Influential Article Review - Sustainable Supply Chain Management and Its Implication to Company Stakeholders

Quentin Carson

Seamus Patton

Grace Mcclain

This paper examines sustainability. We present insights from a highly influential paper. Here are the highlights from this paper: Stakeholder influences on sustainable supply chain management (SSCM) are of increasing interest for researchers to take into account economic, environmental, and social risks. While extant literature on stakeholder influences or risks in SSCM concentrates on selected issues, a comprehensive review of both stakeholder and risk constructs is missing. Hence, this paper examines stakeholder influences and risks in SSCM, as addressed by conceptual frameworks, empirical studies, and formal models to shed light on the trends and gaps in qualitative and quantitative SSCM research. Based on a content analysis of systematically selected journal publications, the commonalities and differences between the research designs are identified. The findings suggest that the integration of economic risks prevails over the consideration of environmental and social risks. Qualitative studies frequently focus on customers or multiple stakeholders that trigger SSCM and relate to supply, demand, and particularly reputational risks. In contrast, quantitative models rather concentrate on formalizing governmental triggers and operational risks. Thus, mutual stimuli between conceptual, empirical, and model-based SSCM research and their implications for future research directions are derived. For our overseas readers, we then present the insights from this paper in Spanish, French, Portuguese, and German.

Keywords: Sustainable supply chain management, Stakeholder influences, Risk management, Literature review, Conceptual frameworks, Empirical studies, Formal models

SUMMARY

- Our results largely confirm the findings by Meixell and Luoma , who find that customer, governmental, and a wide range of other stakeholder pressures are addressed by empirical studies. Furthermore, a similar share of holistic TBL orientation and economic-environmental studies is detected. Based on a bibliometric cluster analysis, Fahimnia et al. reveal sustainability risk management as an important, however underrepresented field of risk management research that is rapidly growing. The results of the study at hand confirm this observation and, in addition, exemplify the importance of linking conceptual and empirical studies to model-based research.
- The additional coding categories selected for this paper lead to novel insights with regard to the actor and level of analysis and the industry focus.

- Our observations based on citation analysis suggest that stimuli between different research methods need to be strengthened in future research. Formal models help to validate conceptual frameworks and quantify the links between constructs that are often substantiated only by qualitative arguments or empirical observations. Correspondingly, empirical studies can help to test formal models, and quantitative analyses that are based on empirical data can lead to stronger findings than models simply illustrated at generic numerical examples.
- The operationalization of sustainability factors, e.g., by determining the financial impacts of sustainability practices, is a key complication when conceptualized constructs are translated into formal models for SSCM. Operationalize stakeholder influences for SSCM
- The operationalization of stakeholder influences on SSCM needs to be strengthened. Formal models support the evaluation of the effectiveness of regulatory pressures and incentives both for SSCM performance measurement and public policy-making.
- The operationalization of SSCM risks leaves room for additional research. The conceptualization of environmental and social risks in the context of SCM is still fragmentary and systematizes specific risk factors using heterogeneous typologies, while the consideration of risks appears to become more relevant for scientific research and managerial practice.
- Examine industry specifics and managerial implications. Different application contexts offer new perspectives to assess stakeholder triggers and SSCM risks. Sustainability risks in the food and beverage SC, identified as a prominent industry focus in conceptual and empirical SSCM research, could be assessed by formal models. Agricultural production as well as food processing industries are central to sustain human life and exposed to a variety of environmental and social risks in an extremely dynamic SC environment of perishable goods. In addition to formal models, sustainability risks and stakeholder influences in the transportation sector could empirically be assessed. In general, the automotive industry, the retail sector, and the chemical and pharmaceutical industry are underrepresented research contexts in which economic, environmental, and social impacts need to be studied more thoroughly.
- Recommendation stresses the necessity to rethink the interplay between qualitative and quantitative approaches to research on stakeholder influences and risks in SSCM. In this way, the existing shortcomings of formal models to reflect sustainability-related stakeholder influences and risks in SCs could be overcome. From the results of content analysis, some examples become evident. Regarding the SC level of analysis, empirical studies that elaborate on more complex network structures and that validate respective formal models are needed. In particular, empirical research could shed further light on sustainable network design. Formal models should be stringently linked and tested with empirical data to ensure congruence of metrics and to support the validation of the model.

HIGHLY INFLUENTIAL ARTICLE

We used the following article as a basis of our evaluation:

Rebs, T., Brandenburg, M., Seuring, S., & Stohler, M. (2017). Stakeholder influences and risks in sustainable supply chain management: a comparison of qualitative and quantitative studies. Business Research, 11(2), 197–237.

This is the link to the publisher's website:
https://link.springer.com/article/10.1007/s40685-017-0056-9#Sec31

INTRODUCTION

Sustainable supply chain management (SSCM) has become an established field of research. Currently, SSCM plays a crucial role in mature markets as well as in emerging economies (Esfahbodi et al. 2016).

However, major trends and shortfalls in SSCM research include the need to comprehensively address stakeholder influences and to elaborate upon appropriate approaches to SSCM performance measurement (Pagell and Shevchenko 2014; Reefke and Sundaram 2017). Various conceptual frameworks provide definitions (Ahi and Searcy 2013) and systematize key constructs for SSCM research (Seuring and Müller 2008a, b), while empirical studies on the state of SSCM development (Carter and Easton 2011) and formal models for SSCM (Seuring 2013; Brandenburg et al. 2014) illustrate how to integrate environmental and social sustainability factors into supply chain management (SCM). Besides intra-organizational activities and reverse operations, the inter-organizational perspective on the forward supply chain (SC) is highly relevant. Moreover, pressures and incentives from governments, customers, and other stakeholders that trigger the implementation of SSCM (Seuring and Müller 2008b) as well as sustainable risk management are of particular interest in scientific literature (Hofmann et al. 2014). Relationship management with stakeholders and sustainable risk management in SCs are identified as major themes and research opportunities in SSCM (Reefke and Sundaram 2017).

Recent literature shows that quantitative models formalize stakeholder pressures and incentives for green or sustainable SCM and assess sustainability risks (Brandenburg and Rebs 2015). However, conceptual and empirical research that focuses on SSCM triggers and risks has not been compared to the developments and directions of formal models. These research streams might even appear somewhat disconnected. Hence, this paper seeks to compare how stakeholder triggers and risks are addressed by conceptual frameworks, empirical studies, and formal models. Based on commonalities and differences of focused constructs, mutual stimuli and guidelines for future research are addressed.

Thus, we pose the following research questions to explore the current state of research and future research directions:

1. How are stakeholder influences on SSCM addressed in related research?
2. How are sustainability-related risks conceptualized and evaluated in SSCM research?
3. Which guidelines and future prospects are derived from commonalities and differences of conceptual frameworks, empirical studies, and formal models?

The remainder of this paper is organized as follows: In Sect. 2, related reviews are summarized, and the research questions of this literature review are justified. In Sect. 3, the research methodology is described, and the methodological rigor is discussed. Section 4 contains the results of the content analysis. Subsequently, Sect. 5 summarizes the main findings and presents a conceptual framework of stakeholder influences and SSCM risks. Section 6 outlines the contributions and limitations of this study and suggests guidelines for future research based on the key findings. Section 7 concludes this paper. Additionally, the references of all journal articles analyzed for this literature review are provided as electronic supplementary material.

CONCLUSION

The developments of SSCM research considering the stakeholder triggers and risk for SSCM performance are compared to point out commonalities and differences between conceptual, empirical, and formal modeling research. The systematic search for sample papers in the Web of Science involves journal-specific searches in key journals in the field of logistics and SCM. The results of the analysis suggest that research considering stakeholder influences and risks in SSCM has just begun and that its future relevance will accelerate. Thus, considerable efforts are necessary to conceptualize and measure the interrelationships between stakeholder triggers for SSCM and sustainability-related SC risks. While governmental triggers are prevailing in related formal models, customer and other stakeholder triggers are dominating conceptual and empirical studies. Future research should take into account environmental and social risks in addition to the prevailing economic risk management. Moreover, formal models also need to integrate customer and other stakeholder groups. The operationalization of stakeholder influences and SSCM risks by formal models is highlighted as another future research area. Finally, an integrated view on stakeholder triggers and SSCM risks is advocated for SSCM research and practice to comprehensively control and sustain SC performance.

APPENDIX

FIGURE 1
DISTRIBUTION OF SAMPLE PAPERS OVER TIME

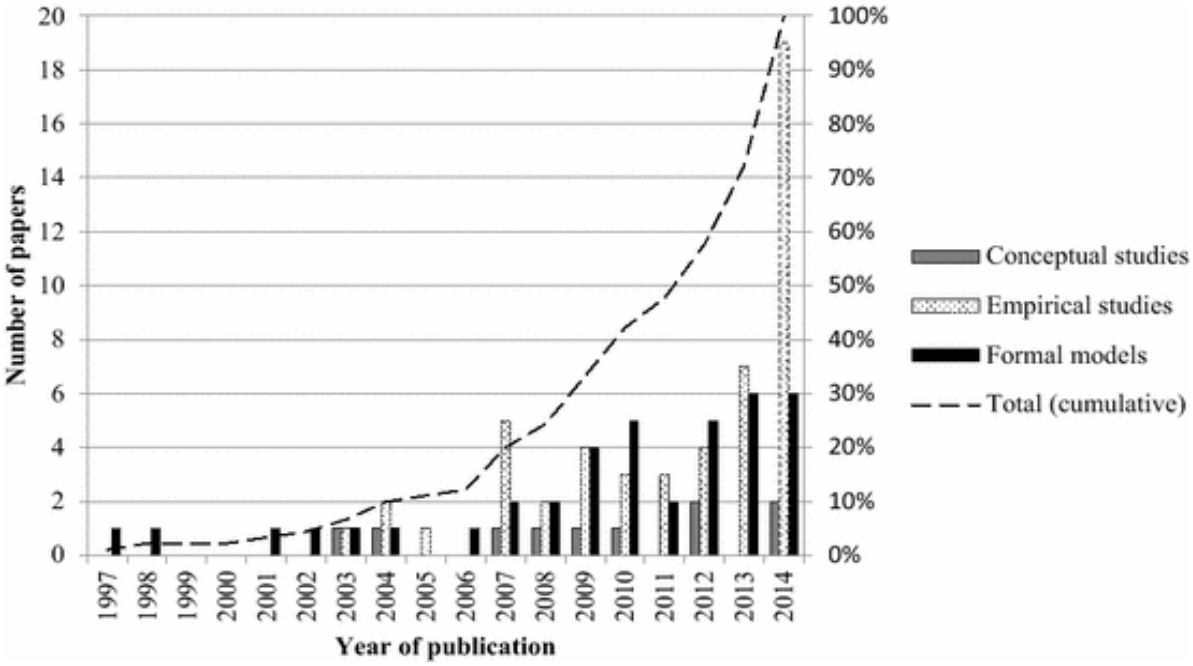


FIGURE 2
CITATIONS WITHIN AND BETWEEN THE TWO RESEARCH CLUSTERS

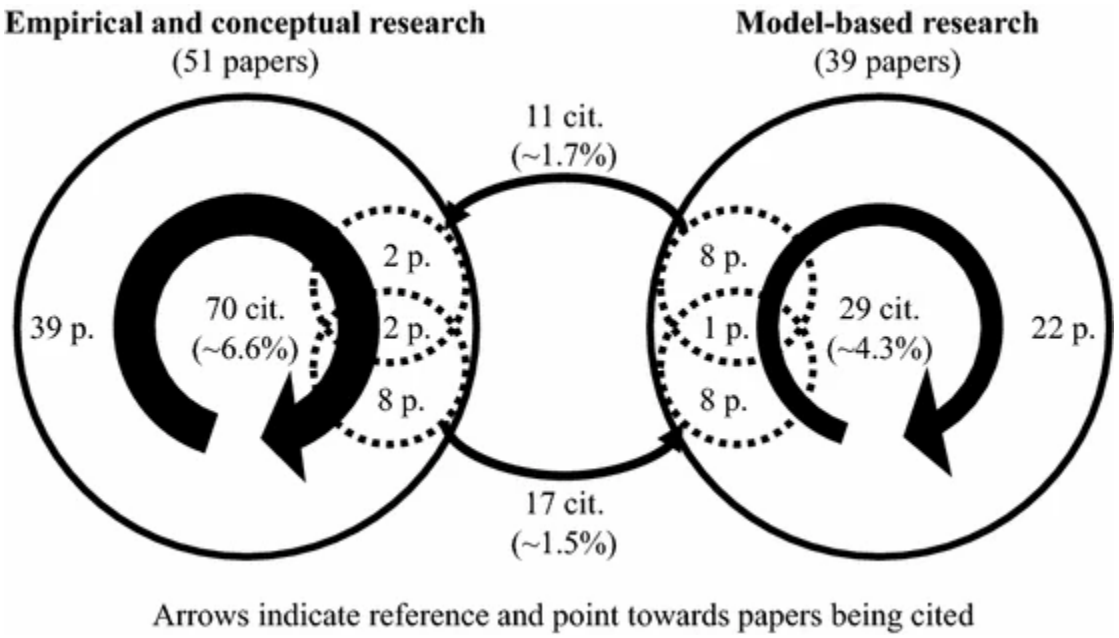
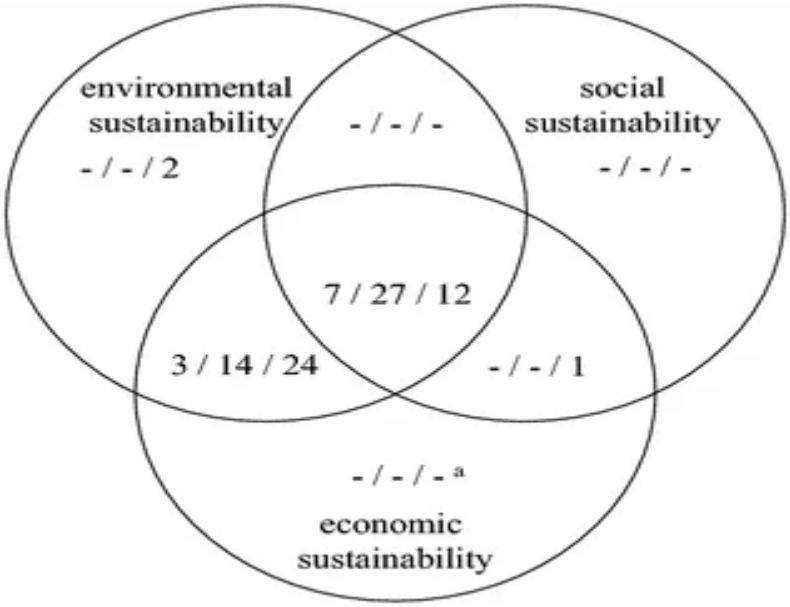


FIGURE 3
DIMENSION OF THE TBL OF SUSTAINABILITY



Legend: conceptual studies / empirical studies / formal models

[a] Purely economic studies are not in focus

FIGURE 4
DISTRIBUTION OF SAMPLE PAPERS OVER PUBLICATION YEARS FOCUSING ON ONLY STAKEHOLDER TRIGGERS, ONLY SSCM RISKS, OR BOTH DIMENSIONS

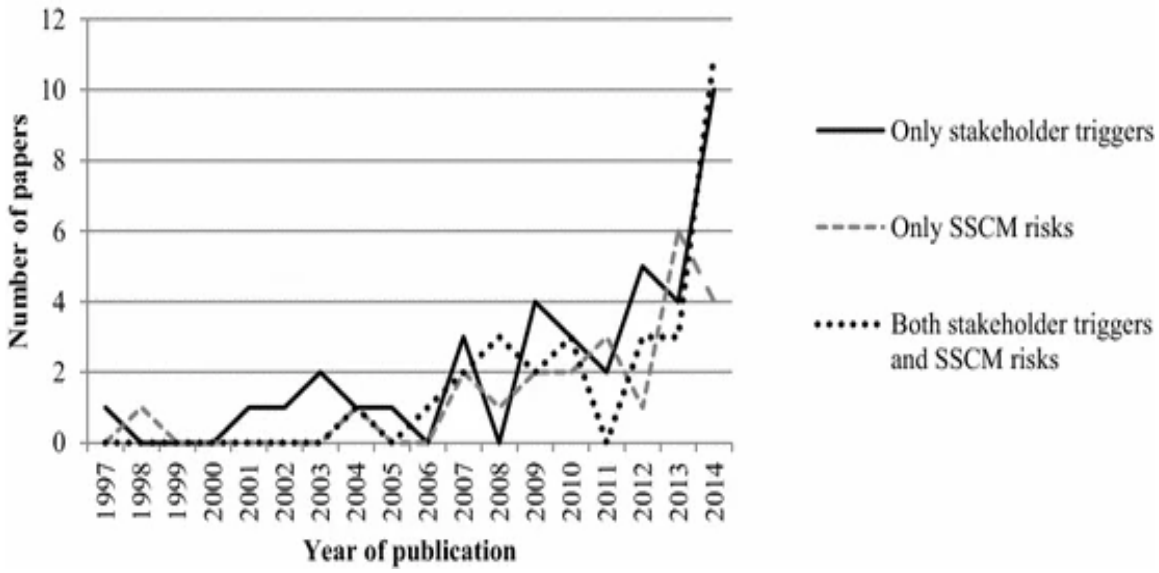
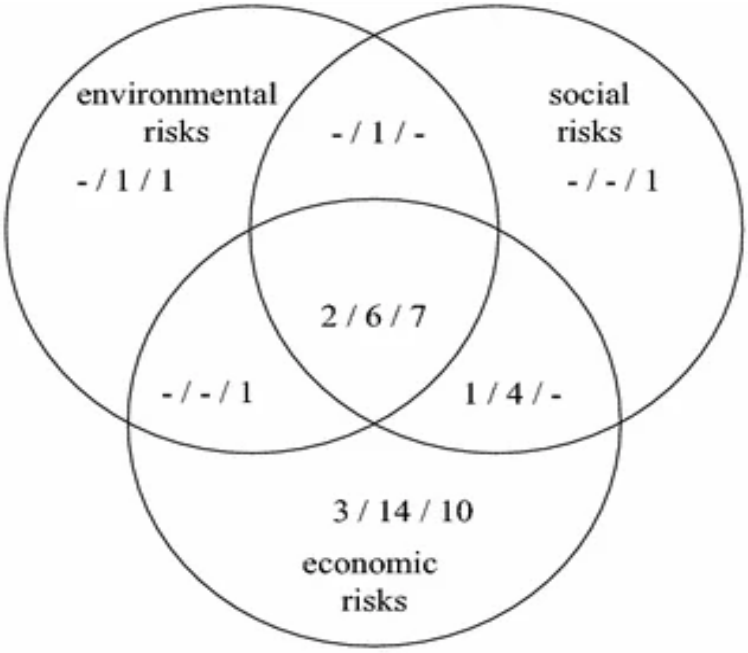


FIGURE 5
TBL RISKS IN SSCM



Legend: conceptual studies / empirical studies / formal models
Note that risks are not addressed or modeled by: 4 / 15 / 19

FIGURE 6
SIMILARITIES AND DIFFERENCES REGARDING RISK APPROACHES

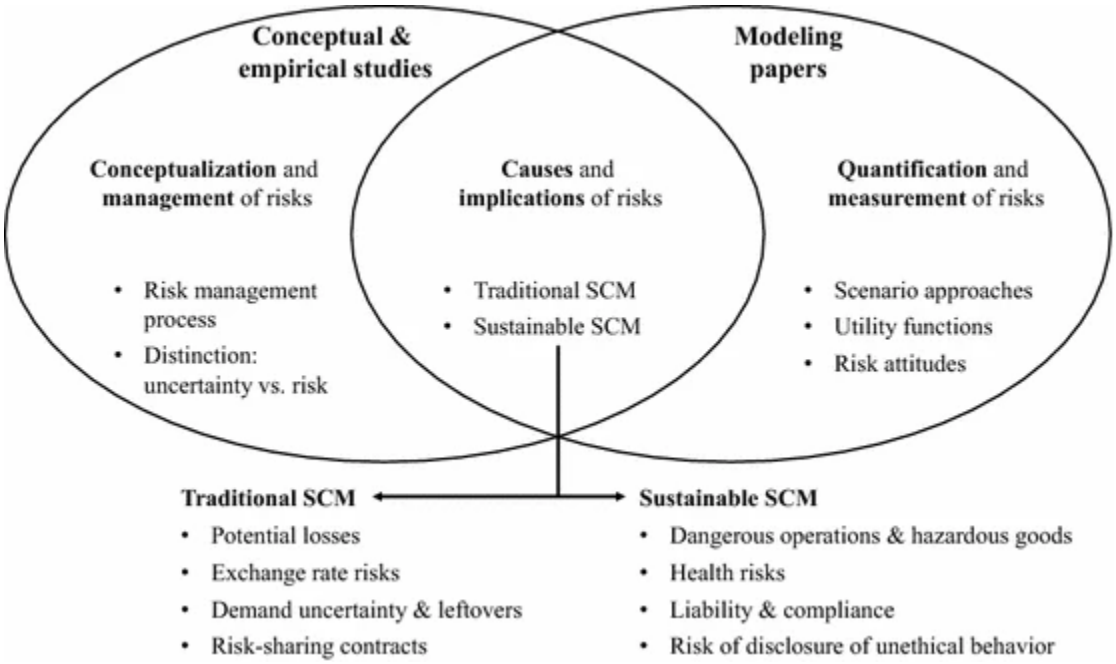


FIGURE 7
CONCEPTUAL FRAMEWORK OF STAKEHOLDER INFLUENCES AND RISKS IN SSCM

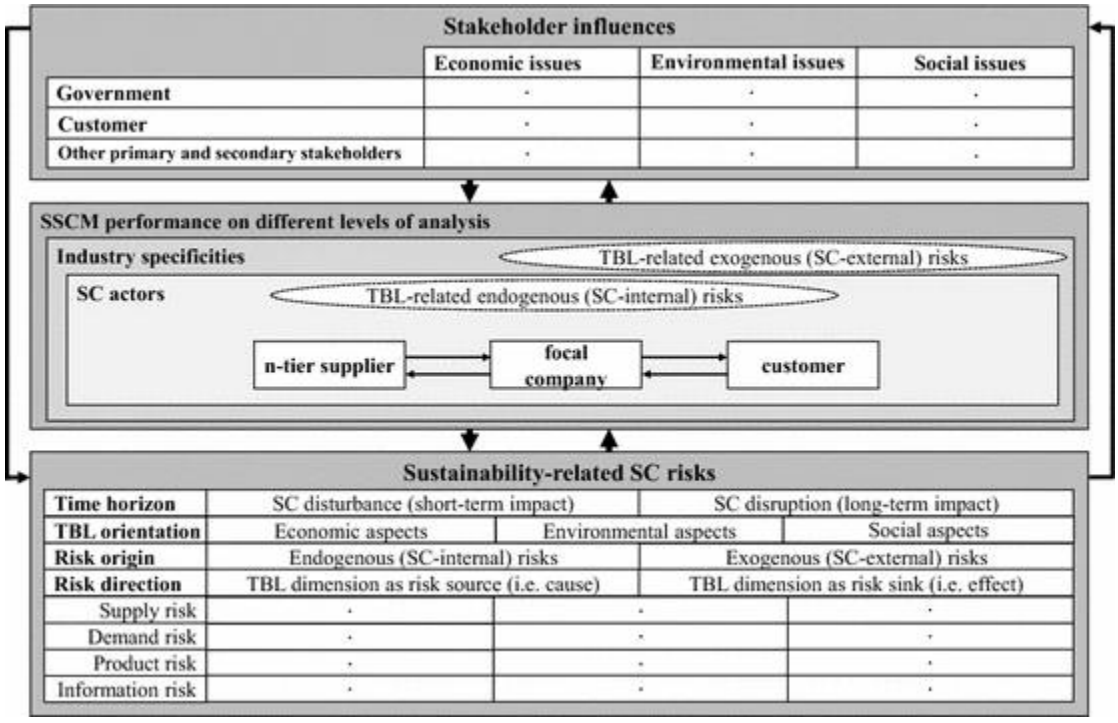


TABLE 1
LITERATURE REVIEWS ON SUSTAINABILITY-ORIENTED STAKEHOLDER TRIGGERS AND RISKS IN SCM

Author(s) and year	Sample size	Research designs	TBL focus	Triggers	Risk management
Seuring and Müller (2008b)	191	General	Holistic	X	X
Colicchia and Strozzi (2012)	55	General	None	–	X
Miemczyk et al. (2012)	73	General	Holistic	–	X
Brandenburg and Rebs (2015)	185	Models	Holistic	X	X
Fahimnia et al. (2015)	489	Models	Holistic	–	X
Heckmann et al. (2015)	Not disclosed	Models	Not explicit	–	X
Ho et al. (2015)	224	General	None	–	X
Meixell and Luoma (2015)	49	Empirical	Holistic	X	–
Rangel et al. (2015)	16	Conceptual	Not explicit	–	X
Choi et al. (2016)	64	General	Not explicit	–	X

TABLE 2
STRUCTURAL DIMENSIONS AND ANALYTIC CATEGORIES FOR THE CONTENT ANALYSIS

Structural dimension	Analytic categories	References
Supply chain management		
Primary actor of analysis[a]	Manufacturer, carrier, retailer, multiple	Halldórsson and Arlbjørn (2005)
Level of analysis[a]	Dyad, chain, network, other	Halldórsson and Arlbjørn (2005)
Function of analysis[a]	Environmental/corporate social responsibility (CSR) management, logistics, materials management, network design, pricing, product development, production, SCM, sourcing, standards/ certifications, technology/IT	Brandenburg et al. (2014) and inductive coding scheme
Industry focus[a]	Agriculture, apparel/textile, automotive, biofuel, chemicals/pharmaceuticals, electronics, energy, engineering, food/beverages, furniture, metal/ mining, public procurement, retail, tourism, transportation, multiple, undisclosed/generic	Inductive coding scheme
Sustainability		
TBL dimensions[b]	Economic, environmental, social	Elkington (1998), Dyllick and Hockerts (2002)
Sustainable supply chain management		
Stakeholder triggers[b]	Government, customers, other stakeholders	Seuring and Müller (2008b)
	Other stakeholders include: further primary stakeholders (suppliers, employees, shareholders, top management), further secondary stakeholders (NGOs, competitors, local community, media, trade unions, investors, wider public), nonspecific/generic	Clarkson (1995), Meixell and Luoma (2015)
Risk management[b]	Supply, demand, product, information risks	Tang (2006)
	Economic, environmental, social risks	Seuring and Müller (2008b)

[a] Single classification only

[b] Multiple classification possible

TABLE 3
DISTRIBUTION OF PAPERS OVER RESEARCH METHODOLOGIES

	Empirical	Theoretical	Total
Qualitative	27	10	37
Quantitative	14	39	53
Total	**41**	**49**	**90**

TABLE 4
DISTRIBUTION OF FORMAL MODELING PAPERS REGARDING THE MODEL TYPE

	Deterministic	Stochastic	Total
Descriptive	8	8	16
Normative	21	2	23
Total	**29**	**10**	**39**

TABLE 5
DISTRIBUTION OF SAMPLE PAPERS OVER SCIENTIFIC JOURNALS

Journal	Conceptual papers	Empirical studies	Formal models	Total
JCLEPRO	5	19	4	28
SCMIJ	3	4	–	7
IJOPM	1	4	–	5
JSCM	1	2	–	3
JOM	–	4	–	4
IJPE	–	4	10	14
EJOR	–	–	5	5
IJPR	–	–	5	5
Other journals	–	4	15	19
Total	**10**	**41**	**39**	**90**

JCLEPRO Journal of Cleaner Production, *SCMIJ* Supply Chain Management: An International Journal, *IJOPM* International Journal of Operations and Production Management, *JSCM* Journal of Supply Chain Management, *JOM* Journal of Operations Management, *IJPE* International Journal of Production Economics, *EJOR* European Journal of Operational Research, *IJPR* International Journal of Production Research

TABLE 6
RANKING OF THE MOST INFLUENTIAL SAMPLE PAPERS

Rank	Paper	LCS	Paper	LCR
1	Seuring and Müller (2008b)	20	Seuring and Müller (2008b)	10
2	Zhu et al. (2005)	10	Miemczyk et al. (2012)	7
3	Handfield et al. (2002)	8	Beske and Seuring (2014)	6
	Koplin et al. (2007)	8	Foerstl et al. (2014)	6
4	Matos and Hall (2007)	7	Govindan et al. (2014a)	5
	Nagurney and Toyasaki (2003)	7	Leppelt et al. (2013a)	5

TABLE 7

PRIMARY ACTOR OF ANALYSIS

Primary actor of analysis	Conceptual studies	Empirical studies	Formal models	Total
Manufacturer	1	19	18	38
Carrier	–	–	5	5
Retailer	–	4	2	6
Multiple	9	18	14	41
Total	**10**	**41**	**39**	**90**

TABLE 8
LEVEL OF ANALYSIS

Level of analysis	Conceptual studies	Empirical studies	Formal models	Total
Dyad	2	3	12	17
Chain	4	33	5	42
Network	1	2	22	25
Other	3	3	–	6
Total	**10**	**41**	**39**	**90**

TABLE 9
FUNCTION OF ANALYSIS

Function of analysis	Conceptual studies	Empirical studies	Formal models	Total
SCM	6	16	12	34
Sourcing	3	8	8	19
Envir./CSR mgmt	1	5	–	6
Logistics	–	3	7	10
Network design	–	–	6	6
Production	–	3	1	4
Other	–	6[a]	5[b]	11
Total	**10**	**41**	**39**	**90**

[a] Materials management (1 paper), product development (3), standards/certifications (2)

[b] Pricing (2 papers), technology/IT (3)

TABLE 10
INDUSTRY FOCUS

Industry focus	Conceptual studies	Empirical studies	Formal models	Total
Apparel/textile	–	1	3	4
Automotive	–	2	1	3
Chem./pharmaceutical	–	2	1	3
Food/beverages	1	7	–	8
Metal/mining	–	3	2	5
Transportation	–	–	6	6
Other	–	6[a]	7[b]	13
Multiple	–	13	2	15
Undisclosed/generic	9	7	17	33
Total	**10**	**41**	**39**	**90**

[a] Agriculture (1 paper), engineering (1), furniture (1), public procurement (1), tourism (2)

[b] Agriculture (1 paper), biofuel (1), electronics (2), energy (2), retail (1)

TABLE 11
INTEGRATION OF STAKEHOLDER TRIGGERS AND SSCM RISKS

	Only triggers	Triggers and risks	Only risks	Total
Conceptual	4	3	3	10
Empirical	15	15	11	41
Formal models	19	11	9	39
Total	**38 (42%)**	**29 (32%)**	**23 (26%)**	**90 (100%)**

TABLE 12
STAKEHOLDER TRIGGERS FOR SSCM

Stakeholder triggers	Conceptual studies	Empirical studies	Formal models
Focused (at least one)	4	22	26
All factors	3	8	4
None of the factors	3	11	9
Customers[a]	5	17	12
Government[a]	4	18	23
Other stakeholders[a]	6	22	4
Thereof other primary[a]	1	11	2
Thereof other secondary[a]	6	22	4

[a] Multiple classification possible

TABLE 13
DETAILED DISTINCTION BETWEEN PRIMARY AND SECONDARY STAKEHOLDER TRIGGERS FOR SSCM

Stakeholder triggers	Conceptual studies	Empirical studies	Formal models
Primary stakeholders[a]			
Customers	5	17	12
Suppliers	1	8	1
Employees	–	5	–
Shareholders	–	2	–
Top management	–	2	1
Secondary stakeholders[a]			
Government	4	18	23
NGOs	4	12	–
Competitors	2	7	1
Local community	–	3	1
Media	–	3	–
Trade unions	–	1	–
Investors	1	3	1
Wider public	1	5	2
Unspecified/generic	1	8	2

[a] Multiple classification possible

TABLE 14
SUPPLY CHAIN RISK MANAGEMENT

SC risks (Tang 2006)	Conceptual studies	Empirical studies	Formal models
Supply risk[a]	5	11	9
Demand risk[a]	2	13	7
Product risk[a]	1	8	7
Information risk[a]	1	2	2
Focused (at least one)	6	22	16
All factors	–	–	1
None	4	17	22

[a] Multiple classification possible

TABLE 15
MOST COMMON FOCI REGARDING ALL STRUCTURAL DIMENSIONS OF THE CONTENT ANALYSIS FOR CONCEPTUAL, EMPIRICAL, AND FORMAL MODELING RESEARCH

	Conceptual papers	Empirical studies	Formal models
Actor	Multiple actors	Manufacturer, retailer	Manufacturer, carrier
Level	Chain		Network, dyad
Industry	None focused	Food/beverages	Transportation
Sustainability	TBL often holistically addressed		Economic-environmental focus
Stakeholder influences	Multiple stakeholders	Customers, other	Regulatory triggers
SCM risks	Supply, demand, particularly reputational risks		Operational risks
SSCM risks	Economic risks prevail, complemented by environmental and social risks		

REFERENCES

Adams, M., and A. Ghaly. 2007. Maximizing sustainability of the costa rican coffee industry. Journal of Cleaner Production 15: 1716–1729.

Adriana, B. 2009. Environmental supply chain management in tourism: the case of large tour operators. Journal of Cleaner Production 17: 1385–1392.

Ahi, P., and C. Searcy. 2013. A comparative literature analysis of definitions for green and sustainable supply chain management. Journal of Cleaner Production 52: 329–341.

Akkerman, R., P. Farahani, and M. Grunow. 2010. Quality, safety, and sustainability in food distribution: a review of quantitative operations management approaches and challenges. OR Spectrum 32: 863–904.

Andersen, M., and T. Skjoett-Larsen. 2009. Corporate social responsibility in global supply chains. Supply Chain Management: An International Journal 14: 75–86.

Aneja, Y.P., and K.P.K. Nair. 1979. Bicriteria transportation problem. Management Science 25: 73–78.

Bai, C., and J. Sarkis. 2010. Integrating sustainability into supplier selection with grey system and rough set methodologies. International Journal of Production Economics 124: 252–264.

Bektas, T., and G. Laporte. 2011. The Pollution-Routing Problem. Transportation Research Part B 45: 1232–1250.

Bertrand, J.W.M., and J.C. Fransoo. 2002. Operations management research methodologies using quantitative modeling. International Journal of Operations and Production Management 22: 241–264.

Beske, P., and S. Seuring. 2014. Putting Sustainability into Supply Chain Management. Supply Chain Management: An International Journal 19: 322–333.

Bourlakis, M., G. Maglaras, E. Aktas, D. Galleear, and C. Fotopoulos. 2014. Firm size and sustainable performance in food supply chains: insights from Greek SMEs. International Journal of Production Economics 152: 112–130.

Brandenburg, M., K. Govindan, J. Sarkis, and S. Seuring. 2014. Quantitative models for sustainable supply chain management: developments and directions. European Journal of Operational Research 233: 299–312.

Brandenburg, M., and T. Rebs. 2015. Sustainable supply chain management: a modeling perspective. Annals of Operations Research 229: 213–252.

Carter, C.R., and P.L. Easton. 2011. Sustainable supply chain management: evolution and future directions. International Journal of Physical Distribution and Logistics Management 41: 46–62.

Carter, C.R., and D.S. Rogers. 2008. A framework of sustainable supply chain management: moving toward new theory. International Journal of Physical Distribution and Logistics Management 38: 360–387.
Chen, J., and S. Slotnick. 2014. Supply chain disclosure and ethical sourcing. International Journal of Production Economics 161: 17–30.
Chkanikova, O., and M. Lehner. 2014. Private eco-brands and green market development: towards new forms of sustainability governance in the food retailing. Journal of Cleaner Production 107: 74–84.
Choi, T.M. 2013. Local sourcing and fashion quick response system: the impacts of carbon footprint tax. Transportation Research Part E 55: 43–54.
Choi, T.-S., X. Ye, L. Zhao, and A.C. Luo. 2016. Optimizing enterprise risk management: a literature review and critical analysis of the work of Wu and Olson. Annals of Operations Research 237: 291–300.
Christopher, M., C. Mena, O. Khan, and O. Yurt. 2011. Approaches to managing global sourcing risk. Supply Chain Management: An International Journal 16: 67–81.
Clarkson, M.B.E. 1995. A stakeholder framework for analyzing and evaluating corporate social performance. Academy of Management Review 20: 92–117.
Colicchia, C., and F. Strozzi. 2012. Supply chain risk management: a new methodology for a systematic literature review. Supply Chain Management: An International Journal 17: 403–418.
Corbett, J.J., and G.A. DeCroix. 2001. Shared-savings contracts for indirect materials in supply chains: channel profits and environmental impacts. Management Science 47: 881–893.
Corbett, J.J., H. Wang, and J.J. Winebrake. 2009. The effectiveness and costs of speed reductions on emissions from international shipping. Transportation Research Part D 14: 593–598.
Cousins, P., R. Lamming, and F. Bowen. 2004. The role of risk in environment-related supplier initiatives. International Journal of Operations and Production Management 24: 554–565.
Cruz, J.M. 2008. Dynamics of supply chain networks with corporate social responsibility through integrated environmental decision-making. European Journal of Operational Research 184: 1005–1031.
Cruz, J.M. 2009. The impact of corporate social responsibility in supply chain management: multicriteria decision-making approach. Decision Support Systems 48: 224–236.
Cruz, J.M. 2013a. Mitigating global supply chain risks through corporate social responsibility. International Journal of Production Research 51: 3995–4010.
Cruz, J.M. 2013b. Modeling the relationship of globalized supply chains and corporate social responsibility. Journal of Cleaner Production 56: 73–85.
Cruz, J.M., and D. Matsypura. 2009. Supply chain networks with corporate social responsibility through integrated environmental decision-making. International Journal of Production Research 47: 621–648.
Diabat, A., D. Kannan, and K. Mathiyazhagan. 2014. Analysis of enablers for implementation of sustainable supply chain management: a textile case. Journal of Cleaner Production 83: 391–403.
Dam, L., and B. Petkova. 2014. The impact of environmental supply chain sustainability programs on shareholder wealth. International Journal of Operations and Production Management 34: 586–609.
Ding, H., Q. Liu, and L. Zheng. 2016. Assessing the economic performance of an environmental sustainable supply chain in reducing environmental externalities. European Journal of Operational Research 255: 463–480.
Dobler, M., K. Lajili, and D. Zéghal. 2014. Environmental Performance, Environmental Risk and Risk Management. Business Strategy and the Environment 23: 1–17.
Dou, Y., and J. Sarkis. 2010. A joint location and outsourcing sustainability analysis for a strategic offshoring decision. International Journal of Production Research 48: 567–592.
Dyllick, T., and K. Hockerts. 2002. Beyond the business case for corporate sustainability. Business Strategy and the Environment 11: 130–141.

Eisenhardt, K.M. 1989. Agency theory: an assessment and review. Academy of Management Review 14: 57–74.
Elkington, J. 1998. Cannibals with Forks: The Triple Bottom Line of the 21st Century. Stoney Creek/CT: New Society.
Eng-Larsson, F., and A. Norrman. 2014. Modal shift for greener logistics—exploring the role of the contract. International Journal of Physical Distribution & Logistics Management 44: 721–743.
Esfahbodi, A., Y. Zhang, and G. Watson. 2016. Sustainable supply chain management in emerging economies: trade-offs between environmental and cost performance. International Journal of Production Economics 181: 350–366.
Fagerholt, K., G. Laporte, and I. Norstad. 2010. Reducing fuel emissions by optimizing speed on shipping routes. Journal of the Operational Research Society 61: 523–529.
Fahimnia, B., C.S. Tang, H. Darzani, and J. Sarkis. 2015. Quantitative models for managing supply chain risks: a review. European Journal of Operational Research 247: 1–15.
Fayezi, S., A. O'Loughlin, and A. Zutshi. 2012. Agency theory and supply chain management: a structured literature review. Supply Chain Management: An International Journal 17: 556–570.
Ferretti, I., S. Zanoni, L. Zavanella, and A. Diana. 2007. Greening the aluminium supply chain. International Journal of Production Economics 108: 236–245.
Fink, A. 2009. Conducting research literature reviews. Sage Publications.
Foerstl, K., A. Azadegan, T. Leppelt, and E. Hartmann. 2014. Drivers of supplier sustainability: moving beyond compliance to commitment. Journal of Supply Chain Management 51: 67–92.
Freeman, R.E. 1984. Strategic Management: A Stakeholder Approach. Financial Times Prentice Hall.
Freeman, R.E. 2010. Strategic management: a stakeholder approach. Cambridge: Cambridge University Press.
von Geibler, J. 2013. Market-based governance for sustainability in value chains: conditions for successful standard setting in the palm oil sector. Journal of Cleaner Production 56: 39–53.
Georgopoulou, E., Y. Sarafidis, and D. Diakoulaki. 1998. Design and implementation of a group DSS for sustaining renewable energies exploitation. European Journal of Operational Research 109: 483–500.
Ghadge, A., S. Dani, and R. Kalawsky. 2012. Supply chain risk management: present and future scope. The International Journal of Logistics Management 23: 313–339.
Giannakis, M., and T. Papadopoulos. 2016. Supply chain sustainability: a risk management approach. International Journal of Production Economics 171: 455–470.
Golicic, S.L., D.F. Davis, and T.M. McCarthy. 2005. A balanced approach to research in supply chain management. In Research methodologies in supply chain management, ed. H. Kotzab, S. Seuring, M. Müller, and G. Reiner, 15–30. Heidelberg: Physica.
Govindan, K., S. Azevedo, H. Carvalho, and V. Cruz-Machado. 2014a. Impact of supply chain management practices on sustainability. Journal of Cleaner Production 85: 212–225.
Govindan, K., M. Kaliyan, D. Kannan, and A. Haq. 2014b. Barriers analysis for green supply chain management implementation in Indian industries using analytic hierarchy process. International Journal of Production Economics 147: 555–568.
Govindan, K., H. Soleimani, and D. Kannan. 2015. Reverse logistics and closed-loop supply chain: a comprehensive review to explore the future. European Journal of Operational Research 240: 603–626.
Govindan, K., and H. Soleimani. 2017. A review of reverse logistics and closed-loop supply chains: a journal of cleaner production focus. Journal of Cleaner Production 142: 371–384.
Grekova, K., H. Bremmers, J. Trienekens, R. Kemp, and S. Omta. 2014. Extending environmental management beyond the firm boundaries: an empirical study of Dutch food and beverage firms. International Journal of Production Economics 152: 174–187.
Grimm, J., J. Hofstetter, and J. Sarkis. 2014. Critical factors for sub-supplier management: a sustainable food supply chains perspective. International Journal of Production Economics 152: 159–173.

Halldórsson, Á., and J.S. Arlbjørn. 2005. Research Methodologies in Supply Chain Management – What Do We Know? In Research methodologies in supply chain management, ed. H. Kotzab, S. Seuring, M. Müller, and G. Reiner, 107–122. Heidelberg: Physica.

Handfield, R., S.V. Walton, R. Sroufe, and S.A. Melnyk. 2002. Applying environmental criteria to supplier assessment: a study in the application of the analytical hierarchy process. European Journal of Operational Research 141: 70–87.

Hartmann, J., and S. Moeller. 2014. Chain liability in multitier supply chains? Responsibility attributions for unsustainable supplier behavior. Journal of Operations Management 32: 281–294.

Heckmann, I., T. Comes, and S. Nickel. 2015. A critical review on supply chain risk—definition, measure and modeling. Omega 52: 119–132.

Ho, W., T. Zheng, H. Yildiz, and S. Talluri. 2015. Supply chain risk management: a literature review. International Journal of Production Research 53: 5031–5069.

Hofmann, H., C. Busse, C. Bode, and M. Henke. 2014. Sustainability-related supply chain risks: conceptualization and management. Business Strategy and the Environment 23: 160–172.

Holweg, M., and D.P. van Donk. 2009. When is a conceptual framework also a theoretical contribution? In Operations and Supply Management (OMS) Forum. 1–3.

Iles, A. 2007. Making the seafood industry more sustainable: creating production chain transparency and accountability. Journal of Cleaner Production 15: 577–589.

Jaehn, F. 2016. Sustainable operations. European Journal of Operations Research 253: 243–264.

Janic, M. 2011. Assessing some social and environmental effects of transforming an airport into a real multimodal transport node. Transportation Research Part D 16: 137–149.

Kainuma, Y., and N. Tawara. 2006. A multiple attribute utility theory approach to lean and green supply chain management. International Journal of Production Economics 101: 99–108.

Khan, O., and B. Burnes. 2007. Risk and supply chain management: creating a research agenda. The International Journal of Logistics Management 18: 197–216.

Koplin, J., S. Seuring, and M. Mesterharm. 2007. Incorporating sustainability into supply management in the automotive industry—the case of the Volkswagen AG. Journal of Cleaner Production 15: 1053–1062.

Krippendorff, K. 1980. Content analysis. Beverly Hills/CA: Sage.

Leppelt, T., K. Foerstl, C. Reuter, and E. Hartmann. 2013a. Sustainability management beyond organizational boundaries—sustainable supplier relationship management in the chemical industry. Journal of Cleaner Production 56: 94–102.

Leppelt, T., K. Foerstl, and E. Hartmann. 2013b. Corporate social responsibility in buyer-supplier relationships: is it beneficial for top-tier suppliers to market their capability to ensure a responsible supply chain? Business Research 6: 126–152.

Lindahl, P., K. Robert, H. Ny, and G. Broman. 2014. Strategic sustainability considerations in materials management. Journal of Cleaner Production 64: 98–103.

Lorek, S., and J.H. Spangenberg. 2014. Sustainable consumption within a sustainable economy beyond green growth and green economies. Journal of Cleaner Production 63: 33–44.

Lu, L.Y.Y., C.H. Wu, and T.C. Kuo. 2007. Environmental principles applicable to green supplier evaluation by using multi-objective decision analysis. International Journal of Production Research 45: 4317–4331.

Massoud, M., R. Fayad, M. El-Fadel, and R. Kamleh. 2010. Drivers, barriers and incentives to implementing environmental management systems in the food industry: a case of Lebanon. Journal of Cleaner Production 18: 200–209.

Matos, S., and J. Hall. 2007. Integrating sustainable development in the supply chain: the case of life cycle assessment in oil and gas and agricultural biotechnology. Journal of Operations Management 25: 1083–1102.

Mayring, P. 2010. Qualitative Inhaltsanalyse: Grundlagen und Techniken [Qualitative Content Analysis: Basics and Techniques]. Weinheim: Beltz.

McDonald, S., and S. Young. 2012. Cross-sector collaboration shaping corporate social responsibility best practice within the mining industry. Journal of Cleaner Production 37: 54–67.
McLellan, B., and G. Corder. 2013. Risk reduction through early assessment and integration of sustainability in design in the minerals industry. Journal of Cleaner Production 53: 37–46.
Meixell, M.J., and P. Luoma. 2015. Stakeholder pressure in sustainable supply chain management. International Journal of Physical Distribution and Logistics Management 45: 69–89.
Meredith, J., A. Raturi, K. Amoako-Gyampah, and B. Kaplan. 1989. Alternative research paradigms in operations. Journal of Operations Management 8: 297–326.
Meredith, J. 1993. Theory building through conceptual methods. International Journal of Operations and Production Management 13: 3–11.
Michaelis, L. 2003. The role of business in sustainable consumption. Journal of Cleaner Production 11: 915–921.
Miemczyk, J., T. Johnsen, and M. Macquet. 2012. Sustainable purchasing and supply management: a structured literature review of definitions and measures at the dyad, chain and network levels. Supply Chain Management: An International Journal 17: 478–496.
Mitroff, I.I., F. Betz, L.R. Pondy, and F. Sagasti. 1974. On managing science in the systems age: two schemas for the study of science as a whole systems phenomenon. Interfaces 4: 46–58.
Moore, S., and L. Ausley. 2004. Systems thinking and green chemistry in the textile industry: concepts, technologies and benefits. Journal of Cleaner Production 12: 585–601.
Moore, S., and S. Manring. 2009. Strategy development in small and medium sized enterprises for sustainability and increased value creation. Journal of Cleaner Production 17: 276–282.
Müller, A.-L., and R. Pfleger. 2014. Business transformation towards sustainability. Business Research 7: 313–350.
Nagurney, A., and F. Toyasaki. 2003. Supply chain supernetworks and environmental criteria. Transportation Research Part E 8: 185–213.
Ni, D., and K.W. Li. 2012. A game-theoretic analysis of social responsibility conduct in two-echelon supply chains. International Journal of Production Economics 138: 303–313.
Noci, G. 1997. Designing ‘green’ vendor rating systems for the assessment of a supplier’s environmental performance. European Journal of Purchasing and Supply Management 3: 103–114.
Oliveira, C., and C. Henggeler Antunes. 2004. A multiple objective model to deal with economy–energy–environment interactions. European Journal of Operational Research 153: 370–385.
Pagell, M., Z. Wu, and M. Wassermann. 2010. Thinking differently about purchasing Portfolios: an assessment of sustainable sourcing. Journal of Supply Chain Management 46: 57–73.
Pagell, M., and A. Shevchenko. 2014. Why research in sustainable supply chain management should have no future. Journal of Supply Chain Management 50: 44–55.
Pfohl, H.C., H. Köhler, and D. Thomas. 2010. State of the art in supply chain risk management research: empirical and conceptual findings and a roadmap for the implementation in practice. Logistics Research 2: 33–44.
Quak, H., and M. De Koster. 2007. Exploring retailers’ sensitivity to local sustainability policies. Journal of Operations Management 25: 1103–1122.
Quak, H., and M. De Koster. 2009. Delivering goods in urban areas: how to deal with urban policy restrictions and the environment. Transportation Science 43: 211–227.
Ramudhin, A., A. Chaabane, and M. Paquet. 2010. Carbon market sensitive sustainable supply chain network design. International Journal of Management Science and Engineering Management 5: 30–38.
Rangel, D.A., T.K. de Oliveira, and M.S.A. Leite. 2015. Supply chain risk classification: discussion and proposal. International Journal of Production Research 53: 6868–6887.
Rao, S., and T.J. Goldsby. 2009. Supply chain risks: a review and typology. The International Journal of Logistics Management 20: 97–123.
Reefke, H., and D. Sundaram. 2017. Key themes and research opportunities in sustainable supply chain management—identification and evaluation. Omega 66: 195–211.Return to ref 2017 in article

Reuter, C., K. Foerstl, E. Hartmann, and C. Blome. 2010. Sustainable global supplier management: the role of dynamic capabilities in achieving competitive advantage. Journal of Supply Chain Management 46: 45–65.
Rizzi, F., M. Frey, F. Testa, and A. Appolloni. 2014. Environmental value chain in green SME networks: the threat of the Abilene paradox. Journal of Cleaner Production 85: 1–11.
Roehrich, J., J. Grosvold, and S. Hoejmose. 2014. Reputational risks and sustainable supply chain management: decision making under bounded rationality. International Journal of Operations and Production Management 34: 695–719.
Rosic, H., and W. Jammernegg. 2013. The economic and environmental performance of dual sourcing: a newsvendor approach. International Journal of Production Economics 143: 109–119.
Sauer, P.C., and S. Seuring. 2017. Sustainable supply chain management for minerals. Journal of Cleaner Production 151: 235–249.
Severo, E., J. Ferro de Guimaraes, E. Henri Dorion, and C. Hermann Nodari. 2014. Cleaner production, environmental sustainability and organizational performance: an empirical study in the Brazilian Metal-Mechanic industry. Journal of Cleaner Production 96: 118–125.
Seuring, S. 2013. A review of modeling approaches for sustainable supply chain management. Decision Support Systems 54: 1513–1520.
Seuring, S., and M. Müller. 2008a. Core issues in sustainable supply chain management—a Delphi Study. Business Strategy and the Environment 17: 455–466.
Seuring, S., and M. Müller. 2008b. From a literature review to a conceptual framework for sustainable supply chain management. Journal of Cleaner Production 16: 1699–1710.
Seuring, S., and S. Gold. 2012. Conducting content-analysis based literature reviews in supply chain management. Supply Chain Management: An International Journal 17: 544–555.
Shapiro, J. 2007. Modeling the supply chain. Duxbury: Brooks/Cole, Thompson.
Spens, K.M., and G. Kovács. 2006. A content analysis of research approaches in logistics research. International Journal of Physical Distribution and Logistics Management 36: 374–390.
Tang, C.S. 2006. Perspectives in supply chain risk management. International Journal of Production Economics 103: 451–488.
Ting, S., Y. Tse, G. Ho, S. Chung, and G. Pang. 2014. Mining logistics data to assure the quality in a sustainable food supply chain: a case in the red wine industry. International Journal of Production Economics 152: 200–209.
Tranfield, D., D. Denyer, and P. Smart. 2003. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. British Journal of Management 14: 207–222.
Tukamuhabwa, B.R., M. Stevenson, J. Busby, and M. Zorzini. 2015. Supply chain resilience: definition, review and theoretical foundations for further study. International Journal of Production Research 53: 5592–5623.
Walther, G., A. Schatka, and T.S. Spengler. 2012. Design of regional production networks for second generation synthetic bio-fuel—a case study in Northern Germany. European Journal of Operational Research 218: 280–292.
Whetten, D.A. 1989. What constitutes a theoretical contribution? The Academy of Management Review 14: 490–495.
Wu, Z., and M. Pagell. 2011. Balancing priorities: decision-making in sustainable supply chain management. Journal of Operations Management 29: 577–590.
Yawar, S.A., and S. Seuring. 2017. Management of social issues in supply chains: a literature review exploring social issues, actions and performance outcomes. Journal of Business Ethics 141: 621–643.
Zhu, Q., J. Sarkis, and Y. Geng. 2005. Green supply chain management in China: pressures, practices and performance. International Journal of Operations & Production Management 25: 4333–4355.

TRANSLATED VERSION: SPANISH

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

VERSION TRADUCIDA: ESPAÑOL

A continuación se muestra una traducción aproximada de las ideas presentadas anteriormente. Esto se hizo para dar una comprensión general de las ideas presentadas en el documento. Por favor, disculpe cualquier error gramatical y no responsabilite a los autores originales de estos errores.

INTRODUCCIÓN

La gestión sostenible de la cadena de suministro (SSCM) se ha convertido en un campo de investigación establecido. Actualmente, el SSCM desempeña un papel crucial en los mercados maduros, así como en las economías emergentes (Esfahbodi et al. 2016). Sin embargo, las principales tendencias y deficiencias en la investigación del SSCM incluyen la necesidad de abordar exhaustivamente las influencias de las partes interesadas y elaborar sobre los enfoques apropiados para la medición del rendimiento de la SSCM (Pagell y Shevchenko 2014; Reefke y Sundaram 2017). Varios marcos conceptuales proporcionan definiciones (Ahi y Searcy 2013) y sistematizan construcciones clave para la investigación del SSCM (Seuring y m'ller 2008a, b), mientras que los estudios empíricos sobre el estado del desarrollo de SSCM (Carter y Easton 2011) y los modelos formales para SSCM (Seuring 2013; Brandenburg y otros 2014) ilustran cómo integrar los factores de sostenibilidad ambiental y social en la gestión de la cadena de suministro (SCM). Además de las actividades intraotencia y las operaciones inversas, la perspectiva interocería sobre la cadena de suministro a futuro (SC) es muy relevante. Además, las presiones e incentivos de los gobiernos, los clientes y otras partes interesadas que desencadenan la aplicación del SSCM (Seuring y M-ller 2008b), así como la gestión sostenible del riesgo son de particular interés en la literatura científica (Hofmann et al. 2014). La gestión de las relaciones con las partes interesadas y la gestión sostenible del riesgo en los DC se identifican como temas principales y oportunidades de investigación en SSCM (Reefke y Sundaram 2017).

La literatura reciente muestra que los modelos cuantitativos formalizan las presiones e incentivos de las partes interesadas para el SCM verde o sostenible y evalúan los riesgos de sostenibilidad (Brandenburg y Rebs 2015). Sin embargo, la investigación conceptual y empírica que se centra en los desencadenantes y riesgos de SSCM no se ha comparado con los desarrollos y direcciones de los modelos formales. Estas corrientes de investigación pueden incluso parecer algo desconectadas. Por lo tanto, este documento busca comparar cómo los desencadenantes y riesgos de las partes interesadas se abordan mediante marcos conceptuales, estudios empíricos y modelos formales. Sobre la base de los puntos en común y las diferencias de construcciones enfocadas, se abordan estímulos mutuos y directrices para la investigación futura.

Por lo tanto, planteamos las siguientes preguntas de investigación para explorar el estado actual de la investigación y las direcciones de investigación futuras:

1. ¿Cómo se abordan las influencias de las partes interesadas en la SSCM en la investigación relacionada?
2. ¿Cómo se conceptualizan y evalúan los riesgos relacionados con la sostenibilidad en la investigación de SSCM?
3. ¿Qué directrices y perspectivas futuras se derivan de los puntos en común y las diferencias de marcos conceptuales, estudios empíricos y modelos formales?

El resto de este documento se organiza de la siguiente manera: En la secta 2, se resumen los exámenes relacionados, y las preguntas de investigación de esta revisión de la literatura están justificadas. En la sección 3, se describe la metodología de investigación y se discute el rigor metodológico. La Sección 4 contiene los resultados del análisis de contenido. Posteriormente, la Sección 5 resume los principales hallazgos y presenta un marco conceptual de influencias de las partes interesadas y riesgos del SSCM. La Sección 6 describe las contribuciones y limitaciones de este estudio y sugiere directrices para futuras

investigaciones basadas en los hallazgos clave. La sección 7 concluye este documento. Además, las referencias de todos los artículos de revistas analizados para esta revisión bibliográfica se proporcionan como material complementario electrónico.

CONCLUSIÓN

Los desarrollos de la investigación de SSCM teniendo en cuenta los desencadenantes de las partes interesadas y el riesgo para el rendimiento de SSCM se comparan para señalar puntos en común y diferencias entre la investigación conceptual, empírica y formal de modelado. La búsqueda sistemática de documentos de muestra en Web of Science implica búsquedas específicas de revistas en revistas clave en el campo de la logística y SCM. Los resultados del análisis sugieren que la investigación teniendo en cuenta las influencias y riesgos de las partes interesadas en el SSCM acaba de comenzar y que su relevancia futura se acelerará. Por lo tanto, se necesitan esfuerzos considerables para conceptualizar y medir las interrelaciones entre los desencadenantes de las partes interesadas para el SSCM y los riesgos sc relacionados con la sostenibilidad. Mientras que los desencadenantes gubernamentales prevalecen en modelos formales relacionados, los activadores de clientes y otras partes interesadas están dominando los estudios conceptuales y empíricos. Las investigaciones futuras deben tener en cuenta los riesgos ambientales y sociales, además de la gestión del riesgo económico prevaleciente. Además, los modelos formales también deben integrar a los clientes y a otros grupos de interesados. La puesta en marcha de las influencias de las partes interesadas y los riesgos de SSCM por modelos formales se destaca como otra área de investigación futura. Por último, se aboga por una visión integrada sobre los desencadenantes de las partes interesadas y los riesgos de SSCM para que la investigación y la práctica de SSCM controlen y sostengan de manera integral el rendimiento de SC.

TRANSLATED VERSION: FRENCH

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

VERSION TRADUITE: FRANÇAIS

Voici une traduction approximative des idées présentées ci-dessus. Cela a été fait pour donner une compréhension générale des idées présentées dans le document. Veuillez excuser toutes les erreurs grammaticales et ne pas tenir les auteurs originaux responsables de ces erreurs.

INTRODUCTION

La gestion durable de la chaîne d'approvisionnement (SSCM) est devenue un domaine de recherche bien établi. Actuellement, la SSCM joue un rôle crucial sur les marchés matures ainsi que dans les économies émergentes (Esfahbodi et al., 2016). Toutefois, les principales tendances et lacunes dans la recherche sur la SSCM comprennent la nécessité de s'attaquer de façon exhaustive aux influences des intervenants et d'élaborer des approches appropriées en matière de mesure du rendement du SSCM (Pagell et Shevchenko, 2014; Reefke et Sundaram 2017). Divers cadres conceptuels fournissent des définitions (Ahi et Searcy 2013) et systématisent des constructions clés pour la recherche SSCM (Seuring et Müller 2008a, b), tandis que des études empiriques sur l'état du développement de la SSCM (Carter et Easton 2011) et des modèles formels pour la SSCM (Seuring 2013; Brandenburg et coll. 2014) illustrent comment intégrer les facteurs de durabilité environnementale et sociale dans la gestion de la chaîne d'approvisionnement (SCM). Outre les activités intra-organisationnelles et les opérations inversées, la perspective interorganisationnelle sur la chaîne d'approvisionnement avancée (SC) est très pertinente. En outre, les pressions et les incitations exercées par les gouvernements, les clients et d'autres parties prenantes

qui déclenchent la mise en œuvre de la SSCM (Seuring et Müller 2008b) ainsi que la gestion durable des risques présentent un intérêt particulier pour la littérature scientifique (Hofmann et al., 2014). La gestion des relations avec les parties prenantes et la gestion durable des risques dans les SC sont identifiés comme des thèmes majeurs et des opportunités de recherche dans le SSCM (Reefke et Sundaram 2017).

Des publications récentes montrent que les modèles quantitatifs formalisent les pressions et les incitations des parties prenantes pour le SCM vert ou durable et évaluent les risques de durabilité (Brandenburg et Rebs 2015). Toutefois, les recherches conceptuelles et empiriques qui se concentrent sur les déclencheurs et les risques du SSCM n'ont pas été comparées aux développements et aux orientations des modèles formels. Ces flux de recherche peuvent même sembler quelque peu déconnectés. Par conséquent, ce document vise à comparer la façon dont les déclencheurs et les risques des parties prenantes sont traités par des cadres conceptuels, des études empiriques et des modèles formels. En fonction des points communs et des différences de constructions ciblées, les stimuli mutuels et les lignes directrices pour la recherche future sont abordés.

Ainsi, nous posons les questions de recherche suivantes pour explorer l'état actuel de la recherche et les orientations futures de la recherche :

1. Comment les influences des intervenants sur le SSCM sont-elles abordées dans la recherche connexe?
2. Comment les risques liés à la durabilité sont-ils conceptualisés et évalués dans la recherche sur la SSCM?
3. Quelles lignes directrices et perspectives d'avenir sont dérivées des points communs et des différences entre les cadres conceptuels, les études empiriques et les modèles formels?

Le reste du présent document est organisé comme suit : Dans la section 2, les examens connexes sont résumés, et les questions de recherche de cet examen de la littérature sont justifiées. Dans la section 3, la méthodologie de recherche est décrite, et la rigueur méthodologique est discutée. La section 4 contient les résultats de l'analyse de contenu. Par la suite, la sect. 5 résume les principales conclusions et présente un cadre conceptuel des influences des parties prenantes et des risques de la SSCM. La section 6 décrit les contributions et les limites de cette étude et propose des lignes directrices pour la recherche future fondées sur les principales conclusions. La section 7 conclut ce document. En outre, les références de tous les articles de revue analysés pour cette revue de littérature sont fournies comme matériel supplémentaire électronique.

CONCLUSION

Les développements de la recherche SSCM compte tenu des déclencheurs des intervenants et des risques pour le rendement du SSCM sont comparés pour souligner les points communs et les différences entre la recherche conceptuelle, empirique et formelle de modélisation. La recherche systématique d'exemples d'articles dans Web of Science implique des recherches spécifiques à des revues dans des revues clés dans le domaine de la logistique et du SCM. Les résultats de l'analyse suggèrent que la recherche sur les influences et les risques des intervenants dans la SSCM vient de commencer et que sa pertinence future s'accélérera. Ainsi, des efforts considérables sont nécessaires pour conceptualiser et mesurer les relations entre les déclencheurs des parties prenantes pour les risques de SSCM et de SC liés à la durabilité. Bien que les déclencheurs gouvernementaux prévalent dans les modèles formels connexes, les déclencheurs des clients et d'autres intervenants dominent les études conceptuelles et empiriques. Les recherches futures devraient tenir compte des risques environnementaux et sociaux en plus de la gestion des risques économiques qui prévaut. De plus, les modèles formels doivent également intégrer les groupes de clients et d'autres intervenants. L'opérationnalisation des influences des intervenants et des risques de la SSCM par des modèles formels est soulignée comme un autre domaine de recherche futur. Enfin, un point de vue intégré sur les déclencheurs des intervenants et les risques de la SSCM est préconisé pour la recherche et la pratique de la SSCM afin de contrôler et de maintenir le rendement des SC.

TRANSLATED VERSION: GERMAN

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

ÜBERSETZTE VERSION: DEUTSCH

Hier ist eine ungefähre Übersetzung der oben vorgestellten Ideen. Dies wurde getan, um ein allgemeines Verständnis der in dem Dokument vorgestellten Ideen zu vermitteln. Bitte entschuldigen Sie alle grammatikalischen Fehler und machen Sie die ursprünglichen Autoren nicht für diese Fehler verantwortlich.

EINLEITUNG

Nachhaltiges Supply Chain Management (SSCM) hat sich zu einem etablierten Forschungsgebiet etabliert. Derzeit spielt SSCM eine entscheidende Rolle in reifen Märkten sowie in Schwellenländern (Esfahbodi et al. 2016). Zu den wichtigsten Trends und Defiziten in der SSCM-Forschung gehört jedoch die Notwendigkeit, die Einflüsse der Interessenträger umfassend anzugehen und geeignete Ansätze für die SSCM-Leistungsmessung zu erarbeiten (Pagell und Shevchenko 2014; Reefke und Sundaram 2017). Verschiedene konzeptionelle Rahmen sehen Definitionen (Ahi und Searcy 2013) vor und systematisieren Schlüsselkonstrukte für die SSCM-Forschung (Seuring und Müller 2008a, b), während empirische Studien zum Stand der SSCM-Entwicklung (Carter und Easton 2011) und formale Modelle für SSCM (Seuring 2013; Brandenburg et al. 2014) veranschaulichen, wie ökologische und soziale Nachhaltigkeitsfaktoren in das Supply Chain Management (SCM) integriert werden können. Neben organisationsinternen Aktivitäten und Reverse-Operationen ist die organisationsübergreifende Perspektive auf die Forward Supply Chain (SC) sehr relevant. Darüber hinaus sind Der Druck und die Anreize von Regierungen, Kunden und anderen Stakeholdern, die die Umsetzung von SSCM (Seuring und Müller 2008b) sowie ein nachhaltiges Risikomanagement auslösen, in der wissenschaftlichen Literatur von besonderem Interesse (Hofmann et al. 2014). Beziehungsmanagement mit Stakeholdern und nachhaltiges Risikomanagement in scs werden als Hauptthemen und Forschungsmöglichkeiten in SSCM (Reefke und Sundaram 2017) identifiziert.

Jüngste Literatur zeigt, dass quantitative Modelle den Druck und Anreize für grüne oder nachhaltige SCM von Deninteressenträgern formalisieren und Nachhaltigkeitsrisiken bewerten (Brandenburg und Rebs 2015). Konzeptionelle und empirische Forschungen, die sich auf SSCM-Auslöser und -Risiken konzentrieren, wurden jedoch nicht mit den Entwicklungen und Richtungen formaler Modelle verglichen. Diese Forschungsströme könnten sogar etwas abgekoppelt erscheinen. Daher soll in diesem Beitrag verglichen werden, wie Auslöse- und Risikorisiken von Stakeholdern durch konzeptionelle Rahmen, empirische Studien und formale Modelle angegangen werden. Basierend auf Gemeinsamkeiten und Unterschieden fokussierter Konstrukte werden gegenseitige Reize und Leitlinien für die zukünftige Forschung angesprochen.

So stellen wir folgende Forschungsfragen, um den aktuellen Stand der Forschung und zukünftige Forschungsrichtungen zu erforschen:

1. Wie werden Stakeholder-Einflüsse auf SSCM in der verwandten Forschung berücksichtigt?
2. Wie werden nachhaltigkeitsbezogene Risiken in der SSCM-Forschung konzipiert und bewertet?
3. Welche Leitlinien und Zukunftsperspektiven ergeben sich aus Gemeinsamkeiten und Unterschieden von konzeptionellen Rahmen, empirischen Studien und formalen Modellen?

Der Rest dieses Beitrags ist wie folgt organisiert: In Abschnitt 2 werden verwandte Rezensionen zusammengefasst, und die Forschungsfragen dieser Literaturrezension sind gerechtfertigt. In Abschnitt 3 wird die Forschungsmethodik beschrieben und die methodische Strenge diskutiert. Abschnitt 4 enthält die Ergebnisse der Inhaltsanalyse. Anschließend fasst Abschnitt 5 die wichtigsten Ergebnisse zusammen und stellt einen konzeptionellen Rahmen von Stakeholder-Einflüssen und SSCM-Risiken dar. In Abschnitt 6

werden die Beiträge und Grenzen dieser Studie dargelegt und Leitlinien für die künftige Forschung auf der Grundlage der wichtigsten Ergebnisse vorgeschlagen. Abschnitt 7 schließt dieses Papier ab. Zusätzlich werden die Referenzen aller für diese Literaturrezension analysierten Zeitschriftenartikel als elektronisches Ergänzungsmaterial zur Verfügung gestellt.

SCHLUSSFOLGERUNG

Die Entwicklungen der SSCM-Forschung unter Berücksichtigung der Auslöser und risiken für die SSCM-Leistung werden mit aufgekrüchenen Gemeinsamkeiten und Unterschieden zwischen konzeptioneller, empirischer und formaler Modellierungsforschung verglichen. Die systematische Suche nach Musterpapieren im Web of Science umfasst journalspezifische Recherchen in Schlüsselzeitschriften im Bereich Logistik und SCM. Die Ergebnisse der Analyse deuten darauf hin, dass die Forschung unter Berücksichtigung der Einflüsse und Risiken von Stakeholdern in SSCM gerade erst begonnen hat und dass sich ihre zukünftige Relevanz beschleunigen wird. Daher sind erhebliche Anstrengungen erforderlich, um die Zusammenhänge zwischen Stakeholder-Triggern für SSCM und nachhaltigkeitsbezogenen SC-Risiken zu konzeptionieren und zu messen. Während staatliche Auslöser in verwandten formalen Modellen vorherrschen, dominieren Kunden- und andere Stakeholder-Trigger konzeptionelle und empirische Studien. Bei der künftigen Forschung sollten neben dem vorherrschenden wirtschaftlichen Risikomanagement auch ökologische und soziale Risiken berücksichtigt werden. Darüber hinaus müssen formale Modelle auch Kunden- und andere Interessengruppen integrieren. Die Operationalisierung von Stakeholder-Einflüssen und SSCM-Risiken durch formale Modelle wird als weiterer zukünftiger Forschungsbereich hervorgehoben. Schließlich wird eine integrierte Ansicht zu Stakeholder-Triggern und SSCM-Risiken für SSCM-Forschung und -Praxis empfohlen, um die SC-Leistung umfassend zu kontrollieren und aufrechtzuerhalten.

TRANSLATED VERSION: PORTUGUESE

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

VERSÃO TRADUZIDA: PORTUGUÊS

Aqui está uma tradução aproximada das ideias acima apresentadas. Isto foi feito para dar uma compreensão geral das ideias apresentadas no documento. Por favor, desculpe todos os erros gramaticais e não responsacule os autores originais responsáveis por estes erros.

INTRODUÇÃO

A gestão sustentável da cadeia de abastecimento (SSCM) tornou-se um campo de investigação estabelecido. Atualmente, a SSCM desempenha um papel crucial nos mercados maduros, bem como nas economias emergentes (Esfahbodi et al. 2016). No entanto, as principais tendências e insuficiências na investigação da SSCM incluem a necessidade de abordar de forma abrangente as influências das partes interessadas e de elaborar abordagens adequadas à medição do desempenho da SSCM (Pagell e Shevchenko 2014; Reefke e Sundaram 2017). Diversos quadros conceptuais fornecem definições (Ahi e Searcy 2013) e sistematizam construções-chave para a investigação da SSCM (Seuring e Müller 2008a, b), enquanto estudos empíricos sobre o estado do desenvolvimento do SSCM (Carter e Easton 2011) e modelos formais para a SSCM (Seuring 2013); Brandenburg et al. 2014) ilustram como integrar fatores de sustentabilidade ambiental e social na gestão da cadeia de abastecimento (SCM). Para além das atividades intra-organizacionais e das operações inversas, a perspetiva inter-organizacional sobre a cadeia de fornecimento

para a frente (SC) é altamente relevante. Além disso, as pressões e incentivos de governos, clientes e outras partes interessadas que desencadeiam a implementação da SSCM (Seuring e Müller 2008b), bem como a gestão sustentável dos riscos são de particular interesse na literatura científica (Hofmann et al. 2014). A gestão de relações com as partes interessadas e a gestão sustentável dos riscos nos scs são identificadas como grandes temas e oportunidades de investigação em SSCM (Reefke e Sundaram 2017).

A literatura recente mostra que os modelos quantitativos formalizam as pressões e incentivos das partes interessadas para o SCM verde ou sustentável e avaliam os riscos de sustentabilidade (Brandemburgo e Rebs 2015). No entanto, a investigação conceptual e empírica centrada nos gatilhos e riscos SSCM não foi comparada com a evolução e direções dos modelos formais. Estes fluxos de pesquisa podem até parecer um pouco desligados. Por isso, este trabalho procura comparar a forma como as partes interessadas desencadeiam e os riscos são abordados por quadros conceptuais, estudos empíricos e modelos formais. Com base em comunhões e diferenças de construções focadas, são abordados estímulos mútuos e orientações para a investigação futura.

Assim, colocamos as seguintes questões de investigação para explorar o estado atual da investigação e futuras direções de investigação:

1. Como são abordadas as influências das partes interessadas no SSCM em investigação conexa?
2. Como são conceptualizados e avaliados os riscos relacionados com a sustentabilidade na investigação da SSCM?
3. Que orientações e perspetivas futuras derivam de comunhões e diferenças de quadros conceptuais, estudos empíricos e modelos formais?

O restante deste trabalho é organizado da seguinte forma: Na Seita. 2, são resumidas as revisões relacionadas e as questões de investigação desta revisão literária são justificadas. Na Seita 3, a metodologia de investigação é descrita e o rigor metodológico é discutido. A secção 4 contém os resultados da análise de conteúdo. Posteriormente, a seita 5 resume as principais conclusões e apresenta um quadro conceptual de influências das partes interessadas e riscos SSCM. A secção 6 descreve as contribuições e limitações deste estudo e sugere orientações para futuras investigações com base nas principais conclusões. A secção 7 conclui este artigo. Além disso, as referências de todos os artigos de revistas analisados para esta revisão literária são fornecidas como material suplementar eletrónico.

CONCLUSÃO

Os desenvolvimentos da investigação da SSCM, considerando os desencadeadores e o risco para o desempenho do SSCM, são comparados para assinalar as comunhões e as diferenças entre a investigação conceptual, empírica e formal. A procura sistemática de amostras de documentos na Web of Science envolve pesquisas específicas de revistas em revistas-chave no campo da logística e da SCM. Os resultados da análise sugerem que a investigação, considerando as influências e os riscos das partes interessadas no SSCM, acaba de começar e que a sua relevância futura irá acelerar. Assim, são necessários esforços consideráveis para conceber e medir as inter-relações entre as partes interessadas desencadeadas pelos riscos de SSCM e sc relacionados com a sustentabilidade. Enquanto os gatilhos governamentais prevalecem em modelos formais relacionados, os gatilhos do cliente e de outras partes interessadas estão a dominar estudos conceptuais e empíricos. A investigação futura deve ter em conta os riscos ambientais e sociais, para além da gestão dos riscos económicos prevalecentes. Além disso, os modelos formais também precisam de integrar os grupos de clientes e outros grupos de interessados. A operacionalização das influências das partes interessadas e dos riscos SSCM por modelos formais é destacada como outra área de investigação futura. Por último, defende-se uma visão integrada sobre os gatilhos das partes interessadas e os riscos SSCM para a investigação e prática sscm para controlar e sustentar de forma abrangente o desempenho do SC.