# Framework of Stakeholder Reactions on Sustainability Risk Mitigation Practices and Sustainability Performance in Supply Chains

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### ABSTRACT

Stakeholder expectations and interest in supply chain (SC) sustainability is increasing and hence, environmental and social performance of upstream suppliers may cause sustainability risks for a focal company. Different stakeholders weight environmental and social aspects of sustainability differently and also, adequate level of sustainability is viewed differently in the sense, how far beyond legal requirements a company should extend its sustainability demands for the suppliers. Respectively, stakeholders' reactions to the investments in sustainable supply chain management (SSCM) may vary. Therefore, companies need to balance between the key stakeholders' interests and appropriate sustainability practices in mitigating sustainability risks from suppliers and avoiding losses from various stakeholders' reactions, which may affect the business performance. Also for further research, this paper develops a conceptual framework of how sustainability performance of a focal company and its SC may influence stakeholder reactions. With regards to SSCM, it suggests making a difference between the plain compliance with the law and market-driven sustainability practices beyond legislation.

**Keywords:** Sustainable Supply Chain Management, Sustainability Risks, Sustainability Performance, Stakeholder Reactions

## **1. INTRODUCTION**

Stakeholder pressure is an important driver for sustainability in supply chains (SCs), along with the internal orientation of a company. Even though companies are committed to responsible business and they struggle to spread sustainable practices into their SCs, many environmental and social sustainability risks arise from upstream suppliers. At the same time, focal companies are affected by different stakeholders with different expectations for sustainability, and accordingly, the reactions of the stakeholders toward sustainability risks may vary. In this study, focal companies are referred as in Seuring and Muller (2008): they are companies that manage a certain SC, have direct contacts to suppliers and customers, and design the products and services offered. Furthermore, because these focal companies can affect their suppliers, stakeholders consider focal companies as responsible for the environmental and social function of their suppliers (Koplin et al. (2007; Hofmann et al., 2014).

Therefore, it is crucial to identify the key stakeholders, and understand how they may react not only to the revealed sustainability misconduct, but also to the financial investments in sustainable practices beyond the legal requirements. Such sustainable practices can be, for example, more expensive cleaner fuels or improved social practices with respect to labor, which can decrease the short-term profitability (Carter and Rogers, 2008; Seuring and Muller, 2008; Hofmann et al., 2014).

Environmental, and social legislation (e.g. labor legislation) define the legal frame for sustainability in business. However, businesses labelled as "sustainable" need to exceed legislative demands, in order to meet the expectations of most stakeholders, which can affect the business. In other words, a company can fulfil the sustainability provision of the law, but, if it is not able to respond to the requirements of sustainability of its key stakeholders, it is not truly sustainable in their eyes. (Seuring and Muller, 2008; Freise and Seuring, 2015).

Sustainability risks, for example, unethical environmental and social practices, are realized as the reputational and financial losses through stakeholders' critical reactions (Hofmann et al., 2014). It is obvious that irresponsible behavior results in a public outcry and the stakeholders' negative reaction. However, in some circumstances, sustainable behavior which is commonly taken positively amongst the stakeholders, can cause negative effects in one or few stakeholders; for example, regarding the investments in sustainability as described in Groening and Kanuri (2012). In order to avoid negative effects of the stakeholders' actions towards business performance, sustainability risks from the SC need to be mitigated (Foerstl et al., 2010) and the legitimacy from multiple stakeholders need to be achieved (Mitchell et al., 1997).

Several studies have examined the supply chain risk management (e.g. Manuj and Mentzer, 2008; Ghadge et al., 2012), as well as sustainability risks (e.g. Foerstl et al., 2010; Hofmann et al., 2014). However, there is still room for examination of the connections between supply risks and sustainable supply chain management (Seuring and Müller, 2008). Specifically, fewer studies have paid attention to the identification of concrete environmental and social risk sources, and only a few studies have examined the different reactions of the stakeholders to sustainability risks arising from the SC. To narrow this research gap, this conceptual paper investigates the sustainability risk sources, the risk mitigation practices and the stakeholders' view, in order to develop a conceptual framework of the stakeholder reactions to sustainability performance in the SC context. It approaches the research problem by addressing the following questions: (RQ1) what kind of sustainability risks and mitigation means exist in the supply chains? (RQ2) How could different stakeholders react if the sustainability performance of a company does not meet their expectations?

The subject of this paper is important, because the focal companies need to identify the stakeholders who are the most influential to their SC sustainability performance, and how these stakeholders may react to both, the revealed sustainability misconducts of the suppliers and investments in sustainable practices beyond the legal requirements. This paper makes three contributions. First, based on the systematic literature review, it provides a summary of the empirical papers that contain concrete SC sustainability risk sources and risk mitigation practices. Second, it develops a conceptual framework and propositions for sustainability performance and stakeholder reactions in SCs. Third, it suggests, that true sustainable practices are not based on legislation but on the codes of conduct (CoC) beyond the environmental and social legislation. These CoC have to be agreed with key stakeholders of a company. Hence, managers should focus on analyzing which of the true sustainable practices, or the lack of them, may cause positive or negative reactions among their key stakeholders.

## 2. LITERATURE REVIEW AND RESEEARCH HYPHOTHESES

In this study, we combined two types of literature review in order to investigate the stakeholder reactions to sustainability performance in SCs. In identifying and analyzing the articles which have a risk management approach to SSCM, we chose the systematic literature review method, because the intersection of the research fields (sustainability, SCM, and risk management) relevant to our study, is relatively narrow. In addition, this method identifies the key contributions in the field, and the structured process minimizes the bias and errors in the review process (Tranfield et al., 2003). In identifying and analyzing the articles relating to the stakeholder reactions to sustainability risks, we used the narrative literature review method, as we sought to achieve broad and diverse perspectives to the topic (see, for e.g. Bryman and Bell, 2007, p. 101).

Relating to the systematic method, a preliminary search with a set of basic keywords related to sustainability risk, such as sustainability, responsibility, supply chain and risk, showed that the articles were distributed among many publishers. Hence, we decided to use the Scopus online abstract and citation database, which has also been used by Seuring and Gold (2012).

The keywords and search terms used were derived from the definitions of the key research concepts and associated similar words – such as "risk" (hazard, damage, loss, injury), "supply chain", "supplier", "environment\*" (green), "social" (ethical), "economic\*", "sustainability" and "responsibility". These keywords, agreed upon by the three authors, formed the Boolean phrases. The combined query yielded 548 articles. Of these 548 articles, we excluded all the irrelevant subject areas in this context, as well as the publications other than journal articles, languages other than English, book series, trade publications, and conference proceedings. At the conclusion, we had 149 articles. Following this, we reviewed the abstracts from the 149 articles, and the full paper as well, when needed, for clarity.

Next, in order to ensure the achievement of all the relevant articles into the shortlist, we conducted both backward and forward snowballing procedures (Wohlin, 2014). Backward snowballing was implemented by scrutinizing the reference lists of the selected 26 articles. We first identified the titles in the reference lists, reviewed the abstracts of the promising papers, and added four more appropriate papers to the shortlist. Forward snowballing was conducted using Google Scholar. We entered, one at a time, all the titles of 26 articles which were identified from the initial search. This allowed us to identify all the articles cited the entered article. Again, we went through the results, identified the titles that appeared to match our scope, then reviewed the promising abstracts and found another three relevant papers. After removing the conceptual papers, the final collection of focused literature review comprised of 24 journal articles which report empirical research containing concrete sustainability risk sources and the risk mitigation practices (Table 1). These articles, which are subject to thematic review, were saved into the reference management software, RefWorks, in order to facilitate data management.

The coding strategy of our review follows the principles of content analysis, "an approach to the analysis of documents and texts that seeks to quantify content in terms of predetermined categories and in a systematic and replicable manner." (Bryman and Bell, 2007, p. 291). The decision between deductive and inductive analysis is a fundamental choice when developing the pattern of analytic categories (Bryman and Bell, 2007). Our paper focuses on two main aspects of the literature: the identification of sustainability risk in supply chain, and identifying the sustainability dimensions. Analytic coding categories were defined by drawing on the broader review of SSCM and risk concepts. Part of the categories (e.g. classifying sustainability dimensions to the categories of environmental, social, and economic) were defined in advance, thus following a deductive content analysis. Instead, we did not pre-defined "risk sources", and "risk mitigation practices", but let them emerge inductively from the review articles.

In all, we coded for "sustainability dimension", "risk source", and "risk mitigation practices" (**Table 2**). In terms of sustainability dimensions, Seuring and Muller (2008, 1702) suggested that in management literature (in our case, risk and

SSCM literature), the economic sustainability aspect is covered in all the papers, albeit implicitly in most cases. Nonetheless, we divided sustainability dimensions into three categories: social, environmental and economic. However, we limited the economic dimension of the sustainability risks of this study only to the additional costs originating from not adopting the sustainable practices, and when costs of sustainable practices in an article were identified as a risk which reduces a company's short-term profitability.

Finally, in classifying both environmental and social risk sources, we applied the categorization of Christopher and Gaudenzi (2015), and grouped the risks into seven categories. The three categories of the economic risks sources arose from the reviewed articles (**Table 3**).

Table 1 The Systematic Literature Review Process

Selection process and criteria	Articles left				
Keyword search on the Scopus abstract and citation database	548				
Excluded subject areas, such as computer sciences, mathematics, agricultural and biological sciences, material sciences, medicine, chemistry, pharmacology and toxicology, physics and astronomy, biochemistry, immunology and microbiology, arts and humanities	331				
Excluded conference papers, conference reviews	175				
Excluded book series, trade publications, and conference proceedings	161				
Excluded languages other than English	149				
Reviewed abstracts of the previous stage and excluded irrelevant articles	26				
Included relevant articles from snowballing procedure	33				
Excluded conceptual articles, left relevant empiric journal articles	24				

 Table 2 Coding Categories

Coding Themes	Description								
Sustainability dimension	Environmental, social, economic								
Risk source	Natural environmental risks (not the risks related to business environment or institutional environment); social, labor-related risks originating from the business function (not, e.g., terrorist attacks)								
Risk mitigation practices	Tools, strategies etc. The means to mitigate the risk or related losses in the SC.								

## 3. SUSTAINABILITY IN SUPPLY

## CHAIN

Sustainability aspects were integrated into the supply chain management agenda by 2000, after Bruntland's World Commission on Environment and Development in 1987. The integration began from the environmental sustainability during the 1990s. The concepts of Triple Bottom Line (3BL) by Elkington (1994), and Corporate Social Responsibility (CSR) by Carroll (1999) offered a conceptual foundation for the research and development of SSCM. Sustainability in SCs is implemented mainly by adopting sustainability practices instead of traditional processes (i.e. which do not have particular sustainability orientation). Such sustainability practices are, for example, the sustainability standards that are based on the legislation or regulation, as well as social and environmental supplier CoC. The function of the CoC is to cover the gap between the legal demands and the sustainability values of a focal company (Magnan et al., 2011).

Economic sustainability practices refer, for example, to avoid wasting resources and to use energy-efficient technologies, while environmental sustainability practices seek to prevent negative impacts on nature, and social practices refer, for example, to ethical rules and labor procedures and equity (Magnan et al., 2011; Zorzini et al., 2013; Christopher and Gaudenzi, 2015). SSCM has been comprehensively defined by several authors. For the purpose of this study, we adopt Seuring and Muller's definition (2008, p. 1700), where SSCM is "the management of material, information and capital flows as well as cooperation among companies along the supply chain while taking goals from all three dimensions of sustainable development, i.e., economic, environmental and social, into account which are derived from customer and stakeholder requirements."

The importance of connecting sustainability to supply risks has been noted in several studies (e.g., Foerstl et al., 2010; Ghagde et al., 2012). Especially, in the context of global sourcing and outsourcing, the question of how to manage and mitigate sustainability risks and create transparency for the customers and other stakeholders in complex supply networks, has been essential (Christopher and Gaudenzi, 2015).

### 3.1 Sustainability Risk Sources

In this paper, we follow the definition of Christopher et al. (2011, p. 69), who state that "Sustainability risk refers to increasing vulnerability across the chain due to the negative impacts of global sourcing on economic, social and environmental sustainability."

External stakeholders, for example non-governmental organizations (NGOs) and consumers consider focal companies responsible for actions of upstream suppliers (Hofmann et al., 2014; Grimm et al., 2016). In particular, sourcing from developing countries set purchasing function in key role in terms of social sustainability, for example, working conditions of suppliers' labor (Magnan et al., 2011; Loo and Nasruddin, 2015) Accordingly, it is important to assure that suppliers comply with sustainability standards and CoC in their processes. However, it seems that the supplier compliance with sustainability standards or CoC as a source of sustainability risk. Non-compliance with social CoC

was mentioned in 12 papers, non-compliance with environmental CoC in 9 papers. Both social and environmental non-compliance was mentioned in seven articles (Table 3). We next present the social, environmental, and economic risks sources from the focused literature review on SSCM and risk. The sustainability risk sources and references from the literature review are presented in **Table 3**.

#### 3.1.1 Social Risk

In the global supply chains, poor treatment of the workers can seriously damage the reputation and brand image of a focal company in the eyes of its stakeholders. In the literature, the use of underage and forced work force is under the spotlight especially in sourcing from developing countries. This is mentioned in 12 out of 24 reviewed articles (Koplin et al., 2007; Beske et al., 2008; Lee and Kim, 2009; Awaysheh and Klassen, 2010; Reuter et al., 2010; Magnan et al., 2011; Lemke and Petersen, 2013; Harms et al., 2013; Hofmann et al., 2014; Freise and Seuring, 2015; Lueg et al., 2015; Grimm et al., 2016). Nevertheless, for example Magnan et al. (2011) state that the question of underage workers may be partly culturally bounded, as legislation and country norms can vary between developing countries and countries of focal companies of SCs. The violation of employee rights and human rights is common in emerging and developing countries as stated in eight articles. These kinds of offences in the articles are referred to corporal punishment, restrictions on union building (including collective bargaining), restrictions on fair processes, unregulated termination, lack of a procedure of promotion, policy of hiring and rights of minorities (Beske et al., 2008; Reuter et al., 2010; Awaysheh and Klassen, 2010; Magnan et al., 2011). Underpaid work and unfair wages are stated as social risks in seven articles, for example, Lee and Kim (2009); Magnan et al. (2011); Lueg et al. (2015); Grimm et al. (2016) In addition, the non-equal rights and discrimination regarding race, sex or religion have been considered and identified as social risks in 6 articles, for example Lemke and Petersen (2013); Harms et al. (2013); Reuter et al. (2010); Awaysheh and Klassen (2010). As social risks, mentioned in 6 articles, were also identified coercion to excessive working hours, remuneration, and unacceptable working conditions, for example limited access to fresh water and toilets which are both frequently reported issues in emerging economies (e.g. Hofmann et al., 2014; Freise and Seuring, 2015; Grimm et al., 2016). Employee health and safety issues, e.g. handling of toxic chemicals (Freise and Seuring, 2015), are important aspects of SC social sustainability which were mentioned in 6 articles. For example. Harms et al. (2013) identified that 88% of 32 surveyed largest German stock companies considered health protection as a relevant sustainability issue, and 69% saw the job security relevant. Supplier non-compliance with social CoC was mentioned in 12 papers. (Table 3)

#### 3.1.2 Environmental Risk

Environmental issues touch all stakeholder groups and accordingly, environmental sustainability risks are of interest to most stakeholders, for example media and a wide range of consumers. Environmental risks refer to the risk sources that create an impact on the natural environment, and they are the most investigated sustainability risks in SSCM literature (Seuring and Muller, 2008).

The main environmental risk sources in the reviewed literature are industrial emissions, originating mainly from manufacturing, and transport sectors. They generate greenhouse gases (GNG), particularly carbon dioxide (CO2), and sulphur dioxide (SO2). The transport sector causes emissions, for example through under-utilized transportation and long distances between suppliers and manufacturers. The industrial emissions as environmental risks are discussed in 10 articles (e.g. Christopher et al., 2011; Lee, 2011; Azevedo et al., 2012; Jira and Toffel, 2013; Lintukangas et al., 2015). Another significant environmental concern and risk source is waste generation. According to the research conducted by Harms et al. (2013), 91% of 32 explored German stock companies assessed waste reduction as a relevant sustainability issue in SCs. In this literature review, 6 articles considered waste, stemming for example from packaging, as an environmental SC risk. In addition, environmental concerns and pollution relate to recycling, reuse and final disposal of the company's products, considered in 6 papers (e.g. Koplin et al., 2007; Lee and Kim, 2009; Christopher et al., 2011; Lemke and Petersen, 2013; Freise and Seuring, 2015).

Environmentally unethical practices, presented in the reviewed literature, are for example uncertified use of chemicals and sticking to wasteful processes in spite of the existence of ecological alternatives (e.g. Lueg et al., 2015; Freise and Seuring, 2015). The use of non-renewable or hard-to-renew natural resources (e.g. mineral deposits, wood and pulp), as well as water- and energy-inefficiencies as environmental risk sources were brought out in 5 articles, for example by Harms et al. (2012); Hofmann et al. (2014); Foerstl et al. (2015). Finally, supplier non-compliance with environmental CoC was mentioned in 9 papers (**Table 3**).

#### 3.1.3 Economic Risk

The perspective of this study towards economic risks is limited to the additional costs incurred due to poor environmental and social performance and when a paper identified costs of sustainable practices reducing short-term financial performance. Accordingly, economic risks were identified from the literature, are such as penalty payments and sanctions from legislative authorities (Foerstl et al., 2010; Caniels et al., 2013), environmental costs, for instance, additional costs from authorities for emissions and pollution (Christopher et al., 2011; Azevedo et al., 2012; Lemke and Petersen, 2013; Lintukangas et al., 2016)). Higher costs for sustainable practices compared to traditional practices (as a short-term economic risk in the eyes of some stakeholders) have been identified by Reuter et al. (2010); Azevedo et al. (2012); Touboulic et al. (2014); Foerstl et al. (2015); and Gallear et al. (2015). Such higher costs may be caused, for example, by the use of cleaner fuel that generates less emissions, or adopting improved and more advanced labor practices, which increase well-being of workers.

### 3.2 Sustainability Risk Mitigation Practices

Stakeholders of focal companies expect a certain level of sustainability of the entire SC. These expectations typically (but not always) exceed the legal requirements, and they can vary between different stakeholder groups. Hence, focal companies seek to mitigate the environmental and social risks through supplier management and various sustainability risk mitigation practices and tools. Such practices include supplier CoC by which focal companies strive to guide the behavior of suppliers and communicate acceptable levels of sustainability to suppliers. In addition, supplier CoC express the commitment to sustainability to stakeholders, and enhance the transparency of SCs. Such CoC may contain rules relating to human rights, working conditions, maximum working hours, pollution and waste management (Magnan et al., 2011). The CoC are considered in 14 articles as way to mitigate sustainability risks (e.g. Beske et al., 2008; Awaysheh and Klassen, 2010; Foerstl et al., 2010; Touboulic et al., 2014).

In global SCs, the compliance to CoC is not obvious and thus, regular monitoring and regular or random audits of suppliers are essential. In the review, 16 papers cited monitoring and audits as risk mitigation practices (e.g. Awaysheh and Klassen, 2010: Reuter et al., 2010; Hofmann et al., 2014; Foerstl et al., 2015). Collaboration between a company and its suppliers and other stakeholders as a risk mitigation means can involve actions such as supplier development, corrective plans for identified misconducts, support and motivation, sharing of best practices, stakeholder involvement in decision making of sustainability-related issues, reporting sustainability initiatives to the stakeholders, workshops on innovative sustainability issues (e.g. Koplin et al., 2007; Foerstl et al., 2010; Caniels et al., 2013; Leppelt et al., 2013; Touboulic et al., 2014; Freise and Seuring, 2015). As mentioned earlier, this study refers to the economic sustainability as being affected and supported by environmental and social performance. Thus, environmental and social practices are seen as mitigating economic risks through avoided penalty payments, and avoided or at least decreased environmental costs from both, governments as well as local communities. Such sustainable practices can be, for instance, green logistics, recycling, waste reduction, and fair labor practices. Also, improved process- and resource-efficiency may decrease the costs of transportation, energy, and materials, thus mitigating economic sustainability risks. Sustainability practices have been examined in seven papers (e.g. Koplin et al., 2007; Foerstl et al., 2010; Gallear et al., 2015).

In addition, as sustainability risk mitigation means in the articles were mentioned such as management systems: environmental certificates in eight papers (e.g. Koplin et al., 2007; Lee and Kim, 2009; Gallear et al., 2015), and social certificates in two papers (Harms et al., 2013; Foerstl et al., 2015). Supplier self-assessments was discussed in seven papers (e.g. Beske et al., (2008; Reuter et al., 2010; Leppelt et al., 2013). In controlling suppliers from entering in supplier base, supplier assessment and selection procedures were cited in six papers (e.g. Koplin et al., 2007; Reuter et al., 2010; Grimm et al., 2016), while sub-supplier management was identified in 10 papers (e.g., Awaysheh and Klassen, 2010; Lee, 2011;

Touboulic et al., 2014). Environmental measurement, such as CO<sub>2</sub> was mentioned in three papers (Christopher et al., 2011; Gallear et al., 2015; Freise and Seuring, 2015). Ethical sourcing rules were identified in six papers (Koplin et al., 2007; Lemke and Petersen, 2013; Lueg et al., 2015). A risk management model for SC sustainability was presented by Foerstl et al., 2010; Lemke and Petersen, 2013; Hofmann et al., 2014 and the risk management approach was cited in seven papers altogether. Incentives for compliance with sustainability, for example, visibility of supplier in the end-product was identified in Foerstl et al. (2015), while sanctions for non-compliance with sustainability, for example, financial compensations and termination of supply relationship, was found in four papers (Magnan et al., 2011; Leppelt et al., 2013; Freise and Seuring, 2015; Gallear et al., 21015). The commercial power of the buyer may mitigate sustainability risks, by pressuring the suppliers to comply with the sustainable standards; this was presented by Touboulic et al. (2014). Finally, lean practices that can advance the economic sustainability, for example, through decreased transportation and inventory costs were presented by Azevedo et al. (2012). These risk mitigation practices are summarized in Table 3.

#### 3.3 Sustainability Performances

Sustainability performance of a focal company describes the means, and demonstrates its ability with which it strives to manage sustainability risks in a SC. Hence, sustainability performance was defined by Gualandris et al. (2014, p. 263) as "a company's environmental and social performance". Accordingly, the sustainability performance includes environmental and social sustainability practices, which have been presented and referred to in detail in the previous sections. In addition to single sustainability practices or tools, several authors (e.g. Christopher et al., 2011; Christopher and Gaudenzi, 2015) call for a more risk management approach to SSCM to ensure supplier compliance and improve sustainability performance. Moreover, Kern et al. (2012) identified that the traditional risk management process (identification, assessment, mitigation) is also sufficient in the SC context. In addition to the risk management approach, for example Mor et al. (2016), identifies that in the lean production, by establishing clear environmental goals and rules for acting accordingly, can improve the employee morale and compliance with environmental regulation.

Eventually, the role of stakeholders in the adoption of SSCM, driving the sustainability performance, is evident. Ciliberti et al. (2009) emphasize the significance of the supply chain pressure (i.e., pressure from suppliers and customers) as a driver of CSR along with ethical values of small and medium companies. Similarly Wolf (2014) identified that both SSCM and stakeholder expectations contribute to the sustainability performance of a company. Nevertheless, as various stakeholders value sustainability initiatives differently (Wood, 1991), the stakeholder pressure and expectations can either encourage or discourage to implement sustainability practices in SCs Meixell and Luoma (2015).

Sustainability Dimensions			So	cial					Environmental					Ec	onor	ny	Risk Mitigation Practices															
Risk sources, mitigation Authors	Unacceptable working conditions working	Unfair wages	Child/forced labour	Discrimination	Empl.health & safety	Human right	Suppl.non-compliance	Pollution	Unethical practices	Industrial emissions	Non-renewable	Waste e.g. packaging	Suppl.non-compliance	Penalty payments	Environmental. Costs	Costs for sust.	Monitoring / Audits	Collaboration	Certif. environ. e.g.	Certif. social. e.g. ISO	Suppl. self-assessment	CoC. standards	Supp.assessm/selectio	Sub-supplier	Envir. measurements	Sustainable practices	Ethic sourcing rules	Risk manag. approach	Incentives for compli.	Sanct. for	Commercial power	Lean practices
Koplin et al. (2007)		х	x	X			x	X				х	X				x	х	X		x	X	x	X			x					
Beske et al. (2008)	х	х	x	x	x	x	X			X	х								X		x	x										
Lee and Kim (2009)		х	x			x		x									x		X			X		х								
Awaysheh, Klassen(2010)	x		x	x	x												х					X		х		х						
Foerstl et al. (2010)							x						x	х			х	х			x	x						х				
Reuter et al. (2010)			x	x	x	x	x	x		X	х	х	x			х	х	х			x	X	X									
Christopher et al. (2011)								x		x		х			Х			х										х				
Lee (2011)										х														х	х							
Magnan et al. (2011)	x	х	x			x	x											х				x		х						x		
Azevedo et al. (2012)						x				x					X	х	x		X							х	x					х
Lemke, Petersen (2013)			x	x				x							х		х					x		х		х	x	х				
Caniels et al. (2013)													x	х				х					x								x	
Harms et al. (2013)			x	x	x	x	x			х	х	х	X				X		X	х		X	х					х				
Jira and Toffel (2013)										x								х			x											
Leppelt et al. (2013)							x						x				х	х			x	x		х			x			x		
Hofmann et al. (2014)	x	х	x				x		х	х	х	х					X	х										х				
Touboulic et al. (2014)							x						x			х	x	х				x		х		x					x	
Foerstl et al. (2015)							X				х	х	x			х	x	х	X	х				х					x			
Freise and Seuring (2015)	x		x		x	x	x	x	х								x	х							x			х		x		
Gallear et al. (2015)													X			х	X	х	X			X	х		х	х	x			x		
Lintukangas et al. (2015)										X																х						
Lueg et al. (2015)		х	x						x								x	х				x				х	x					
Grimm et al. (2016)	x	х	x		x	x	x										X	х			x	X	x	X				х				
Lintukangas et al. (2016)										х					x				X												x	

#### Table 3. Sustainability Risk Sources and Risk Mitigation Practices from The Supply Chain Management Literature

## 4. STAKEHOLDER PERSPECTIVE TOWARDS SUSTAINABLE BUSINESS

In order to achieve business continuity and long-term economic performance through stakeholder legitimacy for business, focal companies need to demonstrate their commitment towards sustainability to their key stakeholders (Carter and Rogers, 2008; Hofmann et al., 2014).

In general, responsible behavior of a company implies socially fair working conditions and compensation, and business processes that do not pollute natural environment and endanger the health of the workers and the people of the local community (Campbell, 2007).

The stakeholder pressure for a responsible business is a major driver to adopt the sustainable practices (Seuring and Muller, 2008), as the stakeholders give a company the legitimacy to do business (Mitchell et al., 1997). If a company fails to meet the expectations of its key stakeholders, it may lose the inputs from all or most of them stemming from the critical reactions of the stakeholders (Hofmann et al., 2014). The stakeholder expectations and critical reactions, which are presented in next sections, are summarized in Table 4.

The stakeholder theory may help position the sustainability aspect of business, as it suggests not separating the "business realm from the ethical realm" (Freeman et al., 2010; Hörisch et al., 2014). With regard to the three approaches of stakeholder theory, Donaldson and Preston (1995) present descriptive, normative, and instrumental aspects which are separate, but mutually supportive. In the context of this study, the instrumental aspect of stakeholder theory is relevant, as it presents the connection between stakeholder perspective and the profitability of a company.

#### 4.1 Stakeholders

Conducting successful business requires the understanding of how stakeholder relationships work, and the manner in which they need to be managed (Freeman et al., 2010). This may be challenging for a company, because socially responsible behavior may mean different things in different places to different stakeholders at different times (Campbell, 2007). Stakeholders, in the wide sense, refers to any identifiable group or individual who can affect the functioning of a company, or who are affected by the functioning of a company. The narrow sense implies any identifiable group or individual that can affect the continuity of the business (Freeman and Reed, 1983). The stakeholder theory views companies as a set of internal and external relationships, where each stakeholder has its specific resource, or "stake", with which it contributes to the business and to joint value creation (Mitchell et al., 1997). In the SC context, the relevant stakeholders that can significantly affect a focal company's business and reputation have been identified, such as the customers, employees, suppliers, shareholders/owners, the management team, competitors, local communities.

governments, investors, labor unions, media and NGOs (Hofmann et al., 2014).

Different stakeholders evaluate sustainability performance from their individual perspectives, and the evaluation is based on their subjective criteria, as well as their understanding and acceptance of the CSR principles of a company (Wood, 1991). Because focal companies may have numerous stakeholders that expect that their values and expectations for sustainability are met, focal companies need to understand the significance of a certain stakeholder for their business. In the literature, the importance of the stakeholder is defined with relation to its power over the focal company, the urgency of the requirements of the stakeholder, and the legitimacy it gives the business. The stakeholder power refers to its strength to get through its will in the relationship, while the urgency is the degree to which the stakeholder requirement demands immediate respond (Mitchell et al., 1997). Finally, the legitimacy was defined by Suchman (1995, p.574) as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions." Hence, the stakeholders that are the most important for a company's business, are its key stakeholders, whose expectations need to be satisfied in order to be able to conduct successful business. (Freeman et al., 2010; Hofmann et al., 2014)

#### 4.2 Stakeholders Expectations for Sustainability

Various stakeholders are interested in different issues of a focal company's sustainability performance. They can emphasize the sustainability dimensions, and the acceptable level of sustainability differently, even inside a stakeholder group (Wood, 1991; Hofmann et al., 2014). These sustainability issues can be the factors that influence either the own actions of the stakeholders, and/or are subjects of the widespread public (non) acceptance. Overall, most stakeholders have positive expectations for the focal company's way to perform in a sustainable manner, and the actions they set out to ensure the sustainable process of their suppliers. For example, governments, NGOs and investors have positive expectations for implementation of all three sustainability dimensions. Some of them, e.g. community leaders and investors, may expect managers' attention, and involvement in the decision making of the company. Accordingly, local communities expect social and economic contributions (e.g. tax base) from companies as well as responsible environmental performance. (Freeman et al., 2010). In addition to annual reports and proxy statements, they expect increasing environmental and social reports. (Mitchell et al., (1997). Positive and focused expectation for one or two sustainability aspects have, for example customers, shareholders, and management teams. On the other hand, media could be interested in revelations of misconduct of SCs, and certain competitors may benefit from the failures of rival companies with sustainability efforts. Customers and endconsumers are the most important stakeholders because of their positive expectations for social and environmental

sustainability, and acceptance for sustainable products and services justify the function of the SC. Suppliers are increasingly important stakeholder group due to growing trend towards outsourcing as a business strategy (Koplin et al., 2007). Thus, key suppliers, who act according to sustainability values of a focal company, are important. Suppliers expect fair action from buyers, for example, sharing of the added costs resulting from sustainable practices compared to traditional ones. In addition, they can expect that their contributions become visible in end-products or services. (Touboulic et al., 2014; Foerstl et al., 2015). Employees and labor unions are mostly interested in social issues, for example, fair wages and labor procedures, good working conditions and working hours. (Hofmann et al., 2014; Meixell and Luoma, 2015). Owners, shareholders and investors expect commitment to minimum environmental and social sustainability, and ethical issues. Similarly, legislators and regulators are interested in corporate compliance with minimum standards (Carter and Rogers, 2008; Seuring and Muller, 2008).

When a stakeholder accepts the function of a company, and considers a company's sustainability level as appropriate, a stakeholder grants its legitimacy for the business of a focal company. On the other hand, sustainability risks materialize when the interested stakeholders notice differences between their expectations and the company's sustainability performance. Accordingly, unmet expectations, and revealed sustainability wrongdoings generate their critical reactions (Wood, 1991; Hofmann et al., 2014).

## 4.3 Stakeholders Critical Reactions to Unment Sustainability Expectations

As a response to a focal company's perceived sustainability performance, the stakeholders react according to their individual interests (positively or negatively), creating an impact on the company's business performance (Frooman, 1999; Groening and Kanuri, 2013). Hofmann et al. (2014) emphasize that the stakeholder reaction and critical action presume two factors. First, a stakeholders have to perceive their unmet expectations and second, they have to interpret the unacceptable conditions as stemming from (supplier) actions, which they consider as responsibilities of a focal company. Stakeholder reactions relate to the resources they provide and with which it contributes to the business of a focal company. Negative reaction indicates that a stakeholder is leaving a company without resources, and positive reaction indicates a rewarding action. In order to influence the sustainability behavior of a company, the stakeholders may use two types of resource control strategies, namely, the withholding strategy or the usage strategy (Frooman, 1999).

The withholding strategy means that the stakeholder, in advance, articulates a credible threat of withdrawal in case of misconduct, and, if necessary, put the threat into practice. For example, the employees may withhold their work contribution by striking, creditors can stop financing, consumers can conduct boycotts and customers can withhold their purchases, suppliers can stop supply, and regulators can cancel their permissions. The usage strategies, in turn, imply that a stakeholder continues to provide the resource, but only in certain limited terms (Frooman, 1999; Sharma and Henriques, 2005).

In terms of local communities and governments, in granting their legitimacy, these authorities allow the companies the right to build facilities, and provide them access to local services. In case of misconduct, they may withdrawal these stakes (Freeman et al., (2010). Legislators and regulators expect companies to comply with the minimum legal standards. If companies fail in these minimum sustainability efforts, the stakeholder's (in this case: legislators') negative reaction may also take the form of undesirable legislation, fines and penalty payments. Moreover, NGOs may provoke scandals in detecting sustainability misconducts, which may gain enormous negative media visibility. (Hofmann et al., 2014)

Table 4 Stakeholder expectations, and reactions to sustainability-related risks in SCs – perceptions from the literature

		rr
Stakeholder(s)	Expectations	Critical reactions if not met
Customers / consumers	Sustainable products and services	Withholding of purchases, boycotts.
Suppliers	Sharing of added costs of sustainable practices, visibility in end-products	Termination of supply contracts.
Employees / labor unions	Fair labor practices and good working conditions	Strikes, walkouts, reduced work contribution.
Owners / shareowners	Commitment to social and environmental sustainability, and ethical issues	Withdrawal of capital, selling the stakes.
Investors	Commitment to social and environmental sustainability, and ethical issues	Termination of financing.
Legislators and regulators	Compliance with minimum sustainability standards	Punishments: fines, penalty payments; undesirable legislation, cancellation of permissions.
Governments and (local) communities	Tax base, social and economic contributions, environmentally friendly processes, involvement in decision making, reporting	Withdrawals of economic support and infrastructure. Cancellations of permissions.
Media	Revelations of misconducts in SCs	Negative visibility, and strong means to influence other stakeholders
NGOs, pressure groups	Revelations of misconducts in SCs	Arousing of attention and public outcry, scandals

Regarding the additional investments in sustainable practices (which commonly are seen as positive action), the investors may look at them from a financial perspective more critically than the other stakeholders (Groening and Kanuri, 2012). Similarly, some financiers may see differently the investments in more advanced labor practices that cost money. However, such practices, for example, supporting the fitness exercises of the employees add to the well-being of the employees, and a company can achieve positive reactions of the employees. The perception of fair labor practices, may result in enhanced work satisfaction, loyalty, organizational commitment, and enhanced job performance (Rupp et al., 2006), all of which positively influence business performance. Finally, as an example of the indirect stakeholder influence, the media has a significant stakeholder power (which is a valuable resource) as it can affect other stakeholders to withhold their legitimacy from a focal company, in case of the revelation of sustainability violation

### 5. DISCUSSION

(Sharma and Henriques, 2005)

This paper investigated and analyzed the stakeholder reactions on the sustainability performance of a focal company and its SC. As for responding to RQ1, we provided Table 3, comprising of the sustainability risk sources and the risk mitigation practices. The literature review showed that the non-compliance of suppliers with environmental/social CoC is high, because it was considered as a sustainability risk source in 14 articles altogether 21 times (12 times in social context, and 9 times in the environmental context). Furthermore, Grimm et al. (2016) noted that not only the suppliers, but also the indirect sub-suppliers can seriously damage the reputation and brand image of a focal company in the eyes of the stakeholders. Therefore, supplier sustainability risks need to be mitigated (Foerstl et al., 2010; Hofmann et al., 2014).

The economic aspect of 3BL is complex (Carter and Rogers, 2008). In the context of this study, economic risks were seen only as costs originating from poor environmental and social performance, and when costs for sustainable practices in an article were identified as a risk which reduces a company's (short-term) profitability. Consequently, the economic risks of penalty payments and environmental costs may be solved through the enforcement of social and environmental sustainability practices. With regard to higher costs of sustainable practices, we refer to Carter and Rogers (2008), who argue that though sustainable practices are more expensive in short-term, sustainability enables improved financial performance in long-term when compared to the conventional practices (i.e., practices without specific orientation towards sustainability). Table 3 presents the risk mitigation practices that seek to ensure the sustainability performance in SC, as well as to demonstrate the transparency and a focal company's engagement with the responsible business to the stakeholders. In addition to the risk management practices, companies should develop proactive and systematic sustainability risk management processes to respond increasing challenges from global suppliers, which may form reputational and financial

risks (Seuring and Muller, 2008; Foerstl et al., 2010; Christopher et al., 2011).

In terms of RQ2, in general, all stakeholders may react negatively through suitable resource control strategies, if the sustainability performance of a company does not meet with their individual expectations (Table 4). However, in certain circumstances, the company's investments in sustainability can be viewed differently, even among the members of same stakeholder group. Some investors, for example, may react positively (as additional investments), or negatively (as withdrawals of resources), depending on their expectations for short-term profitability versus long-term financial performance (Frooman, 1999; Carter and Rogers, 2008; Groening and Kanuri, 2012).

It is obvious that breaking the law always causes negative reactions. Instead, the reactions of the stakeholders to more or less sustainable practices, within the legal limits, can vary. Therefore, the companies should differentiate between the two concepts: the compliance with the law and acting according to the agreed sustainability CoC beyond the legal requirements. In contrast to the approach of stakeholder pressure as a driver for SC sustainability, Wolf (2014) showed that independent from the expectations of the stakeholders, sustainability can be a distinctive business strategy of a company. Accordingly, through proactive SSCM strategy a company can achieve a good reputation as a responsible actor, which may allow the corporate legitimacy and access to the resources of the key stakeholders. This discussion leads to the conceptual framework that is presented in Figure 1.

Based on the reviewed literature and the developed conceptual framework, this paper suggest the following propositions:

**P1**. Environmental, social and economic sustainability risks from various suppliers in the SC increase the need of focal companies to develop corresponding risk mitigation practices in order to improve SC sustainability.

**P2.** Stakeholder reactions on unmet expectations of SC sustainability increase the need of focal companies to develop appropriate risk mitigation practices in order to avoid reputational damages and financial losses from key stakeholders.

**P3**. Developed sustainability risk mitigation practices improve sustainability performance that meets key stakeholder expectations.

**P4**. Sustainability performance that meets the expectations of key stakeholders impacts positively on stakeholder reactions.

This conceptual framework can provide insights of how companies should analyze their actions, which are targeted to increase SC sustainability level while meet the key stakeholder expectations. As noted also by Groening and Kanuri (2012), for example, some stakeholder groups may expect only the adherence to legislation because of financial reasons, while others require more advanced sustainability processes in SC in order to contribute positively to the business of the focal company.



Figure 1. A Conceptual Framework of Stakeholder Reactions on SC Sustainability Performance.

# 6. CONCLUSION AND FURTHER

## RESEARCH

The results from this literature review indicate that different stakeholders may react differently towards sustainability performance in SCs, either positively or negatively. The reactions and directions may vary even in the same stakeholder group, for example among investors. Based on this study, the compliance of the upstream suppliers with sustainability standards and the CoC appears to be the most challenging sustainability-related issue in SCs. Hence, managers should invest more in the innovative ways to develop suppliers and sub-suppliers, as well as collaborate with key stakeholders, in order to achieve the desired level of sustainability.

This paper makes three contributions. First, it provides a summary of the empirical papers considering SC sustainability risk sources and mitigation means. Second, it develops a conceptual framework and propositions for the sustainability performance and stakeholder reactions in SCs. Third, it suggests that true sustainable practices are not the ones based on legislation. Hence, the plain compliance with the minimum legislation differs from genuine adherence to agreed sustainability CoC, which go beyond the environmental and social legislation. Therefore, companies should focus on analyzing which ones of the true sustainable practices, or the lack of them, may cause negative or positive reactions in their identified key stakeholders.

For future research, as the direction of the stakeholder reactions is not always obvious, the differences between key stakeholders' expectations need to be identified, in order to detect the causes and predict the impacts on their behavior. Therefore, this framework can become a basis to explore empirically how sustainability performance of a focal company and its SC may influence stakeholder reactions and whether the stakeholder reactions can mediate or moderate the impact of the consequences of sustainability risks on the business performance of a company.

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