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Sustainable Supply Chain Finance: Evolution, Developments and Proposed Future Agenda

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Abstract

Sustainable supply chain finance (SSCF) has recently gained research momentum due to its link with multi-disciplinary subject areas of environmental, economic, and social, which are aligned with sustainability to benefit the whole supply chain (SC) network. However, this alignment requires an extensive literature review and bibliometric analysis to link the financial prospects with the diversified fields and highlight the underpinning area for further investigation. The current study has conducted a bibliometric analysis to visualize the knowledge structures and latest developments in the SSCF field. It delineates a thorough literature review of the scientific publications related to the topic. This paper used bibliometric and network analysis of the SSCF-related literature extracted from the Scopus database covering the time domain of 2009-2023. It examined the evolution process, connected theories, and analyzed the relevant review articles. It also explained the knowledge structure and reported the key contributing authors, publications, sources, institutions, and countries. The research reported the future trends and research themes through network analysis and found seven clusters: (1) conceptualization & exploration of SSCF, (2) social dimension of SSCF, (3) framework for financial service provider, (4) economic dimension of SSCF, (5) environmental dimension of SSCF, (6) integrated approach of SSCF, (7) risk assessment & management for SSCF scholars for further research in the field.

Keywords: Sustainable Supply Chain Finance, Supply Chain Network, Environmental, Economic, Social, Sustainability, Financial Prospects.

1. Introduction

Recent economic development leads to many environmental obstacles that directly impact the health of living beings (1). Every nation struggles to achieve sustainable economic development without compromising the ecological parameters and successfully handling global issues like hunger, poverty, inequality, global warming, etc. (2). However, technological advancements increase the massive energy utilization that causes the spread of harmful pollutants and carbon emissions. The manufacturing sector is one of the leading energy consumers in the world (3). Production and transportation are the key sectors in the supply chain (SC) process and the main contributor to environmental pollution. However, governments promote eco-friendly approaches of green, clean production and renewable energy policies to avoid adverse consequences of traditional energy sources (4). Through supply chain management (SCM) strategies, companies can enforce green policies that help to take financial benefits from the government or regulators and reduce pollution emitted to the environment. SCM is a network of multiple firms collaborating to convert raw materials into finished goods (5).

Sustainable Supply Chain Management (SSCM) is an advanced form of SCM. Souto (6) claimed that sustainable development is linked with economic, social, and environmental aspects. Triple Bottom Line Theory (TBLT) strengthens the argument by stating that significance for profit, people, and the planet to gain long-term prosperity and viability (7). SC is also linked with the financial perspectives of the organization that aims to generate financial gains for stakeholders and maximize their wealth. Jia et al. (8) stated that supply chain finance (SCF) effectively improves firms' financial performance. SCF and sustainability have recently evolved to entail more than social, economic, and environmental issues with corporate philanthropy (9). It can bind all the stakeholders to reduce pollutants and utilize the resources involved in SC networks for sustainability.

Sustainable supply chain finance (SSCF) is an innovative SCF practice that creates a win-win situation for the environment, society, and economy (10). However, the concept of SSCF is novel and still emerging (11). There is limited theoretical and empirical support available for conceptualizing. It highlights the need to outline the picture of relevant research to understand the evolution process and guide the SC stakeholders about its future perspective (12). Further, the concept of SSCF integrates multi-disciplinary perspectives of environmental, economic, and social, which are aligned with sustainability to benefit the whole SC network. This alignment required more understanding to link the financial prospects with the diversified fields and extend the scope of SSCF. Prior literature showed very few systematic reviews or bibliometric analyses on the topic. These

studies either focused on journal-based publications (38) or covered a few of the SSCF-related concepts like ESG (13), sustainable finance (14), green finance (15), environmental finance-related literature (16) and the relationship between SCF and sustainability (8). These studies either belonged to different databases or periods and suggested more reviews in the field for SSCF development.

The current study has conducted a bibliometric analysis to visualize the knowledge structures and latest developments in the SSCF field. It delineates a thorough literature review of the scientific publications related to the topic. It aims to answer the following research questions: (1) How does SSCF integrate economic, environmental, and social benefits for the stakeholders involved in business activities? (2) What are the contributing factors (researchers, publications, sources, institutions, and countries) in developing the SSCF system? (3) What is the future of the concept? The current study makes valuable contributions to SSCF literature. Firstly, it highlights the critical knowledge frontiers in the SSCF by reporting the prominent contributing researchers, publications, sources, institutions, and countries that emphasize adopting the system. Secondly, it provides the theoretical and empirical justification for integrating the SSCF concept with economic, environmental, and social benefits. Third, it identifies future research trends and themes through keywords, trends, co-occurrence network analysis, and bibliometric coupling.

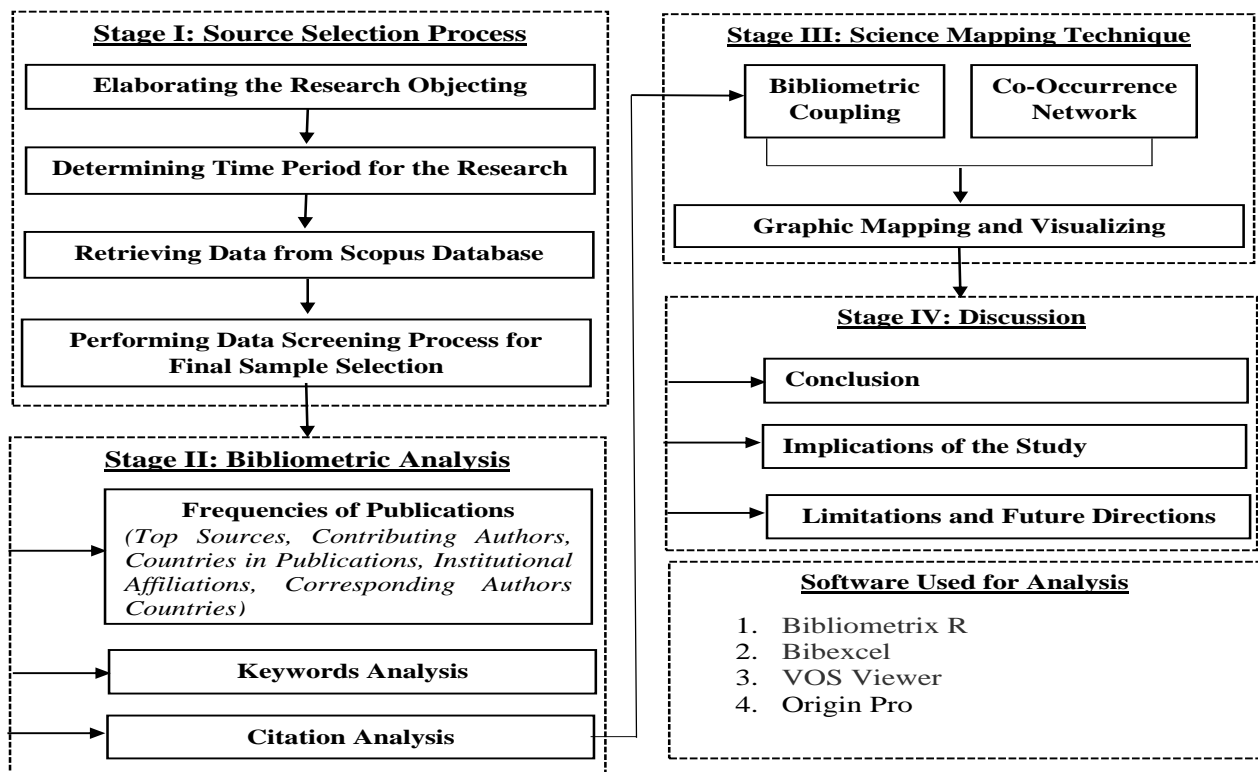


Figure 1. Steps of Bibliometric Analysis

Figure 1 explains the steps of bibliometric analysis by following the procedure suggested by Donthu et al. (17) and Khan et al. (18). It also specifies the software employed in the data analysis process. However, the remaining paper is arranged as follows: first, it discusses the literature review and theoretical perspective of SSCF including its history, theoretical support, and summary of review studies. Second, it explained the material and methods. Third, it discusses the result section, which consists of performance analysis, citation analysis, and a co-occurrence network of keywords. Finally, it ends up in the discussion section containing the conclusion, research implications, limitations and future directions.

2. Literature Review and Theoretical Perspective

This section discussed the empirical evidence for the evolution of SSCF. It provides theoretical and empirical foundations for the conceptualization and integration of SSCF with economic, environmental, and social benefits for the SC stakeholders.

2.1 Evolution of Sustainable Supply Chain Finance

The SCM included all processes from product development to shipment to the ultimate consumer (19). Previously, it is linked with just the flow of goods and information among the SC members (20). However, the concept is interlinked over time with diversified fields to solve multi-dimensional issues (21). Because many scholars believe that sustainable development cannot be achieved without creating a balance between Triple Bottom Line (TBL) and SC activities (22), they attach business goals to sustainability goals. Over the last 10-15 years, sustainability issues have been mainly embedded with CSR activities to achieve social and environmental targets. However, none has applied in business operations like SC to gain environmental, social, and governance (ESG) targets (9). However, the concept of CSR is discussed in the context of social and environmental sciences. Moneva et al. (23) highlighted the importance of sustainability reporting practices to promote environmentally and socially responsible investments (SRI) that ensure financial returns.

SSCM is the way to manage the material, information, and capital flow necessary to convert raw materials into finished goods that are ultimately delivered to the customer (24). It collaborates with SC partners and implements sustainable development goal (SDG) initiatives from the TBLT dimensions (7). It supports developing a friendly alliance with all SC members where each member can link their goal with the goals of their partners (25). It can promote mutual trust, confidence, and collaboration among the partners, ultimately resulting in higher financial rewards (26). Some researchers presented the knowledge-based view of SSCM, which emphasizes knowledge sharing and feedback loops, improving the organizational productive capacity (27).

The primary function of finance is to allocate funds for the most productive use. Sustainable finance creates a link between finance, economics, social and environmental issues and aligns them with sustainability to provide future solutions to the problems (28). SCF helps to productively utilize the SC resources that improve financial performance (8). It is integrated with finance, logistics management, and SCM and is critical in chasing the SSCM (10). The history of SCF can be traced back to 1970 when the relationship between inventory management, trade creditors, and generated cash flows was investigated (29). It helps firms to meet their working capital requirement efficiently (30). However, the concept evolves with time and attaches to firms' sustainability goals for long-term gain.

Alshater *et al.* (31) stated that sustainable finance and ESG are emerging research that can be the basis of SSCF. The idea of SSCF was introduced in 2018 to promote trade transactions in such a way that minimizes harmful impacts and provides economic, environmental, and social benefits to all stakeholders involved in the SCM process (32). Initially, it is conceptualized with TBLT, but later, it emphasizes long-term social and environmental goals rather than short-run economic objectives (33). The question of why SSCF is required is still debatable among scholars and policymakers. Huang *et al.* (29) claimed that SSCF helps in the optimal allocation of financing in the SC networks, reducing conflicts, improving financial sources and cash flow management, and achieving long-run sustainability.

2.2 Theories and Concepts

The SSCF is still theoretically underpinning as it is related to diversified fields of study (business, organizational behaviour, economics, sustainability, social and environmental sciences). The available theories discussed just one or two related areas but failed to cover other aspects of SSCF. Table 1 explains the key theories that help in nurturing the SSCF concept. TBLT is focused on three Ps: people, planet, and profit, which depict the social, environmental, and economic/financial aspects. It explains that firms can only achieve a sustainable market position when they fulfil society's social and ecological needs. Ecological modernization theory is an environmental theory that researchers apply in the context of different subjects. It solves environmental changes by adopting innovative production processes and suggests social explanations for the concept (34). Even at the micro level, it grows as a tool for promoting strategic environmental management in private sector businesses (35). Zhang *et al.* (36) stated that firms could take advantage of green credit policy implementation by building a good environmental reputation.

Table 1: Theoretical Support to SSCF

Theories	Concepts	References
Triple Bottom Line Theory	<ul style="list-style-type: none"> • Create a balance from a triple-bottom-line perspective (society, environment, economy). • Helps to mitigate risk and ensures sustainability in business activities for all stakeholders. 	Tseng <i>et al.</i> (33)
Ecological Modernization Theory	<ul style="list-style-type: none"> • Based on ideas and concepts discussed in management and organizational studies. • Provides a social theoretical explanation of global environmental change. • Emphasizes that economic development can be achieved without deteriorating the natural environment if creative ideas, innovative technologies, and modern measures are adopted. 	Zhang <i>et al.</i> (36)
Transaction Cost Economics Theory	<ul style="list-style-type: none"> • Analyzes how the financial flow management can affect the SC network's economic returns. • Reduces production cost and financial risk and enhances SC performance. 	Wuttke <i>et al.</i> (37)
Agency Theory	<ul style="list-style-type: none"> • Reduces miscommunication and conflicts among the SC members. • Promote confidence and ensure long-term sustainability. 	Zfohl and Gomm (20)
Network Theory	<ul style="list-style-type: none"> • Emphasizes building a trustworthy relationship between the SC partners, which helps them to contribute positive value creation. 	Jayaram and Pathak (27)
Goal Inter-dependence Theory	<ul style="list-style-type: none"> • Individuals' beliefs about integrating their goals with SC partners can promote a supportive culture. • It minimizes risk, increases trust, confidence, and rewards higher returns to the whole network. 	Yang <i>et al.</i> (38)

Social Exchange Theory	<ul style="list-style-type: none"> • Contends the motivation of individuals who interact with each other to seek reward or to avoid punishments. • An SC network promotes transparency, and the mutual trust relationship between SC partners enhances efficiency and performance. 	Griffith <i>et al.</i> (25)
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Many researchers discuss transaction cost economies theory in the context of SCF. It reduces production costs and enhances business productivity for all SC partners (37). SC network includes many partners that often create conflicts due to information asymmetry. Agency theory in SSCF acts as a cooperative partner that helps to reduce disputes between the partners by investigating their intentions and ensuring long-term sustainability (20). It consolidates information asymmetry and creates a mutual trust relationship between SC members (39). Network theory is also one of the contributing theories in the field that emphasizes building a trustworthy relationship between the SC partners, which helps them to contribute positive value creation (27). Social exchange theory provides conceptual linkages and theoretical underpinnings of SSCF and explains how it benefits the SC network (38). It discusses that SC partners try to build confidence, ensure transparency in the system, and cooperate for mutual benefits to improve efficiency and performance in SC (25).

Goal inter-dependence theory states that the individual's belief of how their goals are associated with their partners can determine the interaction level that ultimately affects their performance and group cohesiveness (38). The positive perception of shared goals can promote supportive behaviour that increases a mutual reward system (26). There are other theories, like resource dependency, stakeholder theory, game theory, contingency theory, and business eco-system, which researchers used for theorizing the concept of SCF and often SSCF (3). So future researchers can apply them to provide more insight into the idea. But still, these theoretical explanations of SSCF are intermingled and provide support from diversified fields. However, it is not distinguishable to offer a strong foundation for the concept. That is why it is suggested to either develop new theories or advance the old ones to provide greater insight into the idea or build a niche area in the field.

2.3 Summary of Review Articles

The literature presented many bibliometric analyses, systematic literature reviews, and content analyses that significantly contributed to the development of the concept of SSCF. Table 2 provides a summary of review articles relating to the topic. Singh *et al.* (13) analyzed the emerging ESG concept. They created its link with modern ideas like CSR, sustainable development, sustainable finance, portfolio construction, risk mitigation, and stakeholder engagement in SC activities. The study of Jain and Tripathi (21) also focused on the ESG concept. Bui *et al.* (7) examined the prospect of SSCM in the business domain. Van Holt and Whelan (9) discussed the sustainability issues in different fields of management sciences. Kumar *et al.* (15) conducted a systematic literature review and bibliometric analysis of the relationship between green finance and the circular economy.

Luo *et al.* (14) focused on the sustainable finance concept development and explained the future trends and research themes in the area. Kumar *et al.* (15) conducted a systematic literature review and bibliometric analysis of the relationship between green finance and the circular economy. Tao *et al.* (16) focused on environmental finance-related literature. Some authors conducted a bibliometric analysis of the journals to identify the trend of their publications. Alshater *et al.* (31) reported the key topics of the Journal of Sustainable Finance and Investment from 2011-2020. Linnenluecke *et al.* (40) identified that sustainable finance and CSR are the future trends in the Journal of Accounting & Finance. Ferreira *et al.* (41) observed a relationship between finance and sustainability through a systematic review of the Journal of Sustainable Finance and Investment.

However, some other review articles are included in the final extracted data of Scopus but are not directly relevant to SSCF. Still, they contribute to the evolution process of the concept development. Bruno and Lagasio (42) develop a regulatory framework for financial institutions that contains ESG principles and contributes to ESG literature by providing an overview of European policies. Kempeneer *et al.* (12) provide a framework to explain the role of ESG factors in attaining social and financial gains in the real estate business. Their results indicate that the ESG aspects correlated highly with projects' investment value. They also claimed that user-centred smart real estate is the way to improve ESG and investment values. Yilan *et al.* (43) focused on green sustainable chemistry that increases resource efficiency and minimizes harmful chemical hazards in product development. They stressed environmental protection and claimed that financial investment is required to adopt such a system, and investors need sustainability in their potential return.

This review also included the systematic and bibliometric studies conducted in other databases like Web of Science (WOS), Emerald, and Google Scholar to explain the research gap in the review analysis of the SSCF. Jia *et al.* (8) conducted a bibliometric study and systematic literature review of the concept of SCF in the context of sustainability. They discussed the solutions to handle SC barriers that improve performance by reviewing 47 WOS articles from Jan. 2003 to Dec. 2018. Their results indicate that SSCF mitigates SSC barriers and improves SSC performance. All the review articles in this section justify the research gap for the current study. Previous studies either focused on the concept that plays a significant role in SSCF development or belonged to prior year data or different databases. The present study conducted a bibliometric analysis to visualize the knowledge structures and latest developments in the SSCF field by employing the Scopus database from 1st January 2009 to 30th June 2023, which provides significant insight into the topic to the researchers and practitioners.

Table 2: Summary of Review Articles

Authors	Period Covered	Database	Concept	No. of Documents	Objectives	Main Findings	Gap
Singh <i>et al.</i> (13)	1991-2020	Scopus	ESG	693	* Explain the evolution process and future trends of ESG.	* Link ESG with other emerging fields like CSR, sustainable development, sustainable finance, portfolio construction, risk mitigation, and stakeholder engagement in SC activities. * Highlighted the effect of ESG reporting on financial, social, and environmental performance and sustainability score.	* Lack of bibliometric studies on the emerging topic of ESG.
Jain and Tripathi (21)	2004-2021	Scopus & WOS	ESG	Scopus (867), WOS (388) & manual content analysis (190)	* Quantify the academic literature on ESG and highlight the future research area in the field.	* ESG as an evolving domain in sustainable finance and reports its relevant themes: (1) investing; (2) disclosure & reporting; (3) performance & firm value; (4) corporate governance & performance.	* The review articles related to ESG are limited, and none have studied the articles from high-quality journals yet.
Bui <i>et al.</i> (7)	2008-2020	Scopus	SSCM	2,402	* Identify the future trends of SSCM towards disruption and ambidexterity through a systematic literature review. * Report the future research streams related to the topic. * Delineate the challenges and knowledge gaps in geographic regions.	* Future emerging areas for investigation in SC are finance, agility, strategy, coordination, flexibility, resilience, sustainability, and unexpected disruptions. * It makes a regional comparison that helps to devise regional strategies to make better decisions and minimizes the disparity.	* Various players have reported complexity in global SC networks, a formidable challenge to the sustainability network. Therefore, necessary to add the regional aspects through a comprehensive literature review. It helps to identify the potential research area and a new dimension in the SSCM field.

Van Holt and Whelan (9)	1960-2005	Scopus	Sustainability Issues	65,000	<p>* Highlight the emerging areas in business research and differentiate the conceptual, definitional, and measurement issues among diversified disciplines.</p>	<p>* Prior research discussed CSR, stakeholder capitalism, organizational philanthropy, and environmental issues in the context of sustainability.</p> <p>* Recent research focused on how sustainability is added to business operations.</p> <p>* They reported four main dimensions: management, performance, marketing, and strategy.</p>	<p>* Previous researchers embedded the concept of CSR activities and did not relate it to business activities like SC. That is why there is a need to highlight this crucial issue necessary to gain ESG sustainability.</p>
Kumar <i>et al.</i> (15)	2011-2022	Scopus, WOS, Google Scholar	Green Finance & Circular Economy	286	<p>* Create a link between green finance and circular economy through bibliometric analysis & systematic literature review.</p>	<p>* The eco-innovation is measured only in the context of green finance.</p> <p>* Management must align the circular economy's environmental, social, and financial aspects to obtain sustainable growth.</p>	<p>* The application of green finance can minimize the investment gap and deal with the innovation implementation cost in the circular economy which can be possible if this relationship is extensively analyzed.</p> <p>* Previous studies solely concentrated on individual concepts of green finance and circular economy.</p>
Jia <i>et al.</i> (7)	2003-2018	WOS	SCF in the context of sustainability	47	<p>* Conceptualize SSCF by explaining the relationship between sustainability and SCF and then compiling its motives, practices, and outcomes.</p>	<p>* SSCF mitigates SSC barriers and improves SSC performance.</p>	<p>* Lack of conceptualization on SSCF based on social, economic and environmental perspectives.</p>
Luo <i>et al.</i> (14)	2000-2021	WOS	Sustainable Finance	3,786	<p>* Aims to find out the scholarly literature of sustainable finance and understand the patterns of research and the latest developments in the field.</p>	<p>* SRI is the primary contributor to the development of sustainable finance.</p> <p>* The recent trending potential topics are socially responsible mutual funds, green bonds, COVID-19</p>	<p>* Although many scholarly publications are available on sustainable finance, it is still difficult to grasp the attention of the focus research area.</p> <p>* Difficult to credit the key researchers, sources,</p>

impacts, and institutions, and ESG framework counties and for investment. identify future trends without conducting a bibliometric analysis.

Tao <i>et al.</i> (16)	1970-2020	WOS	Environmental Finance	892	* Bibliometric analysis of environmental finance-related publications	* Rapid increase in environmental finance literature. * Future research streams are CSR, firm value, climate finance, green bonds, sustainable finance, and climate risk.	* Financial aspects are not aligned with the environmental perspective necessary for ecological sustainability.
Alshater <i>et al.</i> (31)	2011-2020	Scopus	Journal of Sustainable Finance and Investment	263	* Conduct a bibliometric analysis of the Journal of Sustainable Finance and Investment.	* Sustainable finance and ESG concepts have gained immense importance during the last four years. * Corporate governance and SRI lost their interest during the sample period. * Identified four main clusters: CSR & sustainable development, sustainable finance & green bond, corporate governance & green bonds and SRI & pension funds.	* It is a common practice to acknowledge the contribution of top-ranked journals through bibliometric studies. * That is why on the 10th anniversary of the journal, researchers adopted the bibliometric technique to honour the stature of the journal and provide insight into its publication.

3. Material and Methods

The study aims to quantify and map the academic literature on SSCF through bibliometric analysis and an extensive literature review to advance the current knowledge about the evolution process, present status, and future trends of the concept (44). Scopus database was used to extract data from article titles, abstracts, and keyword search fields. An exhaustive search query was developed to cover all underlying areas related to SSCF from 1st January 2009 to 30th June 2023. The query was generated in five steps. In stage 1, the terms associated with SSCF were introduced. Stage 2 added its relationship with sustainability, while the other areas related to SSCF (SSCM, environmental, social, and economic) were included in Stage 3. Then in stage 4, the manufacturing sector was introduced, while in stage 5, certain limitations were imposed on the data, such as limited subject area, document type, and language, which resulted in the final extracted data of 84 documents. The query development process is explained in Table 3.

Table 3: Query Development Process

Stages	Queries	Results
1	TITLE-ABS-KEY (("Sustainable Supply Chain Finance" OR "SSCF" OR "Supply Chain Finance" OR "Sustainable Finance"))	1946
2	TITLE-ABS-KEY (("Sustainable Supply Chain Finance" OR "SSCF" OR "Supply Chain Finance" OR "Sustainable Finance") AND ("Sustainability" OR "Sustainable Finance"))	756
3	TITLE-ABS-KEY (("Sustainable Supply Chain Finance" OR "SSCF" OR "Supply Chain Finance" OR "Sustainable Finance") AND ("Sustainability" OR "Sustainable Finance") AND ("Sustainable Supply Chain Management" OR "Environmental Sustainability" OR "Social Sustainability" OR "Corporate Social Responsibility" OR "CSR" OR "Economic Sustainability"))	82

4	TITLE-ABS-KEY (("Sustainable Supply Chain Finance" OR "SSCF" OR "Supply Chain Finance" OR "Sustainable Finance") AND ("Sustainability" OR "Sustainable Finance") AND ("Sustainable Supply Chain Management" OR "Environmental Sustainability" OR "Social Sustainability" OR "Corporate Social Responsibility" OR "CSR" OR "Economic Sustainability") OR ("Manufacturing"))	95
5	TITLE-ABS-KEY (("Sustainable Supply Chain Finance" OR "SSCF" OR "Supply Chain Finance" OR "Sustainable Finance") AND ("Sustainability" OR "Sustainable Finance") AND ("Sustainable Supply Chain Management" OR "Environmental Sustainability" OR "Social Sustainability" OR "Corporate Social Responsibility" OR "CSR" OR "Economic Sustainability") OR ("Manufacturing")) AND (Limit-To (SubjArea, "BUSI") OR Limit-To (SubjArea, "ECON") OR Limit-To (SubjArea, "ENVI") OR Limit-To (SubjArea, "SOCI")) AND (Limit-To (Doctype, "ar") OR Limit-To (Doctype, "re") OR Limit-To (Doctype, "cp") OR Limit-To (Doctype, "bk") OR Limit-To (Doctype, "ch")) AND (Limit-To (Language, "English"))	84

The VOS Viewer, Bibliometrix R, Bibexcel and Origin Pro software were used for the data analysis of 84 finalized documents. The final data consisted of articles (59), reviews (9), conferences (8), books (4) and book chapters (4), whereas editorial (1) and conference review (1) were excluded from it. The basic subjects covered were business, management and accounting, economics, econometrics and finance, and environmental and social sciences. The final data included only those documents (84) in English, while the documents in other languages, like one in Italian, were also excluded. The annual growth rate of the publications was 22.93%. The yearly output of the articles is presented in Figure 2. There is an increasing trend in the publications from 2009-2023 which depicts the interest of the researchers and practitioners in the emerging concept of SSCF. It reflects that all stakeholders realize the positive outcomes of SSCF in mitigating risk and obtaining sustainable SC performance.

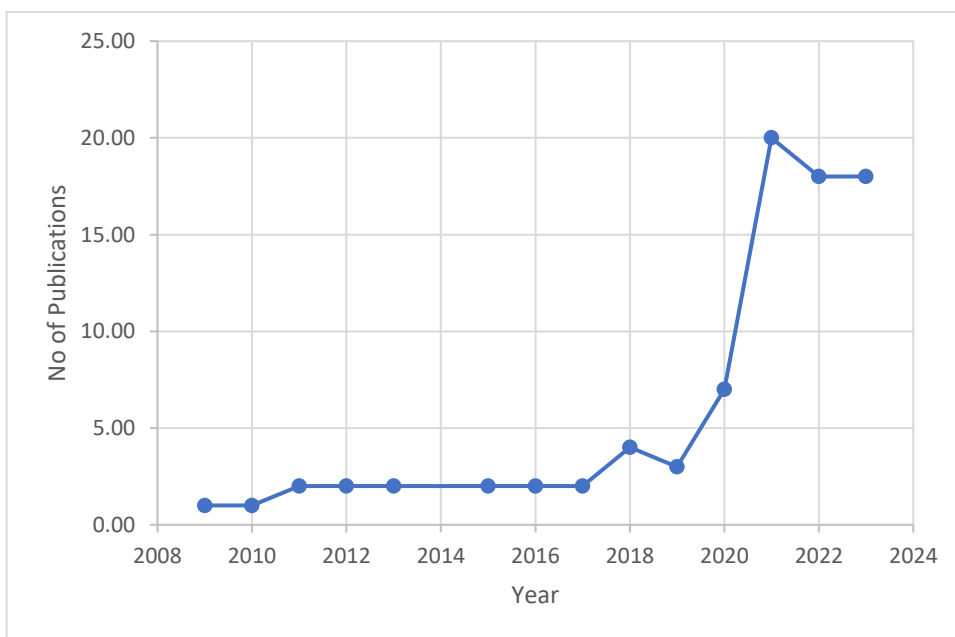


Figure 2. Year-Wise Publication Output

4. Results

4.1 Performance Analysis

Performance analysis provides critical insight into the patterns of SSCF research. It explains the most relevant sources of publication and their impact, top-ten authors in the field, most contributing institutions, countries, corresponding authors, and citations (45) in developing the SSCF system. Table 4 explains the most relevant sources and impacts. Figure 3 shows the bibliographic coupling of the sources, which is the opposite of co-citation analysis. According to the analysis, two publications are considered bibliographically coupled if both acknowledge the third publication's work. The selection criteria are at least one source; all 63 sources meet the threshold. Here the most prominent journal is Sustainability, which is also validated by Table 4.

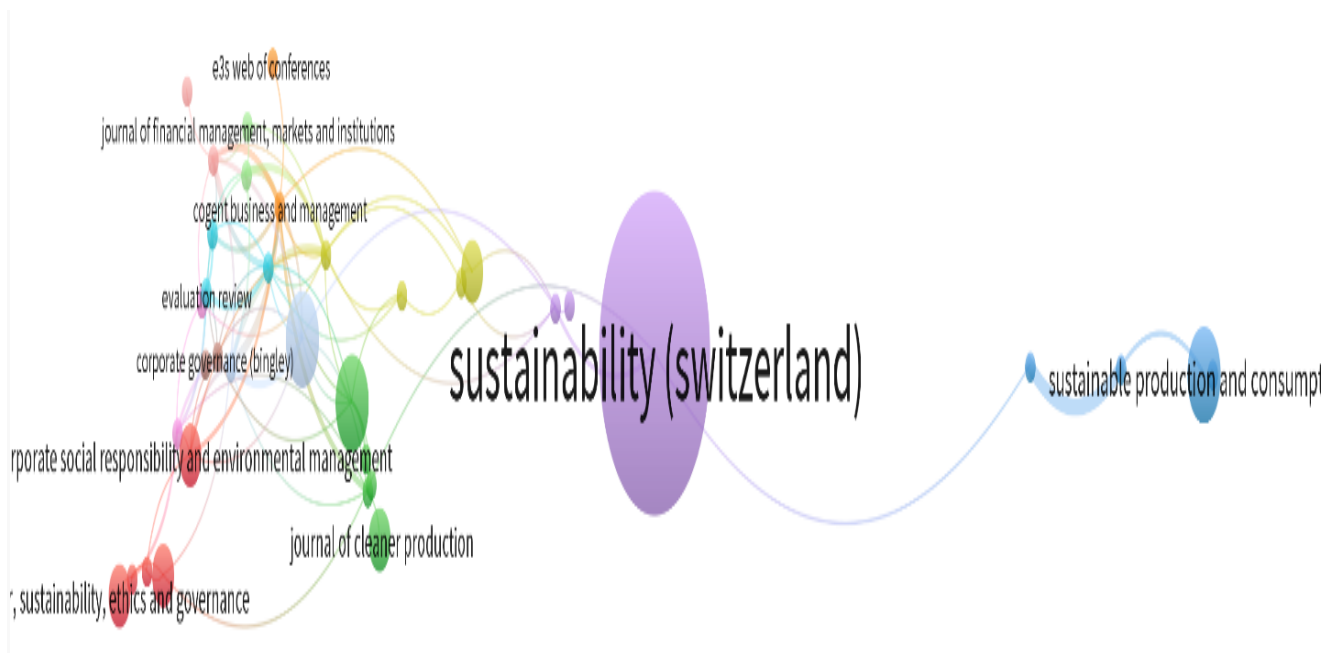


FIGURE 3. Bibliographic Coupling of Sources

Table 4 shows that Sustainability (Switzerland) is the most prominent journal with N=10; TC=116 and has the highest value for the indexes (h=4; g=10). However, Sustainable Production and Consumption obtained the highest value for m-index=1 while the second highest for TC=101. The h and g indexes and NP values are the same for all the journals but differ for TC and m-index. The 2016 International Conference on Logistics, Informatics and Service Sciences, LISS 2016, received the lowest TC=2, while the Accounting and Finance journal had the lowest value for m-index=0.071. Regarding total publications, Environment, Development and Sustainability, Journal of Sustainable Finance and Investment and Sustainable Production and Consumption published 3 articles and ranked second. The remaining 6 sources stood in third place with 2 publications each.

Table 4: Most Relevant Sources and Impact

Most Relevant Sources		Source Impact						
Sources	N	Sources	h Index	g Index	m Index	TC	NP	PY Start
Sustainability (Switzerland)	10	Sustainability (Switzerland)	4	10	0.667	116	10	2018
Environment, Development and Sustainability	3	Journal of Sustainable Finance and Investment	3	3	0.375	86	3	2016
Journal Of Sustainable Finance and Investment	3	Sustainable Production and Consumption	3	3	1	101	3	2021
Sustainable Production and Consumption	3	IOP Conference Series: Earth and Environmental Science	2	2	0.5	5	2	2020
Corporate Social Responsibility and Environmental Management	2	Journal of Business Economics	2	2	0.182	32	2	2013
CSR, Sustainability, Ethics and Governance	2	Journal of Cleaner Production	2	2	0.667	70	2	2021
IOP Conference Series: Earth and Environmental Science	2	World Development	2	2	0.333	98	2	2018
Journal of Business Economics	2	2016 International Conference on Logistics, Informatics and Service Sciences, LISS 2016	1	1	0.125	2	1	2016
Journal of Cleaner Production	2	Accounting and Finance	1	1	0.25	7	1	2020
World Development	2	Accounting Research Journal	1	1	0.071	9	1	2010

Note: N= publication output; TC=Total Citations; NP=Net Production; PY=Publication

Singh and Zhang got the prominent places with equal h, g indexes and NP. However, Zhang got the highest m-index (0.667) and had better total citations than Singh (See Table 5). Singh *et al.* (13) mainly focus on ESG research which gained popularity in 2005 due to its association with CSR, sustainable development, sustainable finance, portfolio construction, risk mitigation,

and stakeholder engagement in SC activities. They highlighted the unexplored areas in the ESG literature and explained how they could affect the firms' social, financial, environmental, and sustainable performance. Their research identified that sustainable finance and CSR are the future trends in the Journal of Accounting & Finance. They believe businesses must fulfil their fiduciary responsibilities instead of just focusing on profitability perspectives. Their environmental and social responsibilities are equally important as financial obligations (40). Zhang *et al.* (36) discussed the effect of green credit policy implementation in Chinese manufacturing industries. They reported that small and medium-sized firms took more advantage of the environmentally friendly credit policy than larger ones. Further, they analyzed the redistribution effect and found it can perform in both low-high information asymmetry conditions. But when there is satisfactory financial development in the region and less environmental investment by the government.

Table 5: Top Contributing Researchers

Researchers	h_index	g_index	m_index	TC	NP	PY_start
Singh AK	2	2	0.5	10	2	2020
Zhang Y	2	2	0.667	17	2	2021
Abdallah SB	1	1	0.333	7	1	2021
Abdel-Basset M	1	1	0.333	68	1	2021
Imanche SA	1	1	0.333	3	1	2021
Al-Issa N	1	1	0.5	1	1	2022
Al-Mohamad S	1	1	0.5	1	1	2022
Kumo HA	1	1	0.333	3	1	2021
Alshater MM	1	1	0.333	17	1	2021
Etzeberria IA	1	1	1	1	1	2023

Note: TC=Total Citations; NP=Net Production; PY=Publication

Nabeeh *et al.* (19) adopted a sophisticated methodology to test the implications of green credit policy to obtain sustainable finance objectives and healthy environmental targets. The findings depict that green credit policy under the suppliers' restrictions to invest in environment-friendly areas can minimize harmful pollutants and maintain sustainable business performance. Zhao *et al.* (46) explained how commercial banks had changed their strategy from scale effect to customer effect in the era of economic globalization and immense competition. They have focused more on retaining customers through CSR activities, building social enterprises, and adopting green and sustainable financial sources. All these efforts result in a good market image, creating customer loyalty that enhances the banks' financial performance. Saidane and Abdallah (47) analyzed the relationship between default risk and CSR and its ESG dimensions separately. They found a direct association between firms' stability and CSR activities while a negative relationship between environmental performance and firms' stability. Imanche and Kumo shared the same publications (28). Their research claimed there is a thread for small, developing countries in the form of FDI in the era of globalization. Although FDI is necessary for their development and to achieve SDGs. They analyzed the role of Chinese FDI in Nigeria and found that this investment benefits both. In contrast, Chinese companies work properly on developmental projects, while Nigerians benefit from sustainable sectoral and infrastructural development. Al-Issa and Al-Mohamad shared the same publications (48). Their research focused on exploring the influence of CSR/ESG on firm value and marketing strategy. Their results indicate that CSR/ESG strategy significantly establishes an effective marketing strategy, cost-effective measures, sustainable SC, and circular processes that enhance firms' value. Alshater *et al.* (31) claimed that sustainable finance and ESG are emerging research topics in the Journal of Sustainable Finance and Investment from 2011 to 2020. They identified critical issues through bibliometric coupling. Moneva *et al.* (23) highlighted the importance of sustainability reporting practices to promote SRI that ensures financial returns.

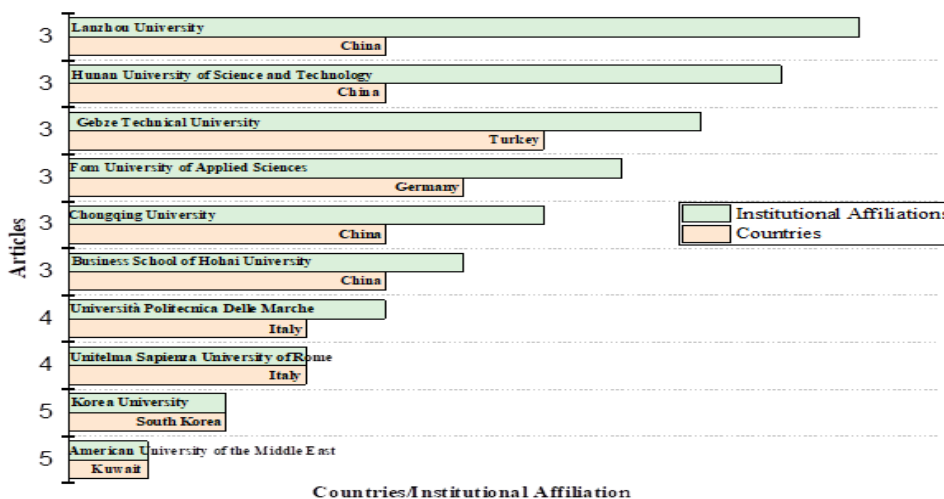


Figure 4. Top Institutional Affiliations and Their Countries

Figure 4 shows the top institutional affiliations and their respective countries that published articles related to SSCF. The American University of the Middle East and Korea University are the top institutions, with 5 publications each. The second place is for the Unitelma Sapienza University of Rome and Università Politecnica Delle Marche, which published 4 each. At the same time, other institutions fall in the category of top-ten relevant sources and publish 3 articles individually. China seems to be the most scholarly contributing country in the literature of SSCF, as 4 institutions with a total of 12 publications belong to it. Italy ranked second with 2 institutional affiliations, each involved in 4 publications, respectively, with a total of 8. The other 4 institutions belong to Kuwait (5), South Korea (5), Germany (4), and Turkey (4).

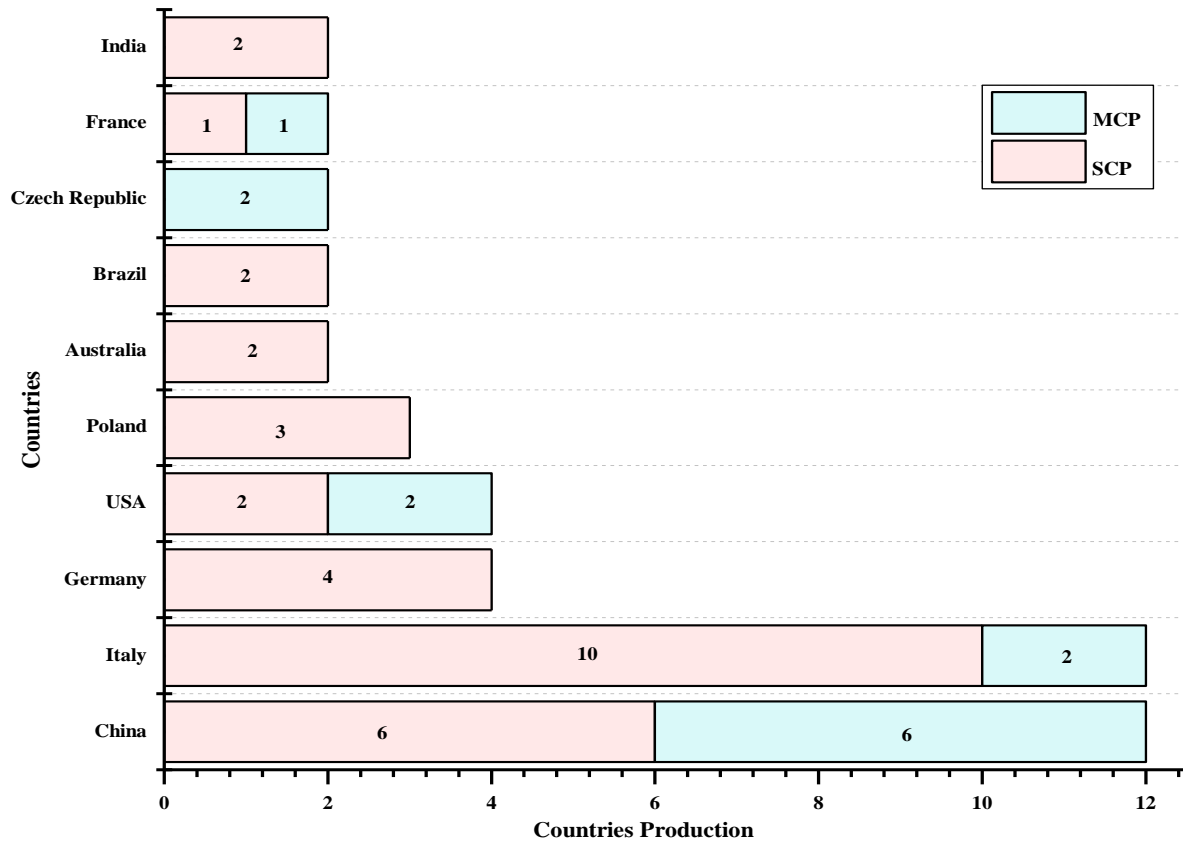


FIGURE 5. Corresponding Author Country Production

The top ten corresponding authors' country is explained in Figure 5 by their SCP (Single Country Production) and MCP (Multiple Country Production). China is the leading contributing country with equal SCP and MCP values, i.e., 6. It is the highest ranked in terms of MCP. However, Italy stands at the top position in SCP (10). Its total article production equals China (12), but it shares the second position in MCP with the USA and Czech Republic. The Czech Republic is the only country which does not have an SCP value. France has equal SCP and MCP values. Germany, Poland, Australia, and India do not share any MCP.

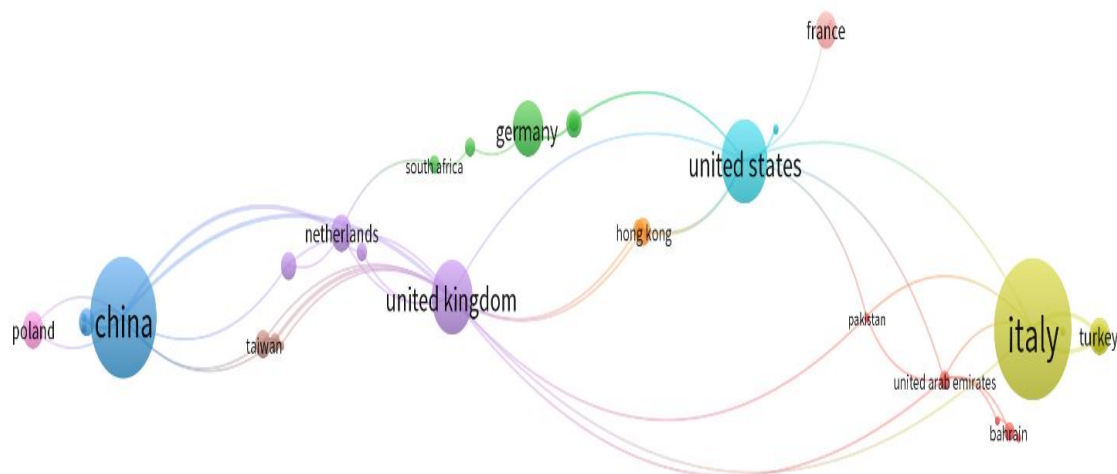


FIGURE 6. Co-Authorship Countries

Figure 6 shows the co-authorship countries. The co-authorship country analysis explains the associated country of the authors involved directly or indirectly in a network. The study sets a criterion for a minimum of 7 countries, and all 47 countries meet the threshold. China, Italy, the UK, the USA, and Germany are the most prominent countries.

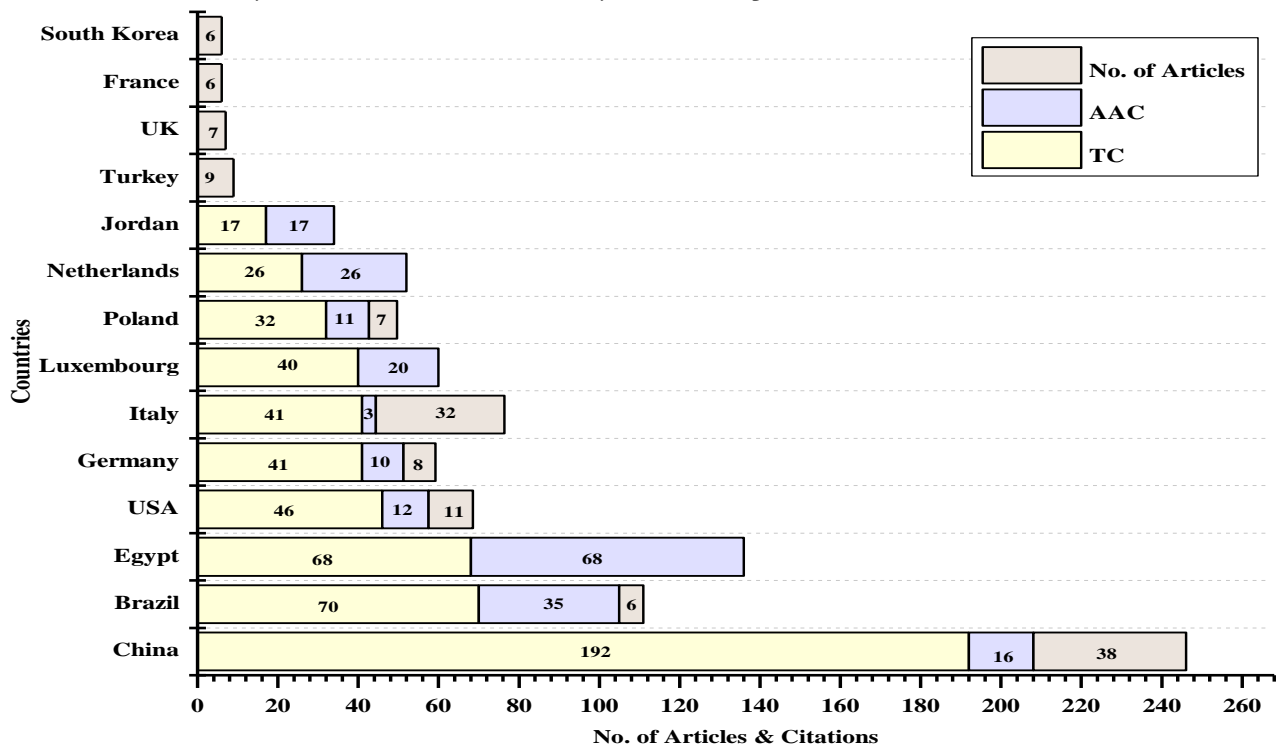


FIGURE 7. Country Scientific Production and Citations

Citations are still used as a performance indicator to assess the quality of the articles and sources of publication. Figure 7 explains the countries' contribution to scientific publications about the emerging concept of SSCF and its acknowledgement through citations. China, Italy, and the USA are the three major countries that lead the scientific production of SSCF, with 38, 32, and 11 publications, respectively. Compared to Brazil, France, and South Korea, the least contributing countries with an equal number of article publications, i.e., 6 each. China, Brazil, and Egypt are the top three countries in total citations (TC:192, 70, 68). Although Egypt depicted the highest values for average article citations (AAC=68), it does not include scientific production in a top-ten country. The other prominent countries are Brazil (AAC=35), Netherlands (AAC=26), and Luxembourg (AAC=20). Jordan has the lowest value for TC (17), whereas Italy has the lowest cited country (AAC=3).

5. Conceptual Analysis

The conceptual analysis reports research trends, themes, and future streams of the underlying topic based on essential keywords (49), providing a greater understanding of the concept in the respective area (50). It includes information about the keywords, authors' citations, co-citation of cited authors, and co-occurrence network that help to analyze the core themes in the SSCF literature.

5.1 Keyword Analysis

Figure 8 discusses the keyword analysis of the most repetitive words, phrases, and concepts in the SSCF-extracted data from the key sources. Figure 8 reported that sustainable finance, sustainability, CSR, ESG, environmental, investment, and economics indicate that the concept attachment with diversified subject areas requires more empirical and theoretical research for future concept development. China is the most contributing country, which authenticates through the figures. As confirmed by analysis, banking sectors play a significant role through green financing to bind the SC partners to work for environmental sustainability and promote SSCF. SCM, sustainable finance, SCF, and environmental economics are the grounding factors of the concept, shown by the repetition of words. Further, climate change is the requirement to promote such a system to gain ESG benefits and develop a policy framework for its acquisition.



Figure 8.1. Title



Figure 8.2. Abstract



Figure 8.3. Author Keywords



Figure 8.4. Keywords

5.2 Citations Analysis

Figure 9 presents the overall visualization of author citations from 2014 to date. The study limits the limitation of including publications with a minimum of two citations and at least one document by the author, which results from 57 authors out of 83. It provides an understanding of similar researchers contributing to the field. These authors emphasized the development of the concept, and the number of citations is evidence of it, which has also increased after 2018. Results show that seven authors have more than 50 citations.

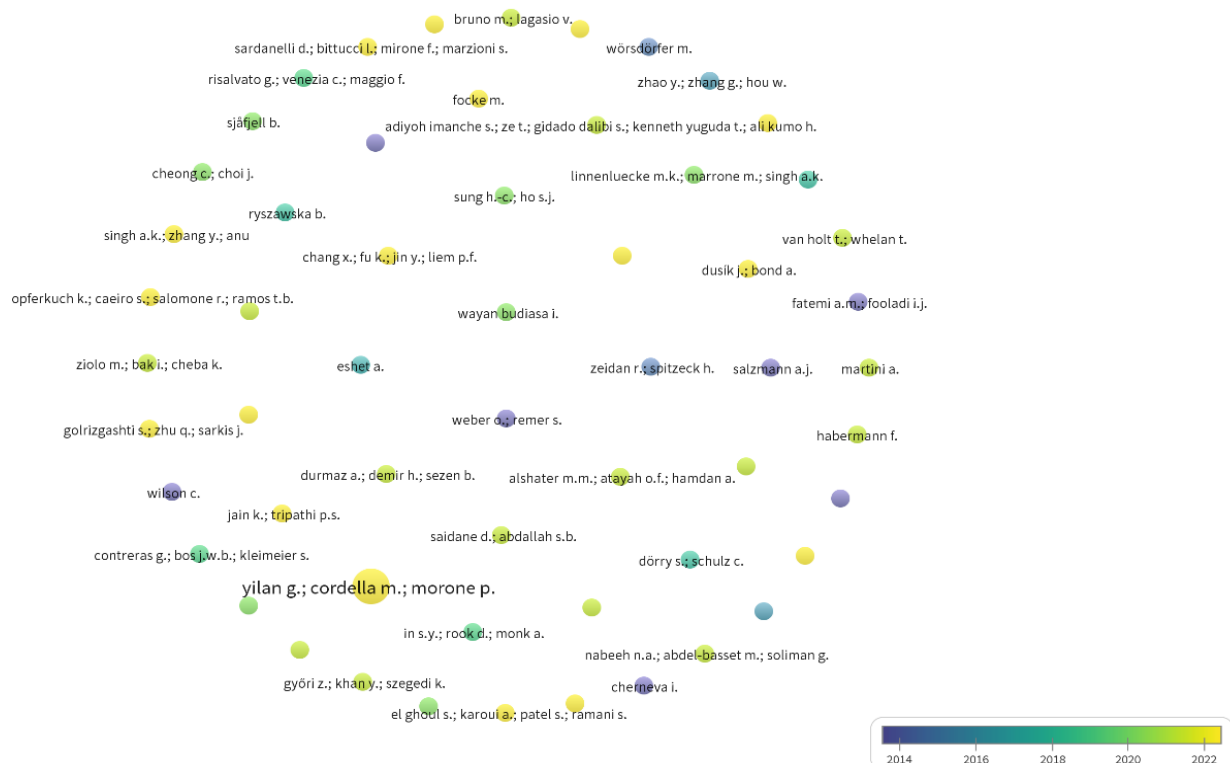


FIGURE 9. Overlay Visualization of Author Citations

Table 6 describes the most cited global publications and shows TC, ACY, and NGC. Bui *et al.* (7) secured the highest value for TC=86, ACY=28.67, and NGC=6.39. Their research focused on the SSCM concept and identified future trends of SSCM towards disruption and ambidexterity through a systematic literature review. They reported that future emerging SC investigation areas are finance, agility, strategy, coordination, flexibility, resilience, sustainability, and unexpected disruptions. Fatemi and Fooladi (51) claimed that the traditional shareholders' wealth maximization approach cannot create sustainable wealth. Therefore, they proposed a sustainable value creation framework considering all social and environmental costs and benefits. It can benefit investors through sustainable returns in the short and long run. Lahkani *et al.* (52) link information technology with SC networks, creating ease in the whole SC process and generating more profits for them. They also suggested that blockchain solutions should be incorporated with global B2B SC to increase eCommerce companies' efficiency. This model generates a secured and centralized database that ensures speedy payments, transparency, and reliability in the database.

Table 6: Most Cited Global Publications

References	TC	ACY	NGC
Bui <i>et al.</i> (7)	86	28.67	6.39
Fatemi and Fooladi (51)	76	6.91	1.43
Lahkani <i>et al.</i> (52)	74	18.50	4.21
Pueyo (53)	72	12.00	2.46
Nabeeh <i>et al.</i> (19)	68	22.67	5.06
Ferreira <i>et al.</i> (41)	59	7.38	1.93
Weber and Remer (54)	55	4.23	2.00
Dörry and Schulz (55)	40	6.67	1.37
Tao <i>et al.</i> (16)	34	17.00	5.77
In <i>et al.</i> (56)	33	6.60	1.55

Note: TC=Total Citations; ACY=Average Citations Per Year; NGC=Normalized Global Citations.

Pueyo (53) presents a green energy investment policy to promote commercial-scale renewable energy investment. They stated that donors and financiers introduce many renewable energy policies, but either they are not fully implemented or cannot achieve the desired success. That is why there is a need to determine the constraints in implementing a green energy investment policy in Kenya. They identified the major impediments to implementing the suggested policy are governance issues, macroeconomic imbalances, unreliable off-takers, high production cost, pressure to keep prices low, lack of financial sources, and high cost of domestic financing. Therefore, Kenya is unable to offer decent returns on these investment projects Nabeeh *et al.* (19) discovered how a green credit policy for SCM manufacturers reduces ecological deterioration. They reported a lack of efforts by manufacturers involved in SCM to diminish the emitted environmental pollution and explore the function of green credit policy to deal with ecological deregulation. Their results show that the SCM manufacturers can gain motivation from the green credit policy to reduce harmful pollutant effects and attain sustainability.

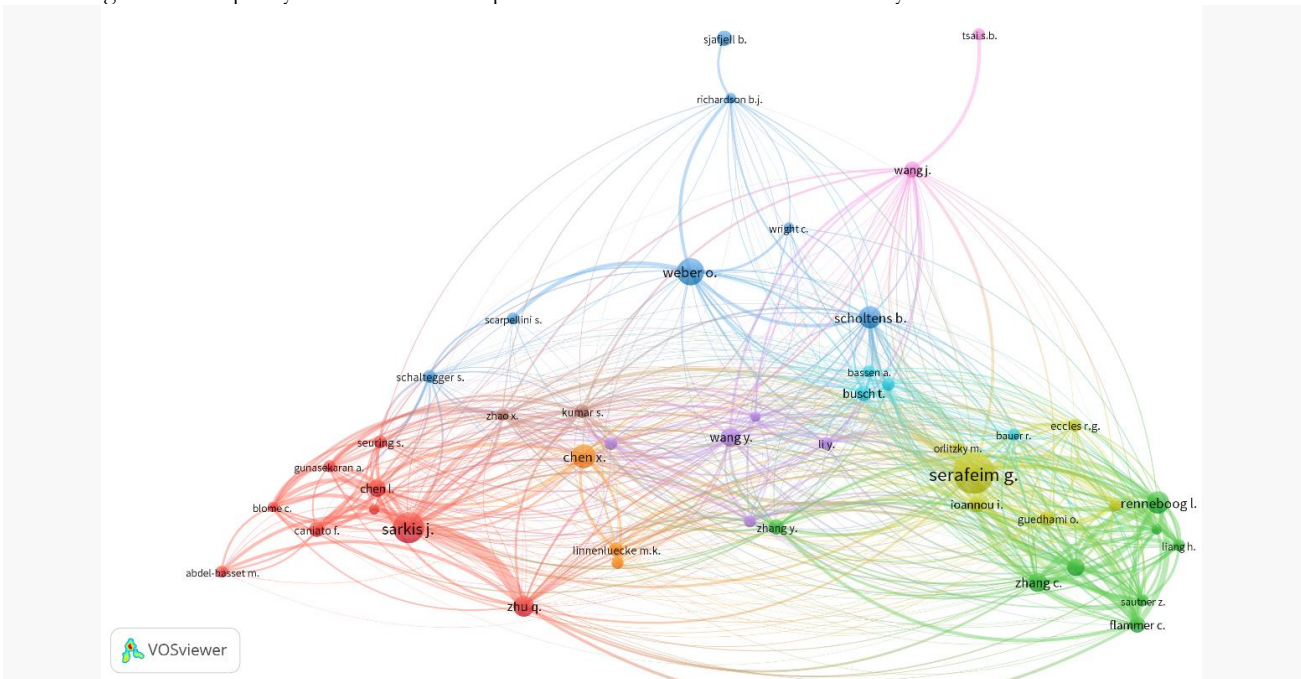


FIGURE 10. Co-Citations of Cited Authors

Ferreira *et al.* (41) emphasized that research on finance and sustainability is essential for establishing the field. Weber and Remer (54) are the only researchers who receive one local citation and fall under the top ten globally cited researchers. Their local/global citation percentage is 1.82%. Dörry and Schulz (55) identified a link between finance and local businesses that

help to attain sustainable economic growth. Tao *et al.* (16) conducted a bibliometric review of the environmental-related literature. They stated that initially, the articles focused on ecological topics like CSR, climate negotiations, government policy, and natural gas volatility. However future research streams highlighted the evolving research area in the recent era is related to finance and sustainability. In et al. (56) obtained the lowest TC=33. These scholars discovered what ESG data is and how to measure its quality and effectiveness. They developed a framework that shows that high-quality data provides better results in investment decision-making processes. A co-citation analysis depicted that two publications are considered co-cited if a third publication acknowledges the work of both. The threshold for the study is the minimum number of citations by the author, which is 10. However, out of 8,386 authors, 47 meet the threshold. Figure 10 presents the co-citations analysis of the cited authors.

5.3 Co-occurrence Network of Keywords

The co-occurrence network analysis reported the thematic patterns based on the keywords' link strength. Figure 11 shows the trends in the underlying literature, divided into seven clusters. The concept is still in an evolving stage and integrates multi-disciplinary perspectives. That is why multiple areas are included in the keywords. Table 7 consists of the clusters, their respective keywords (all included), and themes. The themes included: "Conceptualization & Exploration of SSCF" (cluster 1: red), "Social Dimension of SSCF" (cluster 2: green), "Framework for Financial Service Provider" (cluster 3: blue), "Economic Dimension of SSCF" (cluster 4: yellow), "Environmental Dimension of SSCF" (cluster 5: magenta), "Integrated Approach of SSCF" (cluster 6: turquoise), and "Risk Assessment & Management" (cluster 7: orange).

Cluster 1 explained the origin, conceptualization, and exploration process of SSCF. The SSCF is a multi-dimensional approach that aims to balance TBL (22). It was initiated in the financial sector, where banks provide loans to businesses to promote green manufacturing without compromising financial gains. It is an integrated approach in both industries: service and manufacturing, to gain economic, social, environmental, and financial profits (57). It is based on Singh *et al.* (13). It leads to adopting innovative technological methods like blockchain that facilitate the SC members (7). All these keywords are part of cluster I that play a significant role in understanding and developing the concept, which constitutes not only traditional concepts but is also based on modern concepts.

Cluster 2 focused on the social dimension of SSCF, indicated through the keywords. Many scholars explained the relationship between corporate social performance and financial cost (58). They believe corporate social performance decreases the cost of capital and enhances the firm value over time. The social aspects of SSCF are to promote employee engagement, job satisfaction, and a positive attitude towards task accomplishment that adds value to the whole SC network (9). It provides a new understanding of the concept by increasing awareness about the firms' involvement in CSR activities which motivates the employees and prospective investors (59). It emphasized SRI, which is the development of financing instruments relating to CSR (60). SSCF promotes social activities with financial gains that create a good image of the firm among the stakeholders and enhance sales (49). It also emphasized ethical and responsible financing policies and collaborated with SSCF to gain social and financial benefits together (61).

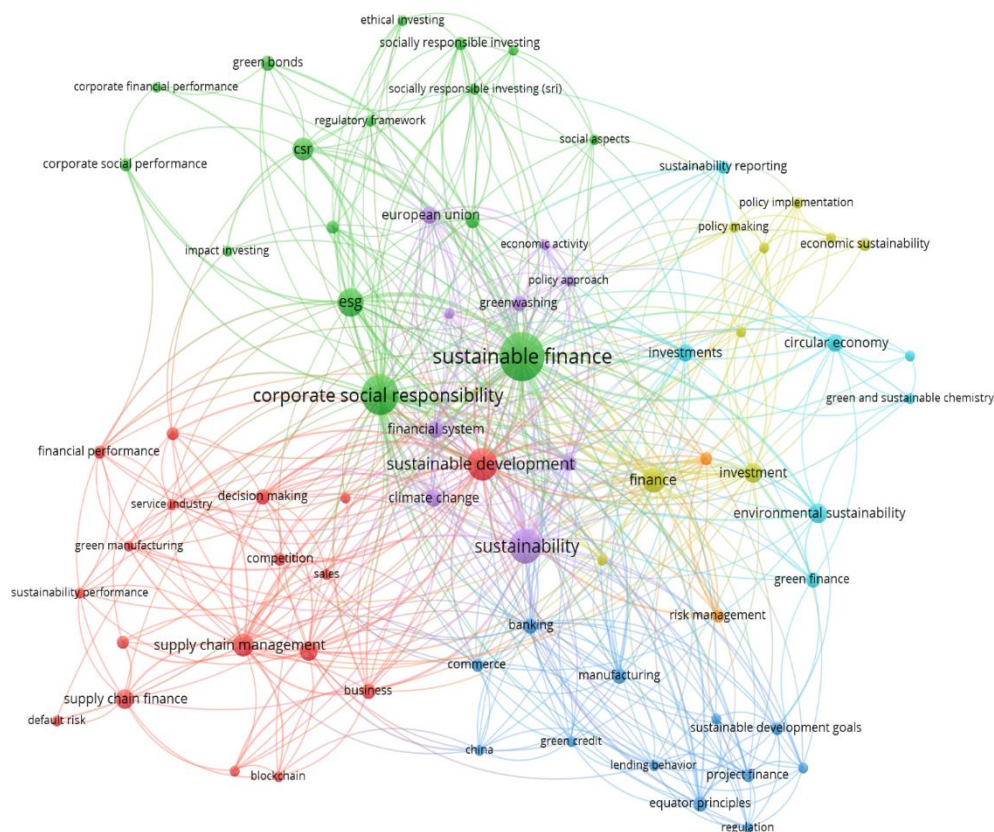


FIGURE 11. Co-occurrence Network

Cluster 3 illuminated the framework for financial service providers to facilitate SC stakeholders. SSCF assists them in designing a monetary mechanism by harmonizing the firms' social, environmental, and economic interests to achieve SDG targets and economic development (62). Banks and the lending sector are the fundamental inducing forces of green policies (63). They promote ecological and social policies that bind the SC firms to utilize credit following the banking regulations and create a balance between TBL (22). However, the transformation towards a low-carbon and green economy requires huge funding. Habermann (60) focused on establishing green financing principles, climate finance, and energy-renewable policies that deal with ecological issues. They designed a green bond framework to facilitate green investment initiatives under the ESG principle. Versal and Sholoiko (64) analyzed the features of green bonds and implemented green projects and identified the barriers to their implementation under the platform of the World Bank and the European Bank for Reconstruction and Development. They suggested introducing supranational financial institutions for promoting sustainable development that initiates green and social bonds.

Table 7. Significant Clusters by Co-occurrence Network

Clusters	Keywords	Themes
1	Blockchain, Business Commercial banks, Competition, Decision Making, Default Risk, Economics, Financial Performance, Green Manufacturing, Integrated Approach, Sales, Service Industries, Supply Chain Finance, Supply Chain Management, Sustainability Performance, Sustainable Development, Sustainable Supply Chain Management, Sustainable Supply Chains.	Conceptualization & Exploration of SSCF
2	Corporate Financial Performance, Corporate Governance, Corporate Social Performance, Corporate Social Responsibility, CSR, ESG, Ethical Investing, Green Bonds, Impact Investing, Performance, Regulatory Framework, Social Aspects, Socially Responsible Investing (SRI), Sustainable Finance.	Social Dimension of SSCF
3	Banking, Banks, China, Commerce, Equator Principles, Financial Services, Green Credit, Lending Behavior, Manufacturing, Project Finance, Regulation, and Sustainable Development Goals.	Framework for Financial Service Providers
4	Alternative Energy, Comparative Study, Economic Development, Economic Growth, Economic Sustainability, Finance, Investment, Policy Implementation, Policy Making	Economic Dimension of SSCF
5	Climate Change, Economic Activity, Environmental Degradation, Environmental Economics, European Union, Financial System, Greenwashing, Policy Approach, Sustainability.	Environmental Dimension of SSCF
6	Circular Economy, Green Finance, Green and Sustainable Chemistry, Life Cycle Assessment, Sustainability Reporting, Environmental Sustainability, Investments.	Integrated Approach of SSCF
7	Risk Assessment, Risk Management	Risk Assessment & Management

Cluster 4 is related to the economic dimension of SSCF, which is linked with economic, financial, and capital gains (15). It facilitates economies of scale for the SC network and enhances resource efficiency (7), transitioning from a traditional economy towards advanced socio-economical systems, smart technologies, and a low-carbon economy (51,65). Cluster 5 discussed the environmental dimension of SSCF. The rapid climate change diverted the attention of scholars and practitioners to take carbon tracker initiatives and introduce green or climate finance policies that can promote responsible investment and environmental policies (60).

Cluster 6 described the integrated approach of SSCF that included sustainability. Jia et al. (8) described the association of SSCF with social, environmental, and economic values. These values are discussed with sustainability and green concepts, which fall under the natural and social science categories. It enhances the scope of the subject and makes its application possible in multi-dimensional fields. Zhang (66) explained the social benefits of balancing environmental and economic activities through green transformation. SCM practices provide transparent information about social, technological, environmental, and financial aspects to address their interrelated complex issues (67). Green sustainable chemistry is essential to achieve ecological targets and maintain sustainable processes, materials, and technology to solve related problems. However, the system cannot be developed without involving appropriate investment at every stage. Therefore, the SSCF is gaining immense importance in establishing a green system in a circular economy that satisfies the interaction and national sustainability reporting requirements.

The last cluster 7 is associated with risk assessment and management. Risk covers matters related to credit, bankruptcy, and demand (68). SSCF plays a significant role in assessing and managing the risk in SCM. It avoids the financial risk in the SC network by creating a balance between TBLs (69). Lynch et al. (58) stated that when the financial performance of a company is stable due to its social reputation, the idiosyncratic risk of investment is reduced. The main handling factors in the SSCF process are risk assessment, blockchain application, reverse factoring, cashflow shortage, and TBL motives (11). It is not only associated with financial risk but also with climate, social, and economic risk (16), which are essential in designing and implementing an effective SSCF system.

6. Discussion

SSCF has gained popularity since 2018 due to its ability to interact with diversified fields (SC, finance, economics, social sciences, environmental sciences, and sustainability). Such integration is beneficial to provide solutions to many interrelated problems, while it sometimes creates confusion in grounding the concept. A detailed literature review and bibliometric analysis are needed for the concept development. The current study conducted scientometric research on SSCF and answered the proposed questions. The Scopus database extracts the data from 1st January 2009 to 30th June 2023. RQ1 is associated with integrating SSCF with environmental, economic, and social benefits for the stakeholders involved in business activities. Previously, it is linked with the flow of goods and information among the SC members. However, recent developments show that it is interlinked with diversified fields to solve multi-dimensional issues of the SC network, and sustainability cannot be achieved by balancing the TBL. It suggests relevant theories in the context of SSCF that provide a strong theoretical underpinning of the concept.

RQ2 concerns the contributing factors (researchers, publications, sources, institutions, and countries) in developing the SSCF system. The concept has been evolving from 2018 to date as there has been a sudden rise in publication output and citations. Sustainability (Switzerland) is the most prominent journal in the field, while Singh and Zhang are the most contributing researchers. Their study mainly focused on integrating the ESG concept with sustainable finance, CSR, sustainable development, and stakeholder engagement in SC activities which is the basis of the SSCF concept. Most SSCF research is conducted in China as it has the highest values for MCP and SCP. Most of the institutional affiliations were linked with China, and most of the influential authors in the domain of SSCF also belong to it. Bui et al. (7) received the highest global citation and focused on the parent concept of SSCM.

RQ3 explains the future of the concept through keyword, citation, and co-occurrence network analysis. Keyword analysis showed that sustainable finance, sustainability, CSR, ESG, environmental, investment, and economics indicate that the concept attachment with diversified subject areas requires more empirical and theoretical research for future concept development. The citation analysis depicts China as the most contributing country, while Bui *et al.* (7) received a maximum number of citations. However, it is also evident from the analysis that seven authors have more than 50 citations. Finally, the clusters identified through co-occurrence analysis are related to the themes of conceptualization & exploration of SSCF, the social dimension of SSCF, the framework for financial service providers, the economic dimension of SSCF, the environmental dimension of SSCF, the integrated approach of SSCF and risk assessment & management. These research themes open new avenues for concept development and propose new dimensions for further exploration and alignment with other relevant fields. The few highlights for future research agenda include:

- Assisting prospective scholars regarding the significance of ESG factors by suggesting to development of a framework for evaluating the sustainable performance of all the SC actors and integrating it with financial decision-making.
- Exploring advanced technologies like blockchain that increase trust and transparency with SC networks by focusing on its potential use to track sustainable sourcing practices, verify certifications, and facilitate green financing mechanisms.
- Helping them understand the financial implications of environmental and social risks and then devise policies to cope with these risks.
- Providing an opportunity to focus on an interdisciplinary approach, innovation clusters, and multistakeholder initiatives to advance SSCF goals and deal with sustainability challenges.
- utilizing advanced digital tools and data analytics to optimize SSCF processes by adding AI, big data, and machine learning techniques that can manage inventory systems, and make better future predictions to mitigate risk.

6.1 Conclusion

SSCF has been developed as an essential area of research in SSF. The increasing number of publications and citations is evidence of it. SSCF is a multi-faceted concept that integrates the inter-disciplinary subject areas to propose the solution of interlinked issues. The current study aims to quantify academic literature about the evolution process, present status, and future trends of the SSCF concept through bibliometric analysis and an extensive literature review. 84 documents taken from Scopus were analyzed from 1st January 2009 to 30th June 2023. The study provides greater insight into the concept by explaining the historical background, theoretical underpinning, and summary of reviewed papers that provide a strong basis for current research. It also acknowledges the key authors, publications, sources, institutions, and countries to understand the evolving process of SSCF. Further, seven clusters were identified through co-occurrence analysis: (1) conceptualization & exploration of SSCF, (2) social dimension of SSCF, (3) framework for financial service provider, (4) economic dimension of SSCF, (5) environmental dimension of SSCF, (6) integrated approach of SSCF, (7) risk assessment & management that suggested robust roadmap for further research in the field.

6.2 The Implication of the Research

The study significantly contributes to advancing the knowledge domain in the SSCF field. First, it suggested new opportunities for conceptual development. It clarifies the relation of SSCF with different subject areas and explains its linkages with the grounding of relevant theories and literature. This alignment creates more understanding to link the financial prospects with the diversified fields and extend the scope of SSCF. Second, it identifies future trends and research streams that help scholars explore the new dimensions of the concept and apply them in different subject areas. Third, it allows the SC partners to utilize green financing to reduce pollution emitted to the environment and achieve sustainable growth and development. Fourth, it delineates the policymakers and government to design a policy framework for creating awareness among the stakeholders regarding the concept of SSCF, which integrates multi-disciplinary perspectives of environmental, economic, and social, aligned with sustainability to benefit the whole SC network. Fourth, industrialists can pay closer attention to the benefits and adoption of the SSCF system through the recent development in the area. It can help to provide greater access to financial

instruments to improve SC performance. Lastly, the current challenges and opportunities can extend the scope of SSCF research.

6.3 Limitations and Future Directions

The study faces specific challenges, which opens new dimensions for research to explore the concept of SSCF further. First, the study used the data extracted from the Scopus database. Future researchers may include data from other databases like WOS, PubMed, Lens, and Dimension and make comparisons of the obtained data. Second, it has retained the publications only in the English language. However, it does not affect our analysis much, but the researchers, like Wei *et al.* (10), emphasized including the articles published in other languages. It can extend the scope of the study. Third, the developed query solely focuses on the study's objectives. Although scholars have extensively tried all the relevant keywords, we still believe keywords used in query development may not be exhaustive. Adding more variables pertinent to SSCF, like ethical funding, environmental finance, and ESG perspectives, is recommended as it may provide distinct results for conceptual development. Further, for theoretical development, including the relevant theories with SSCF is suggested.

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Conflicts of Interest: The authors declare no conflict of interest.

Data Availability Statement: Data is available and can be provided on request.

Appendix A: Table of Acronyms

Acronyms	Description
SC	Supply Chain
SCM	Supply Chain Management
SSCM	Sustainable Supply Chain Management
SCF	Supply Chain Finance
SSCF	Sustainable Supply Chain Finance
ESG	Environment, Social and Governance
SDG	Sustainable Development Goal
TBL	Triple Bottom Line
SRI	Socially Responsible Investments
TBLT	Triple Bottom Line Theory
MCP	Multiple Country Production
SCP	Single Country Production

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