by SMEs is imperative. Such an analysis would offer a quantitative and systematic approach to understanding the landscape of SCF research, identifying key trends, and uncovering thematic clusters that have evolved over time. It would enable researchers to pinpoint underexplored areas, such as the role of digital technologies in SCF, the impact of SCF on SME growth in

cross-border e-commerce, and the interplay between SCF and sustainable supply chain practices. In addition, a bibliometric analysis would provide insights into the most influential authors, journals, and papers, facilitating a better understanding of the intellectual foundations of SCF research. By mapping out the citation networks and co-citation analysis, the analysis could reveal the foundational studies that have shaped the field and the emerging trends that are likely to influence future research directions. Therefore, the research gap in understanding the adoption of SCF by SMEs in the context of cross-border e-commerce calls for a comprehensive bibliometric analysis. This analysis would not only enrich the theoretical underpinnings of SCF but also offer practical guidance for SMEs seeking to leverage SCF for growth and competitiveness in the global marketplace. The main contributions of this study are:

1. **Identification of SCF's Role in Cross-Border E-Commerce:** The study highlights the importance of SCF in addressing financial challenges faced by SMEs in this sector. It demonstrates how SCF can lead to improved cash flow, streamlined financial processes, reduced transaction costs, shorter payment cycles, and effective risk management.
2. **Enhancement of Supply Chain Resilience:** SCF fosters stronger relationships between buyers, suppliers, and financial institutions, contributing to a more collaborative and resilient supply chain, which is crucial for SMEs operating globally.
3. **Digital Transformation Impact:** The study underlines the transformative impact of digital advancements like blockchain and AI on SCF. These technologies increase transparency, reduce fraud, and simplify compliance, positioning SMEs for long-term success in the digital economy.
4. **Bibliometric Analysis of SCF Literature:** The research employs bibliometric analysis to review the existing literature on SCF adoption by SMEs in cross-border e-commerce. It identifies trends, gaps, and the most influential authors and journals in the field.
5. **Insight into Factors Driving SCF Adoption:** Internal drivers such as cost reduction, working capital management, and risk mitigation are highlighted. External factors include market dynamics, regulatory compliance, and technology advancements. Strategic considerations like supply chain visibility and access to capital are also discussed.

2. METHOD

This study reviews the still modest but rapidly increasing body of academic papers on SCF of SMEs. Therefore, it goes beyond a single company or organization. Practically, it orients along the bibliometric literature review methodology. For practitioners, Bibliometric analysis offers a quantitative method to measure, analyse, and visualize trends, impacts, and patterns in academic literature, enabling researchers to identify influential works, key contributors, and emerging areas in a field of study.

In this study, we first located relevant academic papers based on our objective of SCF is a key to Growth for Cross-Border E-Commerce SMEs. For guarantee the quantity of this study, we limited the corpus to journal articles that indexed in the Web of Science (WoS) database, published in English, and omit report, conference paper and book. Following search strategy is performed in the WoS, supply chain finance (All Fields) and small medium enterprise (All Fields) and cross-board e-commerce (All Fields); Time span is until 2025. Initially, 207 publication data are obtained. Subsequently, retrieved publications were checked manually (by reading the title and abstract). We exclude articles that (1) doesn't analyse SCF impacts on SMEs; (2) doesn't analyse how SCF influence SMEs;

Nest step, this study employed Bibliometrix R package for qualitative analysis, which offers comprehensiveness, covering multiple analysis aspects, user-friendliness for non-experts, and automated workflows. Flexibility, big data handling, and rich visualizations further enhance its appeal. This open-source tool, applicable across disciplines, empowers this study with deeper insights into academic literature.

3. RESULTS

In the following sub-sections, this study presents analysis of bibliometric data and outlines and discuss the scholarly evidence on SCF impacts on SMEs.

3.1. Analysis of bibliometric data

This study presents basic characteristics of analysed corpus. *Figure 1* shows the annual scientific production on SCF on SMEs in cross border e-commerce. The number of publications was fluctuating between 2005 to 2017, then sharply increasing. Annual growth rate was 10.78%. SCF of SMEs is a rapid expanding field.

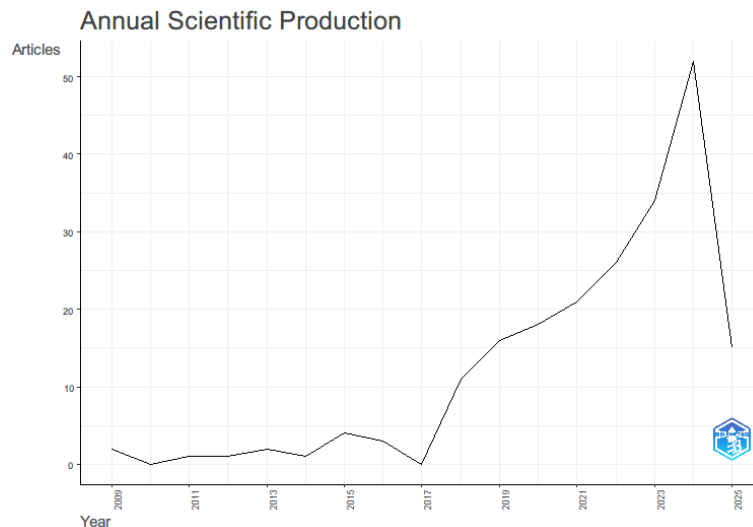


Figure 1 Annual scientific production

Table 1 shows that Sustainability is outstanding in this rank with 27 publications. Following are Journal Enterprise Information Management, Journal of Business and Industrial Marketing, and Industrial Management Data Systems.

Table 1 The most relevant sources

Sources	Articles
SUSTAINABILITY	27
JOURNAL OF ENTERPRISE INFORMATION MANAGEMENT	9
JOURNAL OF BUSINESS INDUSTRIAL MARKETING	8
INDUSTRIAL MANAGEMENT DATA SYSTEMS	5
INTERNATIONAL JOURNAL OF OPERATIONS \& PRODUCTION MANAGEMENT	5
INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS	5
RESEARCH IN INTERNATIONAL BUSINESS AND FINANCE	5
TRANSPORTATION RESEARCH PART E-LOGISTICS AND TRANSPORTATION REVIEW	5
ELECTRONIC COMMERCE RESEARCH	4
FINANCE RESEARCH LETTERS	4

Table 2 shows the most cited authors, which indicates authors' contribution in this field. Song H leads this rank with 58 publications, and is the most cited author. This indicates Song H has made significant contribution in this field. Flowing is LU Q is another author who has also made significant contributions, and received 48 citations,. Ali Z ranks the third with 42 citations.

Table 2 The Most Cited Authors

Author	Number of Cited
SONG H	58
LU Q	48
ALI Z	42
MEHREEN A	42
BI GONGBING BG	39
YU K	32
LIU B	26

3.3. Methodology that applied

Quantitative methodologies used in studies related to Supply Chain Finance (SCF) adoption have varied across different research areas. In the context of SCF and its impact on Small and Medium Enterprises (SMEs), several quantitative approaches have been employed to understand and analyze the factors influencing adoption, the benefits and risks involved, and the strategic implications for firms.

One common quantitative method used is the questionnaire survey. A structured questionnaire was administered to SMEs in the textile industry to assess the effects of SCF on supply chain effectiveness (SCE) (Ali et al., 2018). This approach allowed for the collection of data regarding the adoption of SCF and its subsequent impact on SCE, which was then statistically analysed.

Statistical analysis, specifically regression analysis, has been utilized to test hypotheses and establish relationships between variables. Hierarchical linear regression, a variant of multiple linear regression, was employed to analyse the relationship between SCF adoption, performance, and risk in Chinese manufacturing SMEs (Liu et al., 2018). This helped to identify how SCF adoption positively influenced SME performance but negatively impacted risk.

Bibliometric analysis, which involves the statistical examination of scholarly publications, has also been used to systematically review and analyse the literature on SCF. Xu et al. (2018) conducted a bibliometric analysis to map the knowledge structure of SCF research, identify key authors, and evaluate the prestige of reviewed papers. This method provided insights into the evolution of SCF research over time and helped to identify research clusters.

Network analysis is another quantitative technique that has been applied to SCF research. Through bibliometric tools, Xu et al. (2018) identified established and emerging topical areas in SCF, setting the stage for further investigation into the evolution of research clusters over the years.

Content analysis, often combined with bibliometric analysis, has been used to gain deeper insights into research themes and identify gaps for future research. Xu et al. (2018) conducted a content analysis of key papers based on journal quality and PageRank scores, which provided additional insights into current research themes and suggested directions for future research.

Analytical models have been developed to study the optimal contracting and quantity decisions in supply chains that employ SCF. Choi (2020) developed analytical models for traditional and blockchain-supported supply chains, comparing optimal systems performance between the two.

Machine learning approaches have been applied to forecast credit risk in SCF for SMEs. Zhu et al. (2019) used an enhanced hybrid ensemble machine learning approach to predict SME credit risk in SCF, demonstrating the utility of advanced algorithms in risk assessment.

3.4. How SCF influences SMEs in cross boarder e-commerce

Supply Chain Finance (SCF) plays a crucial role in shaping the landscape of cross-border e-commerce for Small and Medium Enterprises (SMEs). SCF solutions have evolved from being predominantly financial-driven to becoming more integrated with the supply chain, offering a range of benefits to SMEs involved in international trade. These benefits are particularly evident in the areas of liquidity management, risk mitigation, and fostering competitive advantage.

Liquidity Management: SCF schemes provide SMEs with access to working capital that is otherwise tied up in inventory or receivables. By leveraging SCF, SMEs can convert their illiquid assets into cash, which is essential for managing cash flow in a dynamic and competitive market. This liquidity boost enables SMEs to respond quickly to market demands and opportunities, enhancing their operational flexibility and reducing the financial strain associated with delayed payments.

Risk Mitigation: one of the key advantages of SCF for SMEs is its ability to mitigate financial risks. By integrating financial flows with the supply chain, SCF reduces the mismatch risk between supply and demand in financial transactions. This helps SMEs manage credit risk more effectively, as financial institutions (FIs) can better assess the creditworthiness of the entire supply chain, not just the SME itself. Additionally, SCF can lower the cost of debt for SMEs, providing them with lower interest rates and better financing terms compared to traditional lending.

Competitive Advantage: SCF can contribute to the competitive edge of SMEs by improving their financial health and enabling them to compete on equal footing with larger firms. Improved cash flow and reduced credit risk can lead to better supplier relationships, as SMEs can pay their suppliers more promptly. This in turn can result in better terms from suppliers, such as discounts or extended payment periods, which further strengthen the SMEs' financial position. Moreover, SCF can facilitate international expansion by easing the financing constraints that often hinder SMEs from entering new markets.

Technology and Digitalization: the integration of digital technologies into SCF solutions is transforming the way SMEs engage in cross-border e-commerce. Digital platforms enable seamless transactions, real-time monitoring, and enhanced data analytics, which can provide SMEs with insights into market trends and customer behavior. This technological advancement supports more efficient and secure financial processes, making SCF more accessible and beneficial for SMEs.

Collaboration and Ecosystem Development: SCF promotes collaboration among different stakeholders in the supply chain, including buyers, suppliers, and financial institutions. This collaboration is crucial for the success of SCF, as it ensures that all parties share accurate information and work together to optimize financial flows. The development of a 'win-win' ecosystem through SCF can lead to greater financial stability and improved performance for SMEs.

Regulatory Environment: the regulatory landscape also plays a significant role in the effectiveness of SCF for SMEs. Standardization of electronic invoicing and other regulatory measures can streamline the adoption of SCF solutions, making them more accessible to SMEs. Compliance with regulations can also reduce the transaction costs associated with SCF, further enhancing its appeal to SMEs.

3.5. Factors of SMEs in cross boarder e-commerce adopting SCF

Adopting Supply Chain Finance (SCF) in cross-border e-commerce for Small and Medium Enterprises (SMEs) involves a range of factors that influence their decision-making and implementation processes. We extracted 10 factors and categorized into internal and external drivers, as well as strategic considerations.

Internal Drivers:

1. **Financial Efficiency and Cost Reduction.** SMEs look to SCF to streamline financial transactions and reduce costs associated with traditional financing methods (Cagno & Trianni, 2013).
2. **Working Capital Management.** SCF assists SMEs in managing working capital more effectively by providing liquidity through financing solutions like reverse factoring (Lekkakos & Serrano, 2016).
3. **Risk Mitigation.** SCF can mitigate risks associated with cross-border transactions by providing insurance against non-payment and reducing credit risks (Zhu et al., 2019).

External Drivers:

4. **Market Dynamics.** Changes in market conditions, such as increased competition and customer demand for faster delivery, push SMEs towards SCF for quicker and more reliable financial processes (Moretto & Caniato, 2021).
5. **Regulatory Compliance.** Compliance with international trade regulations and standards can be facilitated through SCF platforms that offer automated compliance checks (Ma et al., 2019).
6. **Technology Advancements.** The advent of digital technologies, such as blockchain, enhances transparency and security in supply chain transactions, making SCF more appealing to SMEs (Choi, 2020).

Strategic Considerations

7. **Supply Chain Visibility.** SCF can provide enhanced visibility into the supply chain, allowing SMEs to better manage inventory and anticipate demand (Ali et al., 2018).
8. **Collaborative Relationships.** Building stronger relationships with suppliers and buyers through collaborative SCF solutions can improve terms and conditions for SMEs (Chong et al., 2009).
9. **Access to Capital.** SCF can improve SMEs' access to capital by leveraging the creditworthiness of their larger trading partners (Wong et al., 2020).

10. Sustainability. SMEs are increasingly looking at SCF as a way to integrate sustainability into their financial practices, addressing environmental and social concerns (Liang et al., 2018).

Internal drivers such as financial efficiency and cost reduction are central to SMEs' decision-making process regarding SCF. Cagno & Trianni (2013) elucidate that SMEs are continuously seeking ways to streamline their financial transactions and cut down on the costs associated with conventional financing methods. This pursuit of financial efficiency is intrinsically linked to working capital management, where SCF plays a crucial role by providing liquidity through innovative financing solutions like reverse factoring, as highlighted by Lekkakos & Serrano (2016). Additionally, risk mitigation is a critical internal driver that interacts with financial efficiency; SCF can provide insurance against non-payment and reduce credit risks, as Zhu et al. (2019) note, which in turn bolsters financial efficiency by securing more favourable financing terms.

External drivers like market dynamics exert significant pressure on SMEs to adopt SCF for quicker and more reliable financial processes. Moretto & Caniato (2021) observe that in response to heightened competition and customer demands for expedited delivery, SMEs are compelled to integrate SCF to maintain pace with evolving market conditions. Regulatory compliance is another external driver that interacts with market dynamics. SCF platforms can facilitate adherence to international trade regulations and standards through automated compliance checks, as Ma et al. (2019) suggest, enabling SMEs to focus on market responsiveness without compromising on legal requirements. Furthermore, the advancement of digital technologies, particularly blockchain, as Choi (2020) discusses, has significantly enhanced transparency and security in supply chain transactions, making SCF a more attractive proposition for SMEs seeking to harness the benefits of technological innovation.

Strategic considerations, including supply chain visibility and collaborative relationships, are pivotal in shaping SMEs' SCF adoption. Ali et al. (2018) emphasizes that SCF can offer enhanced visibility into the supply chain, enabling SMEs to better manage inventory levels and predict demand patterns, which in turn optimizes working capital management and financial efficiency. Chong et al. (2009) argue that building stronger relationships with suppliers and buyers through collaborative SCF solutions can lead to improved terms and conditions, fostering a more stable financial environment and reducing credit risks. Access to capital, as Wong et al. (2020) illustrate, is a strategic consideration that is deeply intertwined with collaborative relationships and financial efficiency; SCF can improve SMEs' access to capital by leveraging the creditworthiness of their larger trading partners, thereby facilitating working capital management and risk mitigation.

Sustainability is an increasingly important strategic consideration that interacts with both internal and external drivers. Liang et al. (2018) discuss how SMEs are looking to integrate sustainability into their financial practices through SCF, addressing environmental and social concerns while also potentially benefiting from reduced costs and enhanced reputation. This focus on sustainability can also strengthen collaborative relationships, as businesses that demonstrate commitment to responsible practices are more likely to attract favourable trading terms and capital from investors who prioritize corporate social responsibility.

The interplay between these internal drivers, external drivers, and strategic considerations creates a complex yet dynamic framework that guides SMEs' SCF adoption. For instance, the interaction between financial efficiency and market dynamics pushes SMEs to adopt SCF solutions that not only reduce costs but also allow them to remain competitive in rapidly changing markets. Similarly, the synergy between working capital management and access to capital ensures that SMEs can maintain liquidity and secure funding even in challenging economic conditions. The integration of risk mitigation strategies with regulatory compliance enables SMEs to navigate the legal complexities of cross-border transactions while minimizing financial risks. Lastly, the alignment of supply chain visibility, collaborative relationships, and sustainability fosters a holistic approach to SCF adoption that enhances not only financial performance but also the broader social and environmental impact of SMEs' operations.

In conclusion, the intricate network of interactions between internal drivers, external drivers, and strategic considerations is crucial for the successful adoption and utilization of SCF by SMEs in cross-border e-commerce. Each factor not only contributes to the overall benefits of SCF but also reinforces the others, creating a virtuous cycle that enhances financial resilience, operational efficiency, and competitive advantage in the global marketplace. This interconnectedness underscores the importance of a comprehensive strategy that considers all aspects of the business environment when implementing SCF solutions.

4. DISCUSSION AND CONCLUSION

Current literature reveals that the adoption of Supply Chain Finance (SCF) by Small and Medium Enterprises (SMEs) engaged in cross-border e-commerce is indeed a pivotal strategy for achieving growth and overcoming common barriers faced in this sector. SCF is not merely a financial tool; it is a strategic asset that can reshape the competitive landscape for SMEs in cross-border e-commerce. By addressing the core financial constraints that SMEs face, SCF enables these businesses to focus on core competencies, innovate, and scale up without being stifled by liquidity issues. Moreover, the digital transformation of SCF, driven by advancements in technology such as blockchain and AI, is revolutionizing the way SMEs operate globally. These technologies enhance transparency, reduce fraud, and simplify compliance with international regulations (Wong et al., 2020). The transformative impact of SCF on the financial health, operational efficiency, and competitive positioning of SMEs in the global e-commerce landscape are also underscored.

SMEs often struggle with limited access to finance, particularly in cross-border contexts where traditional financing methods can be prohibitive (Abbasi et al., 2018). SCF solutions, by leveraging the creditworthiness of larger players in the supply chain, provide SMEs with more affordable and accessible financing options (Cagno & Trianni, 2013). SCF can significantly improve cash flow by converting receivables and inventory into immediate liquidity, thus enhancing the financial stability and agility of SMEs (Liu et al., 2018).

The integration of SCF with digital platforms and technologies has been shown to streamline financial processes, reduce transaction costs, and shorten payment cycles (Ma et al., 2019). This leads to more efficient and responsive supply chain operations.

SCF mechanisms can help SMEs manage risks associated with cross-border transactions, such as currency fluctuations, geopolitical uncertainty, and supply chain disruptions (Zhu et al., 2019). By spreading risk across the supply chain, SCF can create a more stable financial environment for SMEs.

The adoption of SCF fosters stronger relationships between buyers, suppliers, and financial institutions, contributing to a more collaborative and resilient supply chain (Chong et al., 2009). This network effect can open doors to new markets and customers for SMEs.

Therefore, the adoption of SCF is a critical step for SMEs looking to grow and succeed in cross-border e-commerce. It provides a pathway to overcome financial barriers, streamline operations, manage risks, and foster strategic partnerships. As global trade becomes increasingly complex, SCF emerges as a cornerstone for SMEs seeking to navigate the challenges and capitalize on the opportunities presented by the digital economy. SMEs should consider SCF as a strategic imperative rather than an optional financial arrangement. By integrating SCF into their business models, SMEs can position themselves for long-term success in the global e-commerce arena. Financial institutions and policymakers also have a role to play in promoting SCF by developing tailored products and creating a supportive regulatory environment that encourages its adoption.

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