

# The degree of stakeholder influences and risks in sustainable supply chains: a systematic literature review

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## Abstract

**Purpose.** Different stakeholders with varying degrees of influences pressure companies to adopt more sustainable practices. The aim of this paper is to investigate and analyse how stakeholder influences and risks may impact the sustainability of supply chains (SCs). Social, environmental, and economic concerns are addressed by a company's engagement with different players in the supply chain. Respectively, companies become more vulnerable from exposure in their SCs and need to balance the pressures from stakeholders and sustainable practices to develop suitable risk mitigation practices.

**Design/methodology/approach.** The authors use a qualitative approach by means of a systematic literature review to examine the empirical data on the way managing stakeholder influences and risks impacts sustainability for supply chains (SCs) from dependable databases: Web of Science (WoS) and Scopus.

**Findings.** The findings of the analysis show that knowledge management, collaboration, and top management commitment is a prerequisite for effectively managing various stakeholder influences and risks for sustainable supply chains. Consequently, further research could identify conflict stakeholder interests and analyse distinct stakeholder influences in various industries and the negative effects these influences in themselves may pose.

**Originality/value.** This paper provides insight into the relevance of bridging the gap for Sustainable Supply Chain Management in terms of value creation and sustainable development.

## Keywords

Stakeholder theory, stakeholder influences, supply chain risks, sustainable supply chains, sustainable development, Triple Bottom Line (TBL), systematic review

## INTRODUCTION

In recent decades, constant calls for openness and accountability have become the norm. As a result, sustainability has grown in importance over time, directing initiatives to maximize internal and external stakeholder value. Consequently, numerous literary works have approached stakeholder theory identifying pressure areas for possible research development, and the constantly changing 21<sup>st</sup>-century environment and ever-changing policies and practices have become drivers that make organisations continuously seek value and sustainability for stakeholders in supply chains (Multaharju, 2016). To further drive this "value," organisations are taking into consideration social, environmental, and economic concerns of their supply chain operations, considered the Triple Bottom Line (TBL) (Elkington, 1997), and for this study the definition of sustainability. Sustainability must, therefore, now be a part of every organisation's business plan. Following Pagell and Wu (2009), sustainable supply chains are those that meet all aspects of the TBL, suggesting that sustainable supply chains are susceptible to more risks. Thus, the management of, social, environmental, and economic sustainability risks is important for sustainable operations (Jaehn, 2016). Today's global market trends are increasingly focused on supply chain against supply chain competitiveness (Hult et al., 2007), and some organisations have been susceptible to supply chain risks. Thus, managers are becoming increasingly aware of the importance of managing stakeholders and associated risks to balance various interests when creating value and ensuring that each stakeholder group can fulfil its role in long-term sustainability (Hörisch et al., 2014; Pedrini and Ferri, 2019).

This study aims to analyse how the management of stakeholder influences and risks in a supply chain can serve as a determinant for enhanced sustainable performance. To fully embrace these dimensions of analysis, three main research objectives are investigated: (1) the exploration of how influences from stakeholders and risks for sustainable supply chains are managed; (2)

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the examination of the effects of influences from stakeholders and risks on sustainable performance in the supply chain; and (3) the investigation of the relationship between sustainable supply chain management risks and influences from stakeholders.

## THE IDEA OF STAKEHOLDER THEORY, INFLUENCES, AND RISKS IN SUPPLY CHAINS (SC)

Sustainability has grown in importance over time, directing initiatives to maximize internal and external stakeholder value. This rise in importance towards stakeholder sentiment is still being observed in more recent years and has driven the use of more recent references in the method and discussion sections. However, as diverse stakeholders involved often disagree on the value of sustainability initiatives (Wood, 1991), their influences and expectations may stimulate or deter the implementation of sustainable practices in SCs (Meixell and Luoma, 2015). This phenomenon is further supported by Silvestre et al., 2008, who argue that occasionally not all cooperation among stakeholders may be good. Overall, most stakeholders want companies to operate in a sustainable fashion, as well as to ensure the measures they have taken assure their suppliers' sustainable process. Hence, to drive this 'value,' organisations are taking into consideration the relevance of stakeholders in terms of their influence over company operations, the urgency of their requests, and the legitimacy it provides the business (Multaharju, 2016), while making allowances for social, environmental, and economic concerns of their SC operations, considered to be the Triple Bottom Line (Elkington, 1997).

More recently, the literature on stakeholder theory has grown in size and depth. In particular, growing social awareness of the impact of business on communities and nations have all been proposed. Stakeholder theory originally appeared in the 1980s before gaining traction in the 1990s, thanks to the works of authors such as Goodpaster (1991), Donaldson and Preston (1995), Clarkson (1994, 1995), et cetera. Developing itself as the new managerial paradigm among academics and management professionals, in addition to owners, workers, suppliers, and clients, other stakeholders could be interested in a company's operations (Clarkson, 1995). Reduced to its fundamental elements, the theory comes from the separation fallacy, open question argument, the integration thesis, and the accountability principle (Freeman, et al., 2010). The theory sought to solve three key issues: (i) the value creation and trade issue; (ii) the capitalism's ethics issue; and (iii) the issue of managerial mindset. These three issues comprise the basic mechanics of stakeholder theory. According to the theory, the relationship between a business and organisations as well as individuals who may change or are affected by it can supply a better chance of addressing these three concerns. This stakeholder approach to business aims to provide as much value to stakeholders as possible when avoiding trade-offs.

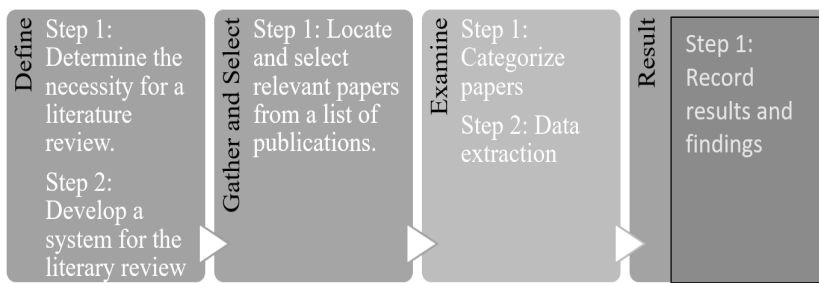
Stakeholders that have a long-term relationship with the firm are more likely to contribute valuable resources. To this end, understanding who the stakeholders are, their distinct interests, and how they operate is critical for today's businesses. The focus should be on identifying the stakeholders who are most crucial to the organisation's existence as well as satisfying their individual needs and aspirations (Hill and Jones, 1998; Helm and Mauroner, 2007; Baron, 2009).

A large body of literature provides several definitions of risk in the context of supply chains (Zsidisin et al., 2004). However, Juttner et al., 2003 posit a popular definition of risk that has been accepted by several researchers as anything that interrupts or impedes the flow of information, material, or product from original suppliers to the ultimate end user. Stemming from various risks, over the last 27 years, the field of risk management (RM) has been characterized by milestone developments. Kogut and Kulatilaka (1994) and Huchzermeier and Cohen (1996) first investigated the field from the perspective of embedded operational flexibility throughout the supply chain network design to reduce supply chain risk, following risk as a potential chance for a firm to reap considerable benefits. More recently, to ensure continuous adaptation to the changing global environment, the field is concerned with the primary objective of avoiding the possibility of a supply chain risk or its associated losses (Kleindorfer and Saad, 2005). Taking the supply chain risks into consideration, Carter and Rogers (2008) define supply chain risk management in the context of their paradigm as a firm's capacity to assess and manage social, environmental, and economic risks in the supply chain. Hence, following Tang (2006), where traditional approaches are no longer viable, four fundamental techniques for managing supply chain risks—supply management, demand management, product management, and information management—could be implemented. Mullai (2009) also provided four categories of risk management techniques: avoidance, reduction, transfer, and acceptance. This suggests RM should extend beyond the confines of a single organisation. RM tries to identify and quantify risks throughout the extended supply chain (Kleindorfer and Saad, 2005; Yu et al., 2007). Hence, where literature has identified transparency in the discussions of driving sustainability, this transparency should not only be driven by reporting to stakeholders but by their active engagement, comments, and inputs to ensure buy-in and enhance supply chain operations (Carter and Rogers, 2008).

## METHOD

A systematic literature study was undertaken in order to collect data from current research through dependable databases: Web of Science and Scopus. This method was selected to satisfy the qualitative structure of the research questions for this study, identify the key contributions in the field, and minimize the bias and inaccuracies in the review process (Tranfield et al., 2003). Two approaches were used: the four-stage approach adapted from Tranfield et al. (2003) in terms of the overall research design, and the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guideline for the purpose of selecting research papers (Page et al., 2021). The four-stage approach categorizes the research process into the following stages (**Figure 1.**): (i) Define; (ii) Gather and Select; (iii) Examine; and (iv) Result.

The first stage recognises the necessity for a literature review and the creation of a procedure for doing one. The second stage involves locating publications and selecting papers relevant to the study context. At this stage, the PRISMA guideline was utilised to carefully identify the suitable research publications. The third stage enables document categorisation and data extraction, and the last stage involves recording the results and findings.



**Figure 1.** The four stages of a systematic research design. Adapted from Tranfield et al. (2003).

In consideration of the above, a combined query using key terms was entered into Scopus and WoS. First in Scopus, key terms stakeholder\* and supply chain\* were searched within the title, giving (155) articles, and then (risk\* or influen\* or factor\*) were searched within the results, yielding (83) articles; upon inclusion, exclusion, and screening based on duplicate extraction and abstract and full article reviews, a total of 78 articles were obtained. Second, in WoS, stakeholder\* and supply chain\* were searched in the title, giving (118) articles, and then refined by key terms (risk\* or influen\* or factor\*), yielding (60) articles; upon inclusion, exclusion, and screening based on duplicate extraction and abstract and full paper reviews, a total of 42 articles were obtained. Both searches suggest that research into “stakeholder influences and risks for sustainable supply chains” has started to receive more attention.

The criteria for inclusion and exclusion used in selecting articles are depicted in **Table 1.** below.

**Table 1.** Inclusion and Exclusion Measures

Selection	Inclusion	Exclusion
Year of Publication	2012–2021	Prior to 2012
Document/Source Type	Peer reviewed articles	Other publications
Language	English	Non-English
Accessibility	Full text	Non-full text

The PRISMA guidelines for identifying articles are depicted in **Figure 2.** below.

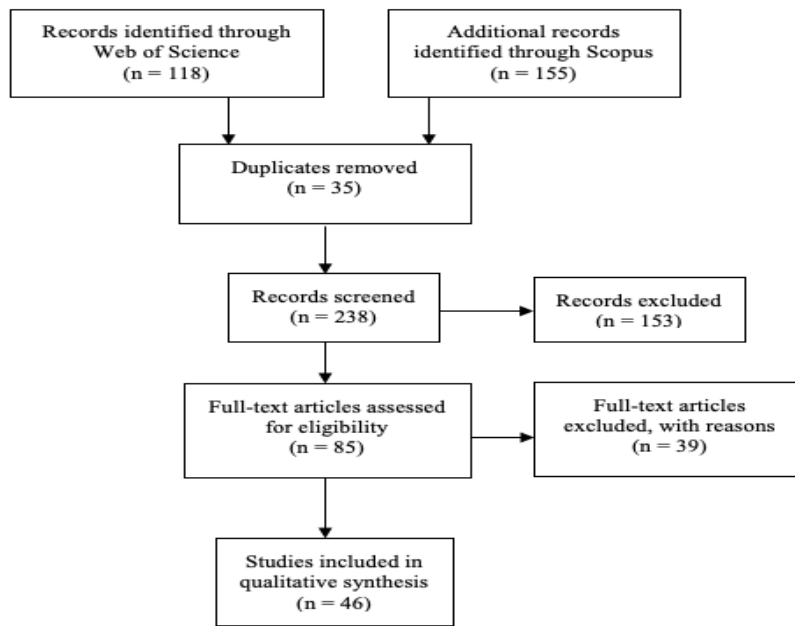


Figure 2. PRISMA Methodology

## RESULTS

The results were analysed to systematically respond to the research questions of the current study in the discussions section. The study suggests that increasing stakeholder pressure has impacted the acquisition of knowledge and information, as depicted in the publication period graph below (Figure 3). This knowledge can be proactively used in Sustainable Supply Chain Sustainability Risks (SCSR) supervision to tackle risk areas (Busse et al., 2017). The increased growth in sustainability from 2017 and the rise in stakeholder sentiment that is still being observed in more recent years further suggest stakeholder pressure contributes to higher Sustainable Supply Chain Management (SSCM) performance and implementation (Rebs et al., 2019). Similarly, integrating stakeholders into SC operations can lead to greater sustainability (Siems and Seuring, 2021).

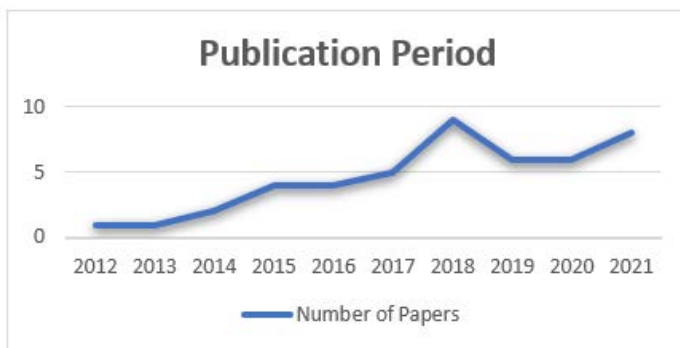


Figure 3. Publication Period (9-year period)

Through comparison and categorization, the retrieved data may be clearly understood and expanded to a deeper degree. Data was taken from each study for further analysis after identifying and categorizing the selected articles. As a result, taxonomy table (Table 2) was created to help examine the research in the most effective way possible. These tables describe the purpose, aims, methodological approach, and findings of each selected article, employed to build a clear path for analysis.

**Table 2.** Taxonomy Table

<i>Title</i>	<i>Author(s)/ Publication Year</i>	<i>Source/ Journal</i>	<i>Purpose</i>	<i>Methodological Approach</i>	<i>Industry</i>	<i>Main Contributions/Findings</i>
A Delphi-based risk analysis— Identifying and assessing future challenges for supply chain security in a multi-stakeholder environment	Markmann, C., Darkow, I.L., and von der Gracht, H. (2013)	<i>Technological Forecasting and Social Change</i>	To contribute to risk analysis in a fivefold method: (i) Detecting and quantifying risks; (ii) assessing stakeholder perceptions and world-views; (iii) promoting global communication process; (iv) recognizing weak signals, outlier viewpoints, and wild-cards; (v) and aiding risk scenario building.	Mixed-method approach (Delphi-research method)	Unnamed	Highlighted the usefulness of the Delphi-method to close the research gap of empirical support in identifying and analysing risk in a global environment, determining relevant topics and stakeholder estimations expected to be relevant in the future.
A multi-stakeholders view of the barriers of social sustainability in healthcare supply chains: Analytic hierarchy process approach	Hussain M., Khan M., Ajmal M., Sheikh K.S., and Ahamat A. (2019)	<i>Sustainability Accounting, Management and Policy Journal</i>	To make contributions to the healthcare industry by creating a model for identifying, categorising, and prioritizing social sustainability barriers.	Mixed-method approach (exploratory survey tool and Analytical Hierarchy Process [AHP])	Healthcare	Used a structured social sustainability framework to identify stakeholder disparity at 3 priority levels from 34 barriers to social sustainability to demonstrate relevance to the industry and determine risk mitigation priorities to address these barriers in the field.
A stakeholder perspective of social sustainability measurement in healthcare supply chain management	Khosravi F., and Izbirak G. (2019)	<i>Sustainable Cities and Society</i>	To quantify the social sustainability of majority of health supply chain players.	Quantitative approach (stochastic exponential distribution model)	Healthcare	Established a framework applicable across all supply chain systems to measure social sustainability levels to assist managers and advocate fairness and good values among stakeholders.
A stakeholders' perspective on barriers to adopt sustainable practices in MSME supply chain: Issues and challenges in the textile sector	Panigrahi S.S., and Rao N.S. (2018)	<i>Research Journal of Textile and Apparel</i>	To assess the pressures and challenges to integrating sustainable supply chain practices (SSCP) across Indian micro, small, and medium enterprises (MSMEs).	Quantitative approach (Interpretive structural modelling [ISM])	Textile	Developed a framework that enables textile MSMEs to integrate Sustainable Supply Chain Management (SSCM).
A supply chain perspective of stakeholder identification as a tool for responsible policy and decision-making	Fritz M.M.C., Rauter R., Baumgartner R.J., and Dentchev N. (2018)	<i>Environmental Science &amp; Policy</i>	To support businesses, researchers, governments etc. to achieve long-term sustainability objectives by identifying stakeholders from a supply chain viewpoint.	Qualitative approach (Supply Chain-Oriented Process to Identify Stakeholders; [SCOPIIS])	Unnamed	Developed an easily replicable 9-step process to enable managers identify stakeholders from a Supply Chain Perspective to reduce bias, omission and enhance knowledge on stakeholders.
Ameliorating food loss and waste in the supply chain through multi-stakeholder collaboration	Bhattacharya A., and Fayezi S. (2021)	<i>Industrial Marketing Management</i>	To expand systems for multi-stakeholder cooperation to minimize food loss and waste (FLW) across supply chains by combining the discussion of collaborative supply chain interactions with stakeholder theory.	Multi-method approach (systematic literature review; [SLR], and secondary case studies)	Unnamed	Elaborated multi-stakeholder collaboration conceptualized in a framework to promote collaborative orientation across vertical and horizontal cooperation, which helps to reduce FLW across the food supply chain and advances knowledge to support stakeholders.
Analysing the impact of environmental collaboration among supply chain stakeholders on a firm's sustainable performance	Ahmed W., Ashraf M.S., Khan S.A., Kusi-Sarpong S., and Arhin F.K., Kusi-Sarpong H., Najmi A. (2020)	<i>Operations Management Research</i>	To examine the influence and impact of stakeholder pressures on a firm's sustainability performance and attitude to green practices within the supply chain.	Quantitative approach (structural equation modelling technique)	Manufacturing	Demonstrated that stakeholder and regulatory forces drive green practices in the supply chain, while a firm's green performance is enhanced by systematic coordination in the form of collaboration and monitoring.

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Antecedents of closed-loop supply chain in emerging economies: A conceptual framework using stakeholder's perspective	Gaur J., and Mani V. (2018)	<i>Resources, Conservation and Recycling</i>	To establish a conceptual model for analysing the risks and opportunities faced by commercial enterprises operating closed loop supply chains (CLSCs)	Mixed-method approach (SLR and content analysis)	Unnamed	Identified 7 drivers that influence the performance of a firm and proposed a framework as a roadmap to firms to evaluate their circumstances and formulate suitable CLSC initiatives.
Can Multi-Stakeholder Initiatives Improve Global Supply Chains? Improving Deliberative Capacity with a Stakeholder Orientation	Soundararajan V., Brown J.A., and Wicks A.C. (2019)	<i>Business Ethics Quarterly</i>	To examine the notion of multi-stakeholder initiatives (MSIs) and illustrate their potential to encourage participation in initiatives over time.	Qualitative approach	Unnamed	Developed a framework to address the barriers that limit the success of MSIs and outlined conditions to encourage participation.
Challenges for sustainable supply chain management: When stakeholder collaboration becomes conducive to corruption	Silvestre B.S., Monteiro M.S., Viana F.L.E., de Sousa-Filho J.M. (2018)	<i>Journal of Cleaner Production</i>	To explore in the supply chain causes, dynamics, and effects of corruption in Brazil.	Qualitative approach	Unnamed	Explored the link between theoretical foundations and empirical results to contribute to theories, policies, and practices in four-fold method.
Changing approaches to child labour in global supply chains: exploring the influence of multi-stakeholder partnerships and the United Nations guiding principles on business and human rights	Boersma, M. (2017)	<i>University of New South Wales Law Journal</i>	To identify most effective contemporary approaches to child labour by civil society organisations, exploring how United Nations Guiding Principles on Business and Human Rights and multi-stakeholder partnerships can be connected.	Qualitative approach (Interviews)	Unnamed	Recognised that effective child labour approaches are characterized by organisations' collaboration with a variety of stakeholders that are contextually and globally based on consideration of local conditions and broader human rights and concentrate on preventing and remedying them.
Corporate motives for multi-stakeholder collaboration—corporate social responsibility in the electronics supply chains	Airike P.-E., Rotter J.P., and Mark-Herbert C. (2016)	<i>Journal of Cleaner Production</i>	To resolve complicated social responsibility concerns in global supply networks.	Qualitative approach	Electronics	Enhanced knowledge of solution mechanisms in conflict minerals and gave a fresh idea of the function of cooperation in promoting corporate social responsibility (CSR), and sustainability-related research.
Creating integral value for stakeholders in closed loop supply chains	Schenkel M., Krikke H., Caniels M.C.J., der Laan E.V. (2015)	<i>Journal of Purchasing and Supply Management</i>	To conduct comprehensive value generation research in CLSCs, identifying several forms of corporate value, strategic success criteria and numerous stakeholders involved in CLSC operations.	Qualitative approach	Unnamed	CLSC operations generate opportunities to decrease risks for the main company and its stakeholders, main and secondary.  The sharing and stakeholder relations within and across organisations enhance the generation of value by affecting strategic success elements e.g., product design, customer service etc.
Developing a theory of focal company business sustainability efforts in connection with supply chain stakeholders	Svensson G., Ferro C., Hogevoid N., Padin C., and Sosa Varela J.C. (2018)	<i>Supply Chain Management</i>	To evaluate the structural characteristics and related consideration of upstream, downstream, market and society stakeholders of stakeholder research models for focus business sustainability.	Quantitative approach (partial least squares—structural equation modelling [PLS-SEM])	Unnamed	Contributed to understanding and anticipation concerns of external stakeholders in the endeavour to sustainable business operations.

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Do stakeholder pressures influence green supply chain practices? Exploring the mediating role of top management commitment	Kitsis A.M., and Chen I.J. (2021)	<i>Journal of Cleaner Production</i>	To examine the key role green practices play in converting internal and external motivators as well as pressure from stakeholders and top management commitment (TMC) into superior economic and environment results.	Quantitative approach (structural equation modelling [SEM])	Unnamed	Identified TMC as a key part in translating stakeholder concerns into green practices that improve company economic and environmental performance.
Does stakeholder pressure matter in adopting sustainable supply chain initiatives? Insights from agro-based processing industry	Azam T., Wang S., Mohsin M., Nazam M., Hashim M., Baig S.A., Zia-Ur-Rehman M. (2021)	<i>Sustainability (Switzerland)</i>	To suggest and prioritize feasible solutions to optimize the effectiveness of the supply chain.	Quantitative approach (fuzzy-analytical hierarchy process [F-AHP-TOPSIS])	Pakistan agro-based processing	Established barrier identification as a technique that develops environmentally sustainable, socially responsible, and commercially viable solutions on a long-term basis.  Identified that the development of appropriate procurement cycle measures and vendor assessment during purchasing helps achieve sustainability.
EMERGING DISCOURSE INCUBATOR: Delivering Transformational Change: Aligning Supply Chains and Stakeholders in Non-Governmental Organisations	Gualandris J., and Klassen R.D. (2018)	<i>Journal of Supply Chain Management</i>	To investigate how interventions are provided, followed by an examination of how international non-governmental organisations' (INGOs) supply chains must be matched.	Qualitative approach	Food	Considered specific differentiation techniques and coordination mechanisms to the varied supply chain designs.
Examining the role of stakeholder pressure and knowledge management on supply chain risk and demand responsiveness	Cantor D.E., Blackhurst J., Pan M., and Crum M. (2014)	<i>International Journal of Logistics Management</i>	To examine how stakeholder pressure affects a company's risk management activities.	Quantitative approach (structural equation modelling [SEM])	Unnamed	Identified stakeholder pressure to have an impact on how companies acquire knowledge and information, and the company's capacity to extract advantages from its risk mitigation operations is strongly linked to its collaborative planning efforts with suppliers and will be more responsive to consumer demand.
Exploring the feasibility of introducing electric freight vehicles in the short food supply chain: A multi-stakeholder approach	Galati A., Giacomarra M., Concialdi P., Crescimanno M. (2021)	<i>Case Studies on Transport Policy</i>	To explore the challenges and opportunities for adopting electric freight trucks in short food supply chains (SFSCs) and the availability at system level of a unified strategy that might promote adoption.	Qualitative approach (systems innovation)	Food supply	Identified that applying a multi-stakeholder approach to current misalignments between market demand and supply requirements may be remedied by employing electric freight trucks as a workable option for entrepreneurs from SFSC.
Exploring the influence of supply chain collaboration on supply chain visibility, stakeholder trust, environmental and financial performances: a partial least square approach	Baah C., Acquah I.S.K., and Ofori D. (2021)	<i>Benchmarking—An International Journal</i>	To investigate the predictive significance of supply chain cooperation and how it impacts the visibility of stakeholder confidence, supply chain, environmental and financial outcomes.	Quantitative approach (partial least squares—structural equation modelling [PLS-SEM])	Manufacturing	Identified that restructured supply chain partnerships enhance partnerships results in loyalty and trust and enhances environmental and competitive advantages.
Extending the supply chain visibility boundary: Utilizing stakeholders for identifying supply chain sustainability risks	Busse C., Schleper M.C., Weilenmann J., Wagner S.M. (2017)	<i>International Journal of Physical Distribution and Logistics Management</i>	To explore how low-visibility buyers may use their network to uncover major SCSR.	Qualitative approach (design science)	Food	Developed a procedural model to demonstrate the efficacy of proactively using knowledge into SCSR supervision in order to detect SCSR areas.  Contributed to the method of prioritizing stakeholder anticipations the purchasing organisations encounter in internationally dispersed supply chain environments.



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Framework of Stakeholder Reactions on Sustainability Risk Mitigation Practices and Sustainability Performance in Supply Chains	Multaharju, S. (2016)	<i>Operations and Supply Chain Management—An International Journal</i>	To examine how focus firms and their SC sustainable performance might affect stakeholder reactions.	Qualitative approach (SLR)	Unnamed	Developed a theoretical framework and proposals for attainment of sustainability and stakeholder responses to real approaches.
How Corporate Social Responsibility and External Stakeholder Concerns Affect Green Supply Chain Cooperation among Manufacturers: An Interpretive Structural Modeling Analysis	Huang X., Yang S., and Shi X. (2021)	<i>Sustainability</i>	To discover and understand the most significant environmental impacts with supply chain partners and how these might contribute to improved environmental performance throughout the supply chain.	Quantitative approach (ISM)	Manufacturing	Provided insight on the relative relevance of 19 factors and their interdependencies to support greater interaction with supply chain partners for further enhanced environmental results.  Proposed that government or community financial incentives and environmental regulatory pressures play an important role in cooperating with green supply chains.
Impacts of stakeholder influences and dynamic capabilities on the sustainability performance of supply chains: a system dynamics model	Rebs T., Thiel D., Brandenburg M., and Seuring S. (2019)	<i>Journal of Business Economics</i>	To investigate the implications of stakeholder influences on SSCM performance	Quantitative approach (Systems Dynamics [SD] model)	Food	Identified that strong stakeholder pressure and stronger external stakeholder pressure contributes to higher SSCM performance and this is supported by a solid management of SSCM implementation.
Integration with Secondary Stakeholders and Its Relationship with Sustainable Supply Chain Practices in Colombian SMES	Quiroga-Calderon, L.M., Mejia-Salazar, I.S., Moreno-Mantilla, C.E., and Loaiza-Ramirez, J.P. (2018)	<i>European Journal of Sustainable Development</i>	To investigate whether the integration of companies and external stakeholders is impacted by practices of green supply chain management (GSCM) and increasingly innovative technologies, e.g., redefining the strategies of a supply chain.	Mixed-method approach (exploratory factor analysis [EFA] and lineal regression analysis)	Unnamed	Established that community integration from the perspective of stakeholder integration has a beneficial impact on the implementation of GSCM techniques and disruptive technologies in the context of an emerging economy.
Perceptions of stakeholder pressure for supply-chain social responsibility and information disclosure by state-owned enterprises	Sánchez R.G., Bolívar M.P.R., and Hernández A.M.L. (2017)	<i>International Journal of Logistics Management</i>	To analyse the impact on state-owned enterprise management (SOE's) on stakeholders' opinions of the necessity to establish socially responsible supply chain policies and to provide information about CSR.	Mixed-method approach (structured questionnaire and structural equation modelling [SEM])	Unnamed	Validated the notion that stakeholders maintain a favourable influence on organisational forecasting and may create awareness and promote the adoption of sustainable policies in the supply chain of enterprises.
Reactive and proactive pathways to sustainable apparel supply chains: Manufacturer's perspective on stakeholder salience and organisational learning toward responsible management	Roy V., Silvestre B.S., and Singh S. (2020)	<i>International Journal of Production Economics</i>	To examine the importance of stakeholders to apparel makers in emerging economies as well as their efforts to learn about sustainability.	Qualitative approach	Apparel	Identified that stakeholder demands are widely acknowledged as significant triggers for the formation of long-term supply networks and the proactive paths of SSCM (purposeful and rigorous efforts) extend the perspective of sustainability learning in supply chains even further.
Stakeholder management in reverse supply chains — The ranking of reverse supply chains entities upon requirements' fulfilment	Nestic S., Ljepava N., and Aleksic A. (2018)	<i>International Journal for Quality Research</i>	To rank reverse supply chain (RSC) organisations based on the fulfilment of key stakeholders' criteria.	Mixed-method approach (stakeholder analysis and fuzzy Delphi method)	Unnamed	Proposed a model to assess the importance of stakeholders' requirements as part of managing relationships with important stakeholders, allowing RSC entities explicitly or implicitly address organisation challenges and enhance their public image while respecting their stakeholder criteria.



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Stakeholder management in sustainable supply chains: A case study of the bioenergy industry	Siems E., and Seuring S. (2021)	<i>Business Strategy and the Environment</i>	To contribute to the theoretical debate on stakeholder management methods in SSCM.	Qualitative approach (interviews and content analysis)	Chile Bioenergy	Suggested that management of stakeholders incorporates several approaches to exchange, address and assess stakeholder problems at internal and external level to obtain legitimacy.  Proposed that the integration of stakeholders can lead to greater sustainability.
Stakeholder pressure in sustainable supply chain management: A systematic review	Meixell, M.J., and Luoma, P. (2015)	<i>International Journal of Physical Distribution &amp; Logistics Management</i>	To sum up and examine the method in which the demands of stakeholders might impact the sustainability of the supply chain.	Qualitative approach (SLR)	Unnamed	Argued that certain stakeholders and their pressure can influence SSCM differently and at 3 levels and in the development of sustainable supply
Stakeholder-Associated Life Cycle Risks in Construction Supply Chain	Koc K., and Gurgun A.P. (2021)	<i>Journal of Management in Engineering</i>	To analyze life cycle and stakeholders SC risks in construction projects.	Qualitative approach (SLR and content analysis)	Construction	Identified the efforts of primary contractors, subcontractors, suppliers, and customers as heavily dependent on effective practices in the supply chain, providing possible risks at each phase of the life cycle of SCs.
Stakeholder-Associated Supply Chain Risks and Their Interactions in a Prefabricated Building Project in Hong Kong	Luo L., Qipin Shen G., Xu G., Liu Y., and Wang Y. (2019)	<i>Journal of Management in Engineering</i>	To recognize dynamic risk interdependence and related stakeholders in Supply Chain Risks (SCRs).	Quantitative approach (Social Network Analysis [SNA])	Construction	Addressed the restrictions of standard static risk analysis by taking account of connected stakeholders and dynamic risk interactions, offering a fuller understanding of the SCRs in prefabricated building projects (PBP).
Stakeholders and socially responsible supply chain management: the moderating role of internationalization	Damert M., Koep L., Guenther E., and Morris J. (2020)	<i>Sustainability Accounting, Management and Policy Journal</i>	To evaluate the impact on the application of socially responsible supply chain management (SR-SCM) practices on demands from stakeholder situated in the origin country as well as degree of corporate diversification.	Qualitative approach	Unnamed	Identified the varied efficacy of stakeholder demands to facilitate socially acceptable behaviours in terms of strategic aspect of SR-SCM and the typical stakeholder.  Highlighted that more globalized companies tend to embrace more SR-SCM techniques, disregarding home country stakeholders with increasing internationalization.
Stakeholders' involvement in green supply chain: a perspective of block-chain iot-integrated architecture	Rane S.B., Thakker S.V., and Kant R. (2020)	<i>Management of Environmental Quality</i>	To investigate the engagement of stakeholders in the greening of the SC, as well as to identify use cases for professionals and practitioners who adopt high tech to promote stakeholder participation.	Mixed-method approach (literature survey, interviews and decision-making trial and evaluation laboratory; [DEMATEL] method)	Automobile	Identified and analysed the key Critical Success Factors (CSFs) that allow successful stakeholder engagement in the creation of a green supply chain.
Stakeholders' management approaches in construction supply chain: A new perspective of stakeholder's theory	Shahbaz M.S., Chandio A.F., Oad M., Ahmed A., and Ullah R. (2018)	<i>International Journal of Sustainable Construction Engineering and Technology</i>	To assess the relationship between the performance of the supply chain and three ways to stakeholder management, i.e., supplier relationship (SR), customer relationships (CS), and risk and reward sharing (RRS).	Quantitative approach	Construction	Found that the positives and substantial impacts on the performance of the supply chain are to be in all stakeholder management techniques (i.e., SR, CS, and RRS).

<i>Title</i>	<i>Author(s)/ Publication Year</i>	<i>Source/ Journal</i>	<i>Purpose</i>	<i>Methodological Approach</i>	<i>Industry</i>	<i>Main Contributions/Findings</i>
Sustainability assessment in automotive and electronics supply chains—A set of indicators defined in a multi-stakeholder approach	Schöggl J.-P., Fritz M.M.C., and Baumgartner R.J. (2016)	<i>Sustainability (Switzerland)</i>	To conduct a literature review on supply chain sustainability assessment.	Qualitative approach	Automotive and electronics	Findings served as the underpinning for SSCM, based on genuine information obtained from associates across the whole SC.
Sustainable evaluation and verification in supply chains: Aligning and leveraging accountability to stakeholders	Gualandris J., Klassen R.D., Vachon S., and Kalchschmidt M. (2015)	<i>Journal of Operations Management</i>	To synthesize a model of how companies may deal with responsibilities in their supply chain for sustainable concerns.	Qualitative approach (sustainable evaluation and verification method)	Unnamed	Supported the inclusiveness in promoting external transparency in an extended supply chain through the effective public sharing of information on material.
Sustainable supply chain management in stakeholders: supporting from sustainable supply and process management in the healthcare industry in Vietnam	Tseng M.-L., Ha H.M., Lim M.K., Wu K.-J., and Iranmanesh M. (2020)	<i>International Journal of Logistics—Research and Applications</i>	To promote the long-term development of healthcare business by recommending appropriate activities for supply chain players.	Quantitative approach (fuzzy Delphi method)	HealthCare	Provided qualities that best support SSCM and may be utilized as practical instruments to establish plans which fulfil the requirements of the stakeholders.
Sustainability supply chain management—The influence of local stakeholder expectations in China's agri-food industry	Kao, P.T., Reidekop, W.H., and Mark-Herbert, C. (2012)	<i>Journal on Chain and Network Science</i>	To inquire into multinational food processors and how they execute SSCM activities and how stakeholder influences may impact them in growing markets like China.	Qualitative approach (case-study approach)	Agri-Food	Identified that SSCM practices developed by companies breaking into emerging markets are heavily influenced by local stakeholder expectations and not only utilised food input.
The hidden cost of phosphate fertilizers: Mapping multi-stakeholder supply chain risks and impacts from mine to fork	Cordell D., Turner A., and Chong J. (2015)	<i>Global Change Peace &amp; Security</i>	To contribute towards understanding the consequences of phosphorous by identifying and discussing the nature of the phosphorus supply chain concerns and its transfer to various stakeholders.	Mixed-method approach (RapAgRisk framework)	Phosphorous	Identified the danger and consequences of the phosphorous supply chain along with wide and diversified risks.  Proposed that the supply chain and its stakeholder must be nimble and proactive to manage both recognized as well as unanticipated risks.
The Influence of External and Internal Stakeholder Pressures on the Implementation of Upstream Environmental Supply Chain Practices	Graham S. (2020)	<i>Business and Society</i>	To inquire into the influence of internal and external antecedents on upstream environmental practices, both separately and in combination.	Quantitative approach (multiple hierarchical regression analysis)	Food	Demonstrated the practical execution and implementation of a motivated environmental plan through three environmental supplier practices and competitive stakeholder pressure.
The Relationship Between Sustainable Supply Chain Management, Stakeholder Pressure and Corporate Sustainability Performance	Wolf J. (2014)	<i>Journal of Business Ethics</i>	To dispute a primary perspective of SSCM as a reaction to pressures from external parties, as advocated by famous media instances.	Quantitative approach (sustainability)	Unnamed	Contended that when organisations adopt SSCM tactics and practices, they do so largely in response to external forces such as non-governmental organisation activity or governmental regulation.  Identified a recent viewpoint on SSCM that companies see SSCM as providing benefits other than simply meeting the expectations of external stakeholders.

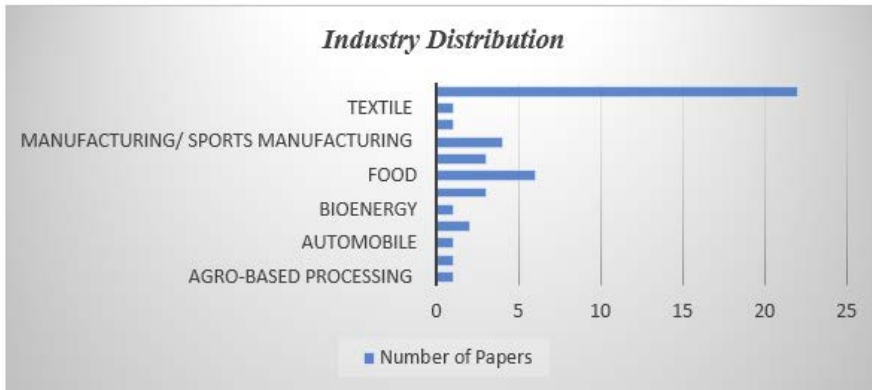
<i>Title</i>	<i>Author(s)/ Publication Year</i>	<i>Source/ Journal</i>	<i>Purpose</i>	<i>Methodological Approach</i>	<i>Industry</i>	<i>Main Contributions/Findings</i>
The stakeholder's pressure and environmental supply chain: Does environmental training matter in Thai sports manufacturing firms?	Somjai S., Rattamanee K., Thongdonpum K., and Jemsitiparsert K. (2019)	<i>Journal of Human Sport and Exercise</i>	To investigate how stakeholder pressure affects environmental supply chain practices.	Quantitative approach (structured equation modelling- partial least squares; [SEM-PLS])	Sports Manufacturing	Regulatory governance and market stakeholders (MRKTS) are critical for adopting Environmental Supply Chain Management (ESCM) procedures and the utilization of environmental training will result in larger ESCM efforts than the case of independently utilizing stakeholder governance mechanisms as strong pressure.
Towards Responsible and Sustainable Supply Chains—Innovation, Multi-stakeholder Approach, and Governance	Gurzawska A. (2020)	<i>Philosophy of Management</i>	To conduct an examination into possible options for effective SSCM to broaden the realm of conscientious decision-making and give conceptual explanation to aid subsequent study in this area.	Qualitative approach	Unnamed	SC stakeholders should employ new organizing and technology solutions to increase accountability and sustainability, providing more opportunities for monitoring and control, performance, and feedback among SC third parties.
Validating a framework of stakeholders in connection to business sustainability efforts in supply chains	Ferro C., Padin C., Svensson G., Sosa Varela J.C., Wagner B., and Høgevoid N.M. (2017)	<i>Journal of Business &amp; Industrial Marketing</i>	To determine the extent of sustainability efforts within company operations and organisational networks, the market, and the public.	Mixed-method approach (questionnaire survey and exploratory factor analysis)	Unnamed	Showed that in firms' business sustainability initiatives, stakeholders inside the core company, industry, and public stakeholders are more valued than implicit preceding and subsequent stakeholders in SCs.
Voluntary Governance Mechanisms in Global Supply Chains: Beyond CSR to a Stakeholder Utility Perspective	Soundararajan V., and Brown J.A. (2016)	<i>Journal of Business Ethics</i>	To examine and highlight poor working conditions from the standpoint of suppliers and subcontractors from developing nations.	Qualitative approach	Unnamed	Implied that implementing CSR/SCM methods in underdeveloped nations would remain unsuccessful without significant improvements to processes promoting and utilizing voluntary governance mechanisms in the global supply chain.

The table below (**Table 3**) summarises the SLR (shown in the taxonomy table, **Table 2.0**) to serve as a quick reference, as it classifies the articles into two major categories and generalises their key contributions.

**Table 3.** SLR Summary

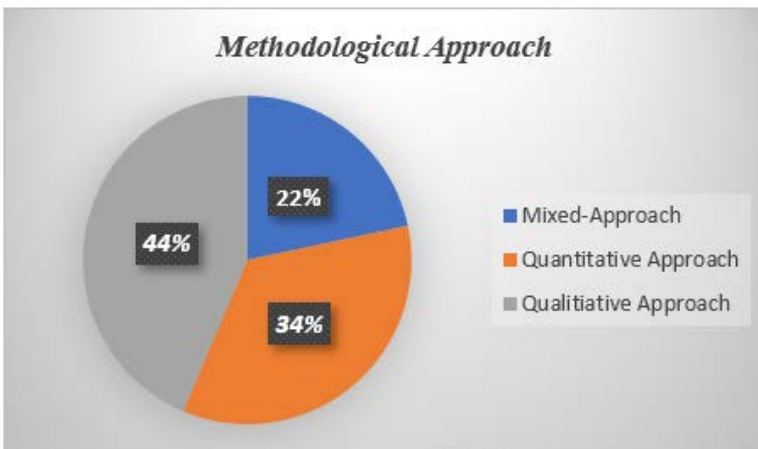
Main topic	Category	Authors	Key contributions
Fulfilment of stakeholder requirements, indicating critical impact of stakeholder interests while considering stakeholders and connected risks.	Performance: Influence & Risk	Rebs et al. (2019); Azam et al. (2021); Baah (2021); Gaur and Mani (2018); Shahbaz et al. (2018); Meixell and Luoma (2015); Nestic (2018); Ahmed et al. (2020); Busse et al. (2017); Markmann et al. (2013); Boersma (2017); Schenkel et al. (2015); Kitsis and Chen (2021); Cantor et al. (2014); Huang et al. (2021); Sánchez et al. (2017); Koc and Gurgun (2021); Luo et al. (2019); Damert et al. (2020); Shahbaz et al. (2018); Tseng et al. (2020); Wolf (2014); Gurzawska (2020); Ferro et al. (2017)	Articles in this category suggest that organisations in a bid to increase accountability and sustainability should employ new organising and technology solutions that provide more opportunities for understanding the degree of stakeholder influences and risks; monitoring, assessing, and efficiently communicating among supply chain stakeholders.
Models that assess the importance of stakeholder interests and risks on business case	Frameworks, Systems and Processes	Quiroga-Calderon et al. (2017); Roy and Singh (2020); Siems and Seuring (2021); Hussain et al. (2019); Khosravi and Izbirak (2019); Panigrahi and Rao (2018); Fritz et al. (2018); Bhattacharya and Fayezi (2021); Gaur and Mani (2018); Soundararajan et al. (2019); Silvestre et al. (2018); Airike et al. (2016); Svensson et al. (2018); Gualandris and Klassen (2018); Galati et al. (2021); Busse et al. (2017); Multaharju (2016); Rane et al. (2020); Schöggel et al. (2016); Gualandris et al. (2015); Cordell et al. (2015); Graham (2020); Somjai et al. (2019); Soundararajan and Brown (2016)	Articles in this category recommend practical frameworks, systems, and processes to verify measures that consider connected stakeholders, their influences, and associated risks.

Following the publication period, findings from the taxonomy table (Table 2) depict that most articles synthesize an all-inclusive industry approach and cover the key issues in generic terms; fewer articles conduct research into specific industries, primarily food, manufacturing, healthcare, and construction industries (see Figure 4).



**Figure 4.** Industry Distribution.  
Source: Authors' analysis.

Further to the identified industries, findings below (Figure 5) suggest that qualitative analysis prevails in the research into stakeholder influences and risks.



**Figure 5.** Methodological Approach used.  
Source: Authors' analysis.

Both industry distribution and methodological approaches identified the need for organisations to investigate and apply specific sustainable methods in their operations. The developed taxonomy table aids academic researchers and professionals alike in identifying gaps in current literature to act on for future operations. The purpose, methodological approach, and main contributions and findings clearly demonstrate a combination of discussions of collaborative efforts towards coding literature of stakeholder pressures and risks in sustainable supply chains.

## DISCUSSION

### Managing stakeholder influences and risks

Stakeholders may be recognised in SC decisions to enhance sustainability initiatives, but there is still little information on how to do so (Siems and Suering, 2021). Yet, these decisions made within the organisational concept of SSCM were found to necessitate the successful collaboration of all stakeholders (Panigrahi and Rao, 2018), and therefore have an influence on

outcomes and risk along the Triple Bottom Line (TBL). Hence, the aim to research the extent of influences from stakeholders and risks for sustainability in supply SCs emerges. SSCM decisions are difficult tasks that include designing the supply network as well as planning, executing, and controlling the operations within it (Brandenburg et al., 2019). Nevertheless, with a wide literature review in accordance with stakeholder theory principles, considered to be the most challenging paradigm for measuring sustainability (Khosravi and Izbirak, 2019), the identification of stakeholders is considered a vital step not just to preserve company reputation, but also to better understand and engage stakeholders in the implementation of more sustainable SCs (Wolf, 2014). Sustainability in SCs is largely carried out through the adoption of sustainable practices rather than traditional methods (Multaharju, 2016). From a supply chain perspective, this identification starts at the level of a product or service, rather than at the level of an organisation or issue, as most conventional techniques do (Fritz et al., 2018). After the major stakeholders have been identified, focus should be on their requirements (Nestic et al., 2018). In order to achieve these sustainability targets, expanding sustainable practices to suppliers is crucial (Panigrahi and Rao, 2018). However, it is worth noting that distinct stakeholders and their pressures can influence SSCM differently (Meixell and Luoma, 2015).

According to Panigrahi and Rao (2018), sustainable SC practices should be included from inception of the SC, and all parties involved should be held responsible for achieving sustainability.

Subsequently, this study reveals that many topics and issues for sustainable SCs have been researched from a stakeholder and risk perspective. These topics are discussed under three broad categories: (i) Social Sustainability; (ii) Environmental Sustainability; (iii) Economic Sustainability.

#### **Social Sustainability: Extent of implementation**

Due to pressure from stakeholders who want socially responsible corporate operations, the concern for social sustainability has increased among supply chain managers and researchers alike (Najjar et al., 2020).

Damert et al., (2020) created a SR-SCM framework to better comprehend the maintenance of social problems in SCs, a complete investigation demonstrating the relationship between stakeholder pressures and communication, compliance, and supplier development strategies. The analysis of Damert et al. (2020) reveals that inconsistencies emerge over various categories of stakeholder pressures and strategies.

This study posits that the extent to which the adoption of sustainable supply chain practices occurs in developing countries are relatively low in comparison to developed countries. To illustrate, from poor nations, the use of underage and forced labour is being scrutinized, particularly in sourcing (Multaharju, 2016). Further, some of these barriers in developed countries (such as UAE) include poor infrastructure, stakeholder disparity, organisational culture, uncertainty, and poor coordination (Hussain et al., 2019), all of which underline the necessity for adequate administration, policy support, and supply chain standards to enhance cooperation between stakeholders and make them capable of addressing uncertainty when they need to so.

#### **Environmental Sustainability: Extent of implementation**

Several environmental legislations in recent years have brought about pressure on firms for the environmental effects of their production processes to meet with specific norms or levels (Graham, 2020). Thus, understanding the supply chain's sustainability implications is becoming increasingly important as environmentally friendly goods and methods are growing more popular among stakeholders (Rane et al., 2020). Therefore, the goal of stakeholder pressure on environmental performance is to decrease the negative impact of externalities that the company creates (Ahmed et al., 2020). Taking the textile industry, for instance, Panigrahi and Rao (2018), suggest that companies are conscious of environmental concerns as well as eager to please their consumers through increasing environmental outcomes by incorporating sustainable supply chain practices (SSCP) into their SCs. As such, stakeholder and institutional pressures trigger environmentally sustainable practices (Ahmed et al., 2020). Similarly, the major factors or drivers of the implementation of environmental supply chain management processes by companies are regulatory stakeholder pressure and market pressure (Somjai et al., 2019). Early research suggested the impact on environmental practices of a proactive environmental strategy was not thoroughly evaluated (Graham, 2020). Now implementation of environmental practices assures cleaner products that enable efficiency in production, manage waste disposal, reduce carbon emissions, improve the use of raw materials, and finally, enhance financial performance in inventory management (Baah et al., 2021). According to Multaharju (2016), the primary environmental risk sources are industrial pollutants, primarily from the manufacturing and transportation sectors.

Since these environmental issues affect stakeholders, firms are put under pressure (Siems and Seuring, 2021). The manufacturing sector specifically is therefore required to contribute to environmental sustainability because of its huge usage of resources, energy, and greenhouse gas emissions (Baah et al., 2020).

### **Economic Sustainability: Extent of implementation**

Companies' efforts towards sustainability are certainly not motivated exclusively by altruism, and the goal of preserving and increasing profit is shared by all firms (Svensson and Wagner, 2015). Often, economic sustainability is solely associated with extra costs arising from the failure to adopt sustainable practice (Multaharju, 2016). However, the economic aspect of sustainability assesses the firms' organisational performance, profitability, and productivity phases (Azam et al., 2021).

### **Impact of stakeholder influences and risks on sustainable performance**

The supply chain network ensures that companies fulfill sustainable criteria and achieve economic, environmental, and social advantages to meet stakeholder needs (Silvestre et al., 2018). Stakeholders frequently put pressure on a company to adopt sustainable organisational methods (Cantor et al., 2014; Rebs et al., 2019). Similarly, they may increase awareness and support sustainable policy implementation in supply chains of companies (Sanchez et al., 2017). Stakeholder influences and risks extend beyond the focal company, as pressures arise from upstream and downstream, forcing companies to adopt sustainable practices. Important supporting players that do not actively engage in the movement of goods from one phase to the next, however, are commonly overlooked by academics and practitioners (Busse et al., 2017). They necessitate the need for companies to comply with institutional constraints imposed on them by external stakeholders (Ahmed et al., 2020). Similarly, collaboration among stakeholders aids supply chains in resolving their complex social and environmental issues (Silvestre et al., 2018). Therefore, the need to manage stakeholders within supply chains has never been greater, especially because the functioning of these networks depends on interactions between various internal and external stakeholder groups (Hussain et al., 2019). A step farther not only identifies threats, but also discovers inefficiencies (Gualandris et al. 2015), for instance, due to the development of and reporting by certain stakeholders on specific measurements to track resource use in the supply chain; e.g., Coca-Cola was effective in decreasing water and energy use per product unit by 20 % (Kumar et al., 2012).

### **Sustainable supply chain risks (SSCRs) versus stakeholder influences**

From a supply chain perspective stakeholder identification starts at the level of a product or service, rather than at the level of an organisation or issue (Fritz et al., 2018). Both stakeholder influences and SSCRs are determined to be mechanisms within SSCM that enhance social and environmental circumstances in the upstream chain of values for a sustainable supply chain (Wolf, 2014). This key opinion argues that companies, if they adopt SSCM strategies and practices, react largely to external pressures and major stakeholder interests, such as government regulations. After the major stakeholders have been identified, the focus should be on their requirements (Nestic et al., 2018). Similarly, there exists a substantial relationship between the cooperative planning in an organisation and its stakeholders as well as its success in risk management (Cantor et al., 2014). According to the World Economic Forum (WEF, 2010), when interacting with stakeholders, companies must adopt a balanced strategy to improve risk management. In fact, stakeholder management techniques decrease supply chain risks (Chen, 2012). As a result, poor sustainable operations within upstream supply chains may result in SSCRs for purchasing organisations. Therefore, in order to observe social and environmental problems and prevent penalties and criticism by stakeholders, companies should implement standards and certifications through risk management techniques (Seuring and Mueller, 2008). According to Tang (2006), these include supply management, demand management, product management, and information management. Similarly, external knowledge may be proactively integrated into SCSR (Busse et al., 2017). Stakeholders can therefore persuade the company to learn about possible dangers that its suppliers are incurring when making and delivering its product. It is obvious that there is a direct link between the pressure from the stakeholders and the benefits a company obtains from its risk mitigation initiatives. While it is useful to fully understand the identification of conflict stakeholder interests, it is outside the scope of this study and is highlighted as an area for future research. However, these multiple and conflicting interests may become a resource itself for risk. This is revealed by Koc and Gurgun (2020) in their analysis of the construction supply chain life cycle, where at least one key supply chain stakeholder participating in a focus group was linked with 135 identified risks (environmentally unfriendly production, high cost of reverse logistics, lack of environmental awareness in the organisation, and so on).

Therefore, if a company had a complete understanding of the upstream supply chain, including specific sustainability circumstances, it would be readily positioned to reduce SCSR, as stakeholders may be considered assets via risk identification, mitigation, and resolution along the SC, better internal SC openness, and supplier supervision (Busse et al., 2017).



## CONCLUSIONS

Research in managing stakeholders' influences and risks in sustainable supply chains has only just begun; in fact, according to Kao et al. (2012), previous SSCM research has generally been multi-sector focused, and so its relevance lies in bridging the gap in the consideration of multiple stakeholder interests in SC decisions to improve sustainability performance, while managing SC risks. As sustainability increases in importance, many companies are shifting from profit maximization to incorporating sustainable practices in their activities. Social, environmental, and economic concerns form the basis for these sustainable practices and the focus in terms of People, Planet, and Profit (TBL).

The stated research objectives were met based on the systematic literary review employed for this study. The results of the current investigation are depicted in the advantages from the managerial standpoint and are useful in illustrating best practices to handle situations faced in the business world to continuously create value for stakeholders. This study suggests three key approaches for this: knowledge management (a key approach that covers most aspects of managing SC risks), collaboration (another approach that supports the idea that the integration of stakeholders can lead to greater sustainability), and top management commitment (critical for adopting organising and technology solutions that could increase sustainability). All three, in turn, provide solutions to the three key issues identified in stakeholder theory. Further, there is need for academic researchers and managers alike to harmonize the data on managing stakeholder influences and risks in sustainable supply chains to make it more efficient and to point out avenues for further research. This paper thus indicates the importance of aligning stakeholder influences and risk mitigation practices for sustainable supply chains.

It can be recommended that, as distinct stakeholders and conflict stakeholder interests were not identified in articles used in the SLR, this area needs to be thoroughly researched to reflect the link between specific stakeholder groups' influences in any given industry and how these influences can be approached. This study adds to the literature on the level of stakeholder influences and risks in SSCs. The pressure faced by firms indicates a significant concern for future SSCM research. Hence, there is need for academic researchers and managers alike to dedicate efforts to harmonize data on managing stakeholder influences and risks for sustainable supply chains to make them more efficient.

Similarly, the information derived from this study can be employed by companies as strategic and operational indicators of sustainable performance. Managers are more conscious of the importance of ensuring that each stakeholder group can fulfil its role in long-term sustainability. To measure performance: supplier assessment, performance reviews, supervision and selection, procurement, sustainable product creation, or sustainability reports are recommended as standard business operations. Hence, engagement with several stakeholders can create an early warning system to help anticipate unforeseen negative effects of developing sustainability risks (Reed, 2018; Manetti and Toccafondi, 2012).

For future research, a mixed research approach that involves both quantitative and qualitative methods is recommended to allow companies to comprehend and incorporate stakeholder influences and associated supply chain risks into SSCM. Researchers and companies alike can continue to investigate relevant modelling techniques, as well as conduct interviews with relevant stakeholders to identify key expectations that will aid in correctly assessing the extent of sustainable practices in various industries.

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