Social Supply Chain Risk Management: A Case Study in a Cosmetic Company

Luiza Ribeiro Alves Cunha[1][0000-0002-2606-0509], Adriana Leiras [1][0000-0002-6305-9662] and Paula Ceryno[2][0000-0001-8185-9092]

[1] Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Rio de Janeiro, Brazil
[2] Federal University of the State of Rio de Janeiro (UNIRIO), Rio de Janeiro, Brazil
luizarac@gmail.com

Abstract. Supply chain risk management has become decisive to generate a competitive advantage. However, social supply chain risk management is still rarely explored. The present study is grounded on results from the academic literature to conduct a case study in a cosmetic company to verify the relationship of the variables identified in the literature with the organizational reality. So, in this paper, we reveal the social risks and the main consequences of these risks tracked by the studied organization. The paper contributes to the academic studies with two new social risks, with validation of a social risk management framework presented in the academy, the description of the company's strategy to manage its risks, and with the probability of occurrence of each consequence for the company, highlighting consequences with a high probability of occurrence.

Keywords: Social Risk, Social Supply Chain Risk Management, Case Study.

1 Introduction

To survive in a business environment, companies must have proper supply chain risk management (SCRM) to understand how to mitigate their risks and manage their supply chains (Ferreira et al. 2018; de Oliveira et al. 2019). However, SCRM academic research has emphasized the traditional aspect of the subject, focusing on the economic view, avoiding interruptions along the chain to reduce financial losses that disturbances may cause (Hofmann et al. 2014). With the concept of the Triple Bottom Line (Elkington 1994), the non-financial view of SCRM emerged, including the social and environmental perspectives. The intersection of the economic, environmental, and social pillars results in the attainment of sustainability.

Although it is possible to see supply chains changing their behavior in a more sustainable way to meet the stakeholders` pressure (e.g., consumers, non-governmental organizations, local communities, society, media, and governments), as well as legislation and regulation (Cruz 2013; Busse 2016), research on the social risks with a supply-chain view is still needed (Yu et al. 2017; Tang 2018; Cunha et al. 2019). Yu et al. (2017) and Cunha et al. (2019) also highlight the importance of empirical studies on social risk management (SRM) to validate the solutions proposed by academia.

In this sense, the present study focuses on the social view of the Triple Bottom Line in the supply chain of a company, aiming to answer three research questions through a case study: (1) The social risks and consequences retrieved by the academic literature fit on the reality of a business company?; (2) What strategies have been used for social risk management in practical?; and (3) Is the framework from the theoretical reference adherent to business reality?

The case study considers a Company of Cosmetics involved in the manufacturing, industrialization, distribution, and sale of cosmetics, fragrances, and personal hygiene products. The company's selection is because the company's activities are guided by a strong organizational culture and well-established socio-environmental policy, aiming at sustainable development and a good relationship with society. Be-sides that, the studied company has more than 170 stores located in more than 60 cities and 20 different countries, has about 6.5 thousand employees, and a consolidated net income exceeding 200 million reais.

That said, to answer the first research question, we compare and validate the results of the case study of a reference company, given its size and value, with the list of 24 social risks, the list of 13 consequences that those risks can cause for a company proposed by Cunha et al. (2019).

The third research question will be answered through the analysis of four hypotheses based on the framework presented by Cunha et al. (2019): (i) Social risks existent in the supply chain of a company generate reactions of stakeholders; (ii) A possible reaction of stakeholders generates consequences for the focal company; (iii) The stake-holder reaction creates a process of identification of the critical stakeholders and their main expectations; (iv) Social risks, stakeholder reactions, consequences, identification of stakeholders and their expectations (the elements of the first three hypotheses) define the supply chain risk management (SCRM) of a company.

The remainder of the paper is organized as follows: Section 2 addresses the research's theoretical foundation, followed by Section 3, presenting the case study methodology. Section 4 demonstrates the case study results and discussion. Finally, Section 5 brings the concluding remarks and suggestions for future research.

2 Theoretical Background

The present study considers SRM as "public interventions to assist individuals, households, and communities in managing risk better, and provide support to the critically poor. The SRM intended to enhance the service provider's ability to anticipate and manage the impacts arising from its operations and thus aims to identify and subsequently mitigate, reduce, and control the social risks that one chain can generate" (Cunha et al., 2019).

Social Supply Chain Risk (SSCR), in turn, is a condition or an event within a focal firm's supply chain that may provoke harmful stakeholder reactions (Hofmann et al. 2014). With the understanding of SRM and SSCR, Cunha et al. (2019) present the definition of Social Supply Chain Risk Management (SSCRM) as the "management (identify and subsequently mitigate, reduce and control) of social risks (risks that occur when stakeholders identify a company's vulnerability on a social issue and pressure the organization to change its approach) where a supply chain is exposed."

Given these definitions and with the results of the SLR presented in Cunha et al. (2019), such as the identification of social risks and the consequences that those risks generate for a company, Cunha et al. (2019) developed a framework, here adapted in Figure 1.

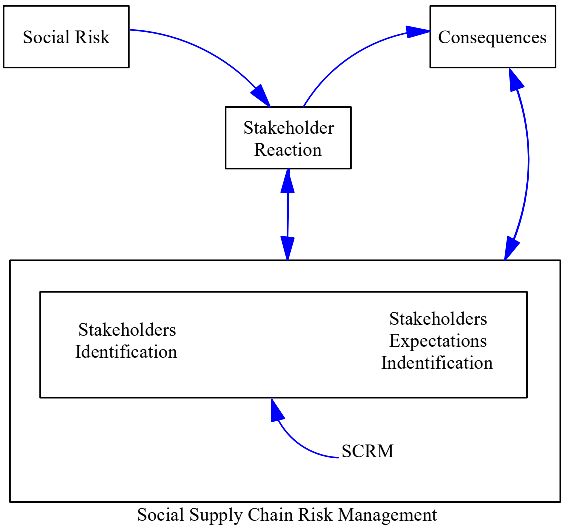

Fig. 1. Social Risk Management Framework (adapted from Cunha et al., 2019).

The SRM framework, such as the SRM definition, intends to increase the service provider's ability to anticipate and manage the impacts arising from the social risks in its operations. Thus, Figure 1 demonstrates that the SSCRM of a company encompasses the SCRM, the identification of stakeholders, and the identification of the stakeholders' expectations. Figure 1 also highlights the relation between social risks in the company's supply chain and the stakeholder's reaction (a relationship that gave rise to hypothesis 1); the influence between the reaction by stakeholders and the consequences that the company will feel (an influence that gave rise to hypothesis 2); and the necessity to identify stakeholders and their expectations to prevent/understand and mitigate stakeholders' reaction (giving rise to hypothesis 3).

In addition to the framework presented in Cunha et al. (2019), we also represent in Figure 1 the relationship between SSCRM and the consequences felt by the company. That is, managing the social risks present in a firm's supply chain, the consequences that the firm will face will be affected; therefore, having proper management, the consequences tend to be minor.

3 Research Methodology

To validate the results found in the academic literature, we follow the six steps proposed by Yin (2013) for the case study methodology: plan, project, preparation, data collection, data analysis, and sharing.

The planning step aims to understand the event that makes it necessary to use a case study instead of other research methodologies. The management of social risks in the supply chain is the event to be studied, addressing the social risks, the consequences that these risks can generate for the company, and the company's strategies used for risk management.

The project step aims to formalize the study questions. The questions that guide this study, already presented in the introductory section, are based on verifying the adherence between social risks and their consequences resulting from the systematic literature review by Cunha et al. (2019), with what is observed in real situations of supply chains of companies.

In the preparation stage, we develop a case study protocol to overview the case study (research questions and objectives) and explain the data collection procedure, a guide to the case study report, and data collection issues. The case study report considers three sources of data collection: (i) completion of the online questionnaire by the interviewees; (ii) individual interviews; (iii) detailed study of the documents made available.

The data collection stage of the case study considered documents made available by the company, interviews, and secondary materials from the internet. First, two professionals of the studied company answered an online questionnaire. This questionnaire was based on Cunha et al. (2019) and made available to respondents through the Sur-vey Monkey platform. Then, we conducted face-to-face interviews with three respondents, with open questions based on answers previously reported by company professionals. Finally, we compiled documents made available by the interviewees and secondary materials available on the website of the studied company.
The professionals considered in these interviews effectively deal with the risks of the company and are: (i) the Supply Manager, responsible for Performance Management and Relationship with Suppliers; (ii) the Audit Coordinator of Supply Management; and (iii) the Compliance Coordinator.

The data analysis stage serves to organize and display data; it consists of an examination, categorization, tabulation, test, or otherwise recombined evidence to produce findings based on empiricism. Four techniques can drive this step: pattern matching, explanation construction, time series analysis, or program logic models (Yin 2013). The present research considers the pattern matching technique, in which the theoretical reference is used as a prognosis and compared with the results of the case study.

Finally, the sharing stage consists of delivering textual materials and presenting sufficient evidence so that the readers reach their conclusions. In this way, the sharing stage consists of the publication of the present paper.

4 Results and Discussion

The studied company has three areas responsible for its risks: (i) the Supply area, which deals with risks related to suppliers; (ii) the legal and Compliance area, an area concerned with issues related to labor laws, including the risks of corruption and bribery; (iii) the area of corporate risks, encompassing other risks.

The cosmetic company has four means of identifying social issues present in its supply chain, as explained by the interviews: (i) through an audit carried out periodically by the company; (ii) through a complaint from one supplier over another (which has already occurred with a textile supplier); (iii) through the ombudsman channel and, (iv) through the media.

The interviewees stated that the company has a list of risks predefined by a multidisciplinary group (encompassing the area of supplies, risk management, legal area, and relationship with suppliers), which is reviewed every two years and serves as the basis for the supplier's audit checklist.

Risk mapping includes different sources of information: internal and external factor analysis, company value chain mapping, risk self-assessment, loss and fraud indica-tors, internal audit reports, certification controls, and complaints received by the Ombudsman's Office.

The online questionnaire made it possible to list the 24 social risks found in Cunha et al. (2019) for the interviewees. Of those 24 risks, 11 of them are not audited for the studied company and, therefore, are presented in Table 1 without the probability of occurrence, these being: unfair or low wages, although the same worries about workers' compensation, however, it still cannot reach the level of detail of the amount paid by its suppliers to employees; access to drinking water; access to basic sanitation; unfair compensation; reallocation or rupture of indigenous peoples; exposure of communities near the end of activity; unavailability to public facilities; expropriation; exposure to unemployment; and reallocations without explicit grounds and equality before the law.

In addition to the 24 listed risks, the online questionnaire also allows the respondents to add different social risks with their probabilities of occurrence in their supply chain. Accordingly, two social risks were added: Corruption and Bribery and Compliance with Local Labor Legislation. Corruption and bribery should be added to the list presented in Cunha et al. (2019), as they may create critical social risks. For example, if somehow the money destined for the aid of an Amazon community is diverted, the community will not receive the necessary assistance and may trigger various social risks. However, concerning local labor legislation, this risk applies to the cosmetics company studied because its suppliers are within the Brazilian territory. If the company has suppliers located outside Brazil, the law to be followed should be the one proposed by the International Labor Organization – ILO (2017).

Although some of the 24 social risks presented in Table 1 are also covered by local legislation or ILO, other risks are not included in Table 1 and are covered by legislation, such as the protection of migrant workers. Therefore, this is another factor that reinforces the inclusion of the most appropriate law in a company's supply chain to the list of social risks.

Besides the company's identification of the social risks found in the academic literature, the questionnaire also addressed the probability of occurrence of each social risk and the consequences that these risks could bring to the company.

Based on the company's history, the interviewees considered only two risks as having a high probability of occurrence: Compliance with local Legislation and the Use of Inappropriate Equipment. Table 1 shows the probabilities associated with which social risks and the consequences of these risks.

Regarding the consequences, as shown in Table 1, those that appear most frequently are the damage to the company's reputation (1), the risk of operational stops (4), individual claims or collective action (11), and payment of mandatory compensation by the court (12). The profit reduction (3) consequence was mentioned only twice, demonstrating that the company has a social concern beyond the financial consequence that these risks can cause.

To simplify Table 1, we number the consequences as follows: (1) Damage to the company's reputation; (2) Loss of institutional confidence; (3) Reduced profits; (4) Risk of operational stoppage time; (5) Cancellation or postponement of the projects; (6) Disruptions of strategic planning; (7) Need for management learning; (8) Conflict among the organization's stakeholders; (9) Poor relationship with other members of the supply chain; (10) Customer boycott; (11) Face individual or class action claims; (12) Court mandated compensation payments; (13)Withdrawal or denial of the social license to operate.

In addition to the two respondents of the online questionnaire, the Audit Coordinator of Supply Management explained the process in more detail during the interview. As a strategy to manage the social risks that may be present in its supply chain, the company performs two types of audits, one related to the new suppliers and another related to the contracted suppliers of the company, as shown in Figure 2.

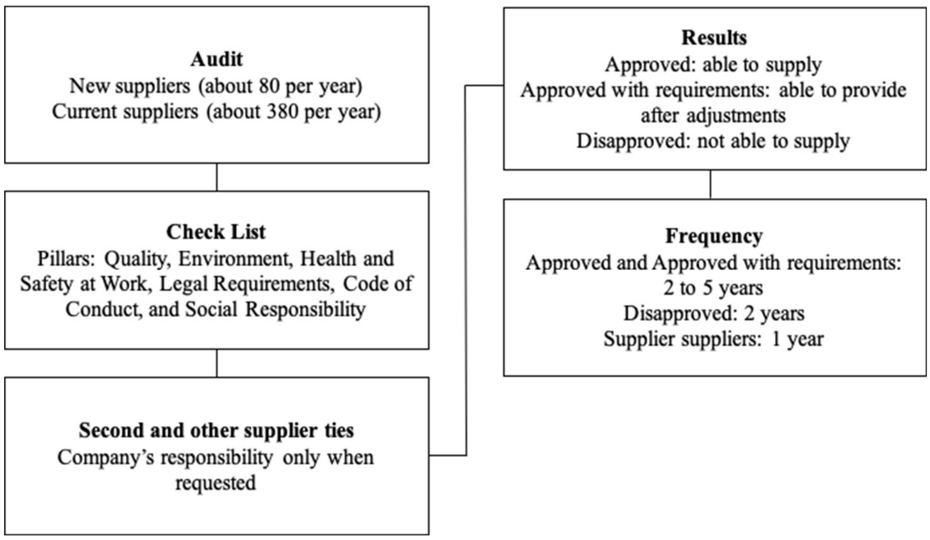

Fig. 2. Company Global Audit process.

Table 1. Social Risks Probability of occurrence, and associated consequences.

	Supply area (answers from the Supply Manager)																Compliance area (answers from the Compliance Coordinator)															
Social Risk	Probability			Consequence													Probability			Consequence												
	Low	Med.	High	1	2	3	4	5	6	7	8	9	10	11	12	13	Low	Med.	High	1	2	3	4	5	6	7	8	9	10	11	12	13
Forced Labor		X		X					X								X			X												
Child Labor		X		X					X								X			X												
Discrimination and harassment	X				X							X					X			X												
Freedom of movement	X									X				X			X						X									
Health and Safety at work		X					X		X									X													X	
Low or unfair wages							X							X																X		
Overtime work		X					X							X				X													X	
Access to clean water							X	X												X												
Freedom of association	X						X							X			X						X									
Access to basic sanitation							X	X																						X		
Unfair compensation							X							X								X										
Inadequate equipment			X			X	X										X							X								

Weaning	X											X		X			X														X	
Double bookkeeping	X						X							X			X													X		
Relocation or rupture of indigenous people				X	X															X												
Exposure of communities near the activity				X	X																										X	
Lack of ethics / transparency		X		X					X								X			X												
Unavailability to public facilities				X										X																X		
Expropriation												X								X												
Exposure to unemployment															X								X									
Impacts on local agriculture	X											X					X							X								
Unreasonable relocations																								X								
Equality																				X												
Unlawful demolitions	X			X	X												X														X	
Corruption and Bribery		X		X	X																											
Compliance with Local Legislation			X	X	X																											
Total	7	6	2	9	6	1	9	2	4	1	0	4	0	8	2	0	11	2	0	8	0	1	3	3	0	0	0	0	0	4	5	0

The main objectives of the Audit process for the company are to mitigate the risk of shortages of products, protect the company image and the integrity of employees, contribute to the maintenance/ obtaining of certifications and awards (which guarantee brand value), and integrate company beliefs and values into the supplier relationship network, ensuring the development of the value chain.

The audit process takes place through a checklist questionnaire answered by direct suppliers. According to the criticality of the supplier, audits take place at one-year intervals (most critical suppliers) to five years (less critical suppliers). The focal company partners with eight different companies that perform more than 300 audits per year with their suppliers. The studied company defines the companies to be audited, and the process of auditing the suppliers happens with a marked date, that is, without surprise for the suppliers.

Still referring to the supplier audit process, second ties suppliers are usually not audited, that is, supplier suppliers are often a concern of their direct suppliers. However, they may become the responsibility of the cosmetics company upon request or if the company thinks it is necessary. Suppliers of second or other ties are only part of the company's list of suppliers for one year, every year, the process of auditing with them.

The checklist questionnaire is based on six pillars, as presented in Figure 1 being Quality, Environment, Health, and Safety at Work, Legal Requirements, Code of Conduct, and Social Responsibility the pillars. In this way, questions are asked in the audit process divided into sections relating to these pillars. The Social Responsibility section of the checklist, for example, presents questions such as: does the organization regulate that its employees accept or provide gifts that may be interpreted as interfering with the business relationship? Is there a detail in the code of conduct or internal disciplinary action procedure in case of unethical behavior? Does the organization have a complaint channel available to all employees and suppliers? Meeting quotas determined by the Ministry of Labor (young apprentices and/or people with disabilities) is fulfilled? Prohibition of forced or child labor? Community development actions?

According to the audited parties' replies, the supplier can be classified into three groups: (i) approved; (ii) approved with restrictions, where the supplier is still able to sell but must adapt within 3 months to the requirements demand in a corrective action plan; (iii) Disapproved, where the supplier will not be able to supply. The corrective action plans necessary for those approved with restrictions are individual and depend on the responses of each supplier.

Some items do not present tolerance and make suppliers automatically disapproved, such as: forced or compulsory labor, child labor, environmental requirements, legal non-compliance, non-compliance with benefit payment rules, non-compliance with health and safety standards, and corruption.

In addition to Global Audit, by the answers from the Supply Manager and the Audit Coordinator of Supply Management, it was possible to understand that the Supply area also encompasses a global relationship area with suppliers and a risk and compliance area.

The Global Supplier Relationship area encompasses an existing Corporate Program since 2004 that, through a sustainable performance management model, seeks to improve performance and relationships with suppliers of all categories with which the company relates, to create a highly competitive supply chain and quality relationships.

Currently, there are researches on global loyalty and national relations, events related to suppliers (awards, workshops, meetings), meeting of results of supplies and panel of indicators, and communication with suppliers. To this end, the program evaluates six pillars (quality, logistics, innovation, competitiveness, socio-environmental, and relationship).

Concerning the area of risk and compliance, its objective is to monitor and communicate the risks identified in the suppliers' auditing and financial evaluation processes, following the established action plans.

Within the Risks and Compliance division, social and environmental monitoring has the specific objective of developing suppliers in the socio-environmental methodology, contributing to a value chain increasingly adhering to the brand's beliefs and values. Examples of initiatives in this area correspond to the search for the reduction of CO_2 emissions and the use of water and waste, linked to the training of suppliers, education, social inclusion of them, and social investment by the cosmetics company.

Lastly, the framework of social risk management was explained in face-to-face interviews for both managers to obtain validation of the hypothesis mentioned in the introduction section or get new insights from it. We deriver the four hypotheses from the Cunha et al. (2019) framework.

The SRM framework presented in Figure 1 demonstrates that given a social risk present in the company's supply chain, stakeholders will react. Due to this reaction, the consequences will be felt in the company. And also suggests, that the identification of stakeholders and the identification of stakeholder expectations should be considered in the social risk management of a company. Thus, the framework includes stakeholders in the company's risk management, highlighting the importance of these actors.

In fact, the interviewees stated that the company plans to partner with the communities involved in the production of cosmetics and, therefore, listens to its stakeholders. For example, an eco-park of the company, where a specific group of workers deals with Amazonian communities, works to identify local issues (e.g., if children are attending schools). The company provides incentives to the region for communities to develop and deliver a direct interface with communities. Meetings and lectures occur as an issue is raised in the eco-park and, if necessary, action plans are created.

Besides the proximity to its stakeholders, as previously shown, the company has a defined social risk list, knows the consequences that these risks can generate for its company, and has strategies to manage its risks.

Therefore, considering the pre-defined list of social risks, the company maintains close relationships with stakeholders to mitigate those risks in its supply chains. By mitigating social risks, stakeholders do not react negatively, preventing consequences from occurring in the company. In this way, the questionnaire and the interviews demonstrated that the company widely covers the first-mentioned two hypotheses.

The answers to the online questionnaire also present the main stakeholders from the company (communities, consumers, beauty consultants), validating that the company identifies its stakeholders. The expectations of the stakeholders are considered in different ways. The expectations of the communities are heard through projects, as mentioned earlier, consumer expectations are heard mainly through the consultants, and the consultants' expectations are listened to and addressed through a specific area of the company.

Accordingly, the third and fourth hypotheses are contemplated in the strategies for supply chain risk management of the cosmetic company.

5 Conclusion

The case study answered three research questions. The first one was responded to as several social risks found in the literature coincide with the social risk monitored by the studied company. However, it became clear that social risks vary according to the company's area. Therefore, risks related to construction, mining, or oil and gas may or may not refer to the ones present in the cosmetics area.

Also related to social risks, the company suggested two new social risks that, after analysis, are indicated as a contribution to the list developed by Cunha et al. (2019) and for the academy.

The second research question was answered by explaining the strategy (audit process) used by the company to deal with its social risks. Cunha et al. (2019) presented strategy in a general manner. In contrast, in the case study, the supplier auditing process was discussed as the strategy used by the company to manage social risk in its supply chain.

The third research question encompassed the framework presented by Cunha et al. (2019). The framework had good understanding and validation on the part of the respondents, an essential step since the developed framework contributes to academics and the business as a tool for social risk management.

In this way, the study was able to contribute to the academic literature by comparing a real case and the results from Cunha et al. (2019). On the one hand, some social risks (those that suit the company's reality) addressed in the academy should be added to the list of risks predefined by the company and, therefore, should receive attention in the audit process. On the other hand, the business environment brings updates back to the academy, adding two new social risks to the list presented in Cunha et al. (2019).

As future research avenues, more case studies should investigate other supply chains, highlight disparities concerning the private and public sectors, and explore different types of organizations and different organizational areas, such as oil and gas, mining, construction, cosmetics, and textiles. Additional studies may also focus on the importance of stakeholders and their social risk management actions and other social risk management strategies.

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