



## Social sustainability in supply chains: clarifications and insights

### *Sustentabilidade social na cadeia de suprimentos: esclarecimentos e novas direções*

Dafne Oliveira Carlos de Moraes<sup>1</sup>  
José Carlos Barbieri<sup>2</sup>

#### Abstract

*Considering a historical predominance of environmental issues within the context of sustainability, social issues are under-represented. This also applies for Sustainable Supply Chain Management. The research field still advances disproportionately on environmental and economic dimensions, front of the social dimension. This study aims to shed additional light about sustainable supply chain management, focusing on provide a theoretical explanation for social sustainability adoption into the supply chain. To guide this theoretical essay, the study explores the concepts of social issues and governance mechanisms and presents a framework for social sustainability adoption and management into supply chains, considering three guiding theories: Stakeholder Theory, Behavioral Theory and Contingency Theory. In order to collaborate with a future research agenda for the field, research gaps focusing on the social dimension are addressed.*

**Keywords:** Sustainable Supply Chain Management. Social Sustainability. Governance Mechanisms. Theoretical Essay.

#### Resumo

*Considerando uma predominância histórica de questões ambientais no contexto da sustentabilidade, as questões sociais estão sub-representadas. Isto também se aplica à gestão da Cadeia de Suprimentos Sustentável. O campo de pesquisa ainda avança desproporcionalmente em dimensões ambientais e econômicas diante da dimensão social. Este estudo tem como objetivo lançar luz adicional sobre o gerenciamento da cadeia de suprimentos sustentável, com foco em fornecer uma explicação teórica para a adoção da sustentabilidade social na cadeia de suprimentos. Para orientar este ensaio teórico, o estudo explora os conceitos de questões sociais e mecanismos de governança, e apresenta um modelo conceitual para a adoção e gestão da sustentabilidade social nas cadeias de suprimentos considerando três teorias orientadoras: Teoria das Partes Interessadas, Teoria Comportamental e Teoria da Contingência. No intuito de colaborar com uma agenda de pesquisas futuras para o campo, elencam-se lacunas de pesquisa com foco na dimensão social.*

**Palavras-chave:** Gestão da Cadeia de Suprimentos Sustentável. Sustentabilidade Social. Mecanismos de Governança. Ensaio Teórico.

## 1 Introduction

A growing body of literature started to focus on the integration of sustainability with supply chain management (SCM). The interest in Sustainable Supply Chain Management (SSCM) is manifested in practitioners and academics (Hassini, Surti & Searcy, 2012) and follows the increase of globalization, international trade and information flows on sustainable performance (Burritt & Schaltegger, 2014; Castro, 2017). SCM's perspective plays a special role in the implementation of sustainability (Marques & Cousins, 2009; Neutzling; Silva, 2016) since it considers the product from a first transformation of raw materials to

<sup>1</sup> Doutoranda em Administração de Empresas pela Fundação Getúlio Vargas. Mestre em Administração de Empresas pela Universidade Estadual do Ceará. Pesquisadora do Departamento de Administração da Produção e Operações Industriais da FGV-EAESP em Gestão Socioambiental e do GVpesquisa – Departamento de Pesquisa da FGV-EAESP em Impacto Social do Conhecimento. Email: dafne\_oliveira@hotmail.com

<sup>2</sup> Mestre e doutor em Administração pela FGV/EAESP. Foi professor em renomadas instituições de ensino superior como a Universidade Federal do Mato Grosso do Sul e a PUC de São Paulo. Pesquisador do Instituto de Pesquisas Tecnológicas do Estado de São Paulo (IPT) desenvolveu atividades nas áreas de Sistemas de Informações, Propriedade Industrial e Transferência de Tecnologia. Membro de diversas comissões técnicas da ABNT e do Inmetro relacionadas com gestão ambiental, responsabilidade social e gestão de Pesquisa, Desenvolvimento e Inovação. Email: jose.barbieri@fgv.br

delivery to the customer (Uysal, 2012). This is essential once the tendency is for organizations to be held accountable for its supplier's behavior (Luzzini, Brandon-Jones, Brandon-Jones & Spina, 2015; Seuring, 2008) and not be considered any more sustainable than its weakest link (Krause, Vachon & Klassen, 2009). As a result, even achieving a high level of sustainable performance, a firm could be compromised by the poor management of its supplier's sustainable issues.

SSCM research has grown over the last few decades. The interest is reflected in continued editions in the major operations management journals, which have called for SSCM special issues since at least 2007. With an exponential increase in published articles, the breadth of questions investigated in SSCM also increased. One aspect, however, remains underdeveloped over the years. Considering the Triple Bottom Line (TBL) dimensions (i.e., economic, social and environmental), the social dimension has often been neglected in research and practice (Seuring & Müller, 2008a; Pagell & Wu, 2009; Wu & Pagell, 2011; Ashby, Leat & Hudson-Smith, 2012; Touboulis & Walker, 2015). Several literature reviews reinforce different aspects of this gap (Marques & Cousins, 2009; Carter & Easton, 2011; Ashby et al., 2012; Ahi & Searcy, 2015; Beske-Janssen, Johnson & Schaltegger, 2015; Tachizawa & Wong, 2014; Taticchi, Tonelli & Pasqualino, 2013; Touboulis & Walker, 2015).

The lack of progress in the social dimension represents a problematic situation. It could mean that companies find it difficult to identify and develop practices in social sustainability (Marshall, McCarthy, Heavey & McGrath, 2015) and that social elements are less tangible when compared to environmental elements (Ashby et al., 2012). Besides, it also could give the impression that sustainability, in its TBL conceptual form, symbolizes a theoretical construction, limited in practice (Brandenburg, Govindan, Sarkis & Seuring, 2014).

This issues reinforce unanswered questions in the field, like the ones this study explores: What social sustainability in supply chain encompasses? How it could be managed along supply chains? The research aims to shed additional light in SSCM and focuses on provide a theoretical explanation for social sustainability adoption into the supply chain. For this, it centers on the following specific objectives: i) understand the origins of SSCM, ii) identify what social sustainability comprises in a SCM context; iii) identify through which means social sustainability could be implemented along the supply chain; iv) identify theoretical lenses to guide the understanding of social sustainability management in supply chains.

This study contributes to the SSCM literature by exploring in a theoretical essay what social sustainability represents in a SCM context. An essay could be understood as a means of analysis and elucidation in relation to an object, regardless of its nature or characteristic, and an approach to incubate new forms of knowledge (Meneghetti, 2011). To guide this theoretical essay, the paper explores the concepts of social issues and governance mechanisms and presents a framework for social sustainability adoption and management into supply chains, considering three guiding theories: Stakeholder Theory, Behavioral Theory and Contingency Theory. Also, in order to collaborate with a future research agenda for the field, research gaps focusing on the social dimension are addressed.

## 1 Sustainable Supply Chain Management

Some researchers have pointed out the beginning of SSCM research at least two decades, while others emphasize the last decade (Hassini, Johnson & Schaltegger, 2015; Carter & Easton, 2011). This division can be considered as an indication of the different understandings about SSCM's concept, which reflects the different understandings about sustainability. On one hand, it is considered as the origin of SSCM studies that develop diverse and isolated aspects related to sustainability, especially those focused on environmental issues. On the other hand, it is understood as the beginning of SSCM the research that addresses sustainability based on all Triple Bottom Line (TBL) dimensions, that is, with a simultaneous focus on environmental, social and economic issues. In order to explore how the insertion of sustainability in the SCM evolved, this study outlines the different concepts that have emerged over the longer period.

In this context, Seuring and Müller (2008b) point out that the main stream of SSCM research began in the mid-1990s, with articles by Murphy et al. (1994), on managing environmental problems in logistics, and Drumwright (1994), on socially responsible organizational purchasing. The researches basically followed the

environmental and social perspectives independent of each other, through the notion of green management and corporate social responsibility (Carter & Easton, 2011; Touboulic & Walker, 2015). Several terms were used to express this complex combination of concepts (Svensson, 2007; Ahi; Searcy, 2013; Taticchi; Tollelli & Pasqualino, 2013). In a chronological sequence of terms, there are: Green Purchases (Min & Galle, 1997); Environmental Procurement (Carter & Carter 1998); Reverse Logistics (Carter & Ellram, 1998); Environmental Logistics (Gonzalez-Benito & Gonzalez-Benito, 2006); Environmentally Conscious Manufacturing (Gungor & Gupta, 1999); Closed-Loop Supply Chains (Beamon, 1999; Guide & Van Wassenhove, 2006; Quariguasi Frota Neto et al., 2009); Responsible Supply Chain Management (Bakker & Nijhof, 2002; Lee & Kim, 2009; Alwaysheh & Klassen, 2010; Park-Poaps & Rees, 2010); Environmental Supply Chain Management (Lippman, 2001; Walker *et al.*, 2008; Zhu, Crotty & Sarkis, 2008) and Green Supply Chain Management (Sarkis, 2003; Srivastava, 2007).

A view of Green Purchasing was brought by Min and Galle (1997) as a way for buyer's professionals to rethink their traditional strategies, which neglected environmental impacts, for the adoption of purchasing strategies aimed at environmental waste prevention and control. This vision, which is still departmental and intra-firm, is expanded by Carter and Carter (1998), when they define Environmental Purchases as the involvement of the purchasing function in supply chain management activities, in order to facilitate the recycling, reuse and reduction of resources. As an illustrative case, the authors describe how the purchasing department of a clothing brand identified environmentally friendly input sources and proposed changes of raw material and product manufacturing process. On new forms of production, Gungor and Gupta (1999) refer to Environmentally Conscious Manufacturing as a process that captures the life cycle of the product and its impacts on the environment in each of its life stages and thus opens space to new decisions for environmental attributes during product design and manufacturing.

In the context of environmental advances through logistics, Carter and Ellram (1998) describe that Reverse Logistics is the process by which companies can become more environmentally efficient by recycling, reusing and reducing the amount of materials used. Gonzalez-Benito and Gonzalez-Benito (2006) advance this understanding and propose that Reverse Logistics would be part of a broader concept of Environmental Logistics, which would lead to environmental practices for procurement, transportation, warehousing, distribution, reverse logistics and waste management.

From the perspective of SCM, Lippman (2001) addresses the concept of Supply Chain Environmental Management, which encompasses a range of activities as: supplier screening focusing on environmental performance, collaboration with green project initiatives, and training for environmental management development on suppliers. Other activities would also include downstream distributors and customers, and even the development of reverse logistics systems for products. In turn, authors such as Walker et al. (2008) and Zsidisin and Sierd (2001) alternate between the previous concept and the Environmental Supply Chain Management concept, treating it as SCM that integrates environmentally friendly practices with policies, actions and relationships adopted in response to related environmental concerns with design, procurement, production, distribution, use, reuse and disposal of goods/services.

Closed-Loop Supply Chains, on the other hand, show the demand for changes in the operation of production systems towards sustainability, achieved with reductions in both resource use and generation of waste, as well as a move away from single use and disposal (Beamon, 1999). Guide and van Wassenhove (2006) explain that the management of these chains involves the design, control and operation of a system to maximize the value creation throughout the life cycle of a product, with the dynamic recovery of value from different types and volumes of returns.

Regarding Responsible Supply Chain Management, Bakker and Nijhof (2002) clarify that for the behavior of organizations to be responsible throughout the supply chain, it is dependent on the actions of other parties, such as suppliers and customers, and only through cooperation and close interaction between the different parties, it is possible to achieve a responsible supply chain, with the management of liability issues necessary throughout the product life cycle. The concept thus leads to a reflection on the actors within and around the organization, linked to the Theory of Stakeholders. In a more specific view, Park-Poaps and Rees (2010) address Responsible Supply Chain Management as an organizational commitment that directs responsible

and cooperative behavior towards the creation and maintenance of fair working conditions throughout the supply chain, encompassing the concept of partnership.

The last concept, Green Supply Chain Management (GSCM), represents the most prolific area in terms of publications, being indicated as the origin of the SSCM (Ahi; Searcy, 2013). In a prominent study, Srivastava (2007) developed a classification for GSCM based on an extensive literature review (i.e., 227 articles). The author established three categories for the literature in the topic: i) Importance of GSCM; ii) Green Design; iii) Green Operations. Categories two and three had subdivisions. Two for Design: Life Cycle Analysis and Environmentally Conscious Design; and three for Operations: Waste Management; Reverse Logistics and Network Design; and Manufacture and Re-manufacture Green. Following this model, GSCM was defined as “integrating environmental thinking into SCM, including product design, supply and material selection, manufacturing processes, delivery of the final product to consumers, as well as end-of-life management of the product after its useful life” (Srivastava, 2007, p.55).

In parallel to the continuous growth of research in GSCM, a more holistic view of sustainability and its integration with SCM emerged (Ahi; Searcy, 2013), seeking to associate green/environmental aspects concomitantly with social aspects. This perspective led to the elaboration of different definitions for what is considered the newest field in SCM, the Sustainable Supply Chain Management (SSCM) (Ashby *et al.*, 2012).

Although a certain conceptual diversity is expected in relatively young fields, SSCM seems to bring an additional challenge by dealing with the integration of two uncertain concepts, such as sustainability and SCM (Touboulis & Walker, 2015). Ahi and Searcy (2013) analyzed which key features should compose SSCM, adopting as its genesis the definitions of sustainability and SCM. The researchers classified the characteristics of each and then classified those of SSCM. As a result, sustainability presented key characteristics with the following focuses: (1) economic, (2) environmental, (3) social, (4) stakeholders, (5) volunteering, (6) resilience, and (7) long-term. In turn, SCM obtained key features with focus on: (1) flow, (2) coordination, (3) stakeholders, (4) relationship, (5) value, (6) efficiency, and (7) performance. Considering the overlapping of the feature with focus on stakeholders, SSCM should encompass 13 key features. Based on this, Ahi and Searcy (2013) proposed their definition of SSCM as

“the voluntary integration of social, economic and environmental concerns with key interorganizational business systems to create a coordinated supply chain to effectively manage the flow of material, information and capital associated with the acquisition, production and distribution of products or services to satisfy the Short-term and long-term profitability, stakeholder requirements, competitiveness and organizational resilience” (Ahi & Searcy, 2013, p. 339)

Among all dimensions of sustainability, the literature on the social dimension is still the least explored (Ashby *et al.*, 2012; Varsei *et al.*, 2014, Beske *et al.*, 2015, Mani *et al.*, 2015). However, as social issues come to be recognized as negative pressures on corporate reputation and performance, research on such issues has increased. The next topic explores about social dimension of SSCM.

## 2 Social Sustainability in Supply Chain Management

Social Sustainability in Supply Chain Management (SSSCM) can be understood as addressing social issues upstream and downstream of the focal company, that is, going beyond internal operations, to suppliers and stakeholders such as local community, society and consumers (Mani *et al.*, 2015).

Three points should be taken into account to manage social sustainability in supply chains: who (i.e., which stakeholders are considered), what (i.e., what social issues are considered) and how (i.e., what actions should be taken in the supply chain) (Klassen & Vereecke, 2012). However, the contents associated with social issues are still undefined.

Some authors, such as Jorgensen (2008) and Gomes *et al.*, (2014), guide the understanding of social issues by linking them to life cycle analysis in order to follow the Social Life Cycle Assessment (SLCA). From this perspective, social issues are divided into four categories of impact (i.e. human rights, work practices and decent work conditions, society, and product-related responsibility), aligned with the social categories

proposed by the GRI (Global Reporting Initiative). Another understanding is provided by Yawar and Seuring (2015), that conducted a systematic review in the literature seeking research that addressed the subject in SCM. The authors classified seven major groups of social issues: working conditions; child labor; human rights; health and safety; development of minorities; inclusion of disabled or marginalized persons; and gender. Mani et al. (2016) also developed an understanding of social issues developing a scale of social sustainability, applied with managers from India and focused on countries of emerging economies. In their findings, the authors consider six major groups of social issues: philanthropy, security, equity, health and well-being; Ethics and human rights. A compilation of social issues is presented in Table 03, providing their classifications, descriptions and authors that somehow already addressed the subject.

**Table 03 – Social Issues on SCM**

<b>Social Issues</b>	<b>Description</b>	<b>Authors</b>
Working Conditions	Employee's working conditions include low wages, extended working hours, the right to form unions, employment contract and worker exploitation	Carter and Jennings (2002); Jorgensen (2008), Preuss (2009), Park-Poaps and Rees (2010), Klassen and Vereecke (2012); Gomes <i>et al.</i> , (2014); Dubey, Gunasekaran and Papadopoulos (2016)
Training Education and Personal Skills	It assesses the level of commitment to improve human capital skills and attempts to correlate the intellectual development of human resources and social progress achieved by the company.	Hutchins and Sutherland (2008); Gomes <i>et al.</i> , (2014);
Child Labor	It is concerned with work by children under the age of 15 which prevents school attendance and work by children under 18 years of age that is dangerous to physical or mental health.	Kolk and Van Tulder (2002); Nadvi (2008); Zutshiet <i>et al.</i> (2009), Lund-Thomsen <i>et al.</i> (2012)
Human Rights	Rights inherent to all human beings, regardless of nationality, place of residence, sex, national or ethnic origin, color, religion, language. The right to equal rights, without discrimination, is the core of human rights	Welford (2002), Carter and Jennings (2002), Jorgensen (2008), Mena <i>et al.</i> (2010); Preuss and Brown (2012); Gomes <i>et al.</i> , (2014); Dubey, Gunasekaran and Papadopoulos (2016); Mani <i>et al.</i> (2016)
Ethic	Has a team, department or division responsible for ethical compliance in manufacturing facilities; Audits the client's place for strict compliance with the code of ethical conduct; And establishes a set of transparent, comprehensive and rigorous codes of ethical conduct	Carter and Jennings (2002); Dubey, Gunasekaran and Papadopoulos (2016); Mani <i>et al.</i> (2016)
Health and Safety	It includes physical and mental health that is directly related to safety and hygiene at work. It also describes hazardous working conditions, which could leave long-term effects on a worker's personal health.	Carter and Jennings (2002), Jorgensen and Knudsen (2006), Hutchins and Sutherland (2008); Ciliberti <i>et al.</i> (2009), Ashby, <i>et al.</i> (2012); Klassen and Vereecke (2012); Gomes <i>et al.</i> , (2014); Dubey, Gunasekaran and Papadopoulos (2016); Mani <i>et al.</i> (2016)
Health and Wellbeing	It periodically audits its suppliers and guarantees the adhesion of the occupational health policy; Ensures the safety of women at customer sites; Ensure the availability of minimum health care in premises in facilities with supplier	Hutchins and Sutherland (2008); Klassen and Vereecke (2012); Gomes <i>et al.</i> , (2014); Mani <i>et al.</i> (2016)

Equity	Ensures diversity in vendor locations, ensures strict compliance with gender and non-discrimination policies at customer sites, ensures diversity in the workplace at customer locations, ensures non-discriminatory gender policy at suppliers	Carter and Jennings (2002); Hutchins and Sutherland (2008); Gomes <i>et al.</i> , (2014); Mani <i>et al.</i> (2016)
Development of Minorities	Development of minorities is the development of these populations that are considered minorities in terms of population by virtue of their religion, race or ethnicity.	Krause <i>et al.</i> (1999), Carter and Jennings (2002); Maignan <i>et al.</i> (2002); Carter (2006)
Disabled/ Marginalized Inclusion	Groups that are mostly neglected in societies for physical disabilities or those neglected by the government. Population living below the poverty line is considered as marginalized.	Carter and Jennings (2002); Carter and Jennings (2004), Hall and Matos (2010)
Gender	Equal treatment of women and transgender people to meet special needs and equal rights in the workplace	Tallontiree <i>et al.</i> (2005), Preto-Carron (2008), Barrientos (2008)
ProductLiability	Integration of consumer health and safety concerns into the product, such as contaminants or other health threats (including special groups) and complaints handling system; Information on product, ingredients, origin, use, potential hazards and side effects, with labeling. Marketing communications, as ethical guidelines for ads.	Jorgensen (2008), Chardine-Baumann andBotta-Genoulaz (2011); Gomes <i>et al.</i> , (2014);
Involvement With The Community	Direct and indirect financial support, as well as material resources that impacted communities are benefiting from. It focuses on the cultural and educational interactions established with impacted communities, with a view to improving the external social environment around the company.	Carter and Jennings (2002); Ashby <i>et al.</i> (2012); Gomes <i>et al.</i> , (2014); Dubey, GunasekaranandPapadopoulos (2016)
Philanthropy	It includes practices such as: donations to religious organizations, encouragement for volunteers to volunteer in charitable units and to donate to NGOs that develop society, encourage suppliers in philanthropic activities, conduct health related fields for society involving factory facilities	Carter and Jennings (2002); Mani <i>et al.</i> (2016)

Source: Jorgensen (2008), Gomes *et al.*, (2014), Yawar and Seuring (2015) and Mani *et al.* (2016)

To implement SSCM, the focal firm would need to develop management practices to extend environmental and social sustainability into the supply chain. The practices used to manage the firm's relationships are referred to in the literature as governance mechanisms, as explored in the next topic.

### 3 Governance Mechanisms for SSCM

Gimenez and Sierra (2013, p.191) understand as governance mechanisms "the practices used by companies to manage relationships with their suppliers, with the aim of improving their sustainability performance". In a more systemic definition, Formentini and Taticchi (2016, p.1921) describe governance mechanisms as "practices, initiatives and processes used by the focal company to manage relationships with 1) internal functions and departments, and 2) their chain members and stakeholders with the goal of successfully implementing their corporate sustainability approach". Thus, internal control mechanisms would be actions limited to corporate limits, while external governance mechanisms, would be actions extended

at the supply chain level. The mechanisms for extending sustainability to suppliers are increasingly adopted, but the scope and mode of implementation vary significantly (Rao, 2002).

Governance mechanisms have been considered in the literature from four different perspectives (Gimenez & Sierra, 2013): analysis of the global value chain; social network theory; new institutional economics (such as Transaction Costs Theory); and supply chain management. The role of governance from a SSCM perspective is receiving growing attention from scholars and practitioners (Formentini & Taticchi 2016). As in other researches in the area (Gimenez & Tachizawa, 2012; Gimenez & Sierra, 2013; Formentini & Taticchi 2016), this perspective is assumed. Table 01 presents a compilation of governance mechanisms considered to extend the sustainability of the focal firm into its supply chain. These mechanisms can be divided into: integration activities and internal governance; screening/selection of future suppliers; incentive actions for improvement; assessment; monitoring; collaboration and development of suppliers.

Sustainable practices would then be moved along the supply chain through governance mechanisms (Mani, Agrawal, & Sharma, 2015) and, in this context, the interest in implementing sustainable activities is shared with the interest in governance models to extend them along the supply chains (Vurro, Russo & Perrini, 2009). Sustainable Supply Chain Governance (SSCG) studies are recent, but have already highlighted important factors such as the formalization of mechanisms (Alvarez, Pilbeam & Wilding, 2010) and the role of collaborative approaches (Vurro *et al.*, 2009).

Table 01 – SSCM Governance Mechanisms

<b>Governance Mechanisms</b>	<b>Description</b>	<b>Authors</b>
Integration Activities and Internal Governance	These mechanisms include: top management support; Use of codes of conduct / ethics, guides and internal policies; establishment of objectives, action plans and management systems; incentive systems and rewards for internal members; systematic analysis of the supply chain and classification of suppliers; adherence to international initiatives (e.g. Global Compact); Certifications (e.g. ISO14001)	Bowen <i>et al.</i> (2001); Carter and Jennings (2004); Handfield <i>et al.</i> (2005); Mamic (2005); Pedersen and Andersen (2006); Cilibert <i>et al.</i> (2008) Andersen and Skjoett-Larsen (2009); Pagell and Wu (2009); Tulder <i>et al.</i> (2009); Foerstl <i>et al.</i> (2010); Goebel <i>et al.</i> (2012); Hoejmose and Adrien-Kirby (2012), Harms <i>et al.</i> (2013); Formentini and Taticchi (2016)
Screening/ selection of future suppliers	Definition of minimum standards required; Process defined for supplier selection	Emmelhainz and Adams (1999); Bowen <i>et al.</i> (2001); Min and Galle (2001); Carter and Jennings (2004); Mamic (2005); Vachon and Klassen (2006); Beske <i>et al.</i> (2008); Leire and Mont (2010); Ehrhardt <i>et al.</i> (2010); Harms <i>et al.</i> (2013)
Incentive actions for improvement	Establishment of consequences for non-compliance; Contracts with reward system; Encouraging competition based on sustainable criteria	Emmelhainz and Adams (1999); Krause <i>et al.</i> (2000); Mamic (2005); Vachon and Klassen (2006); Andersen and Skjoett-Larsen (2009); Leire and Mont (2010); Gimenez and Sierra (2012); Gimenez and Sierra (2013); Formentini and Taticchi (2016)
Assessment	Activities related to supplier assessment, such as application questionnaires or company visit.	Handfield <i>et al.</i> (2005); Leire and Mont (2010); Gimenez and Sierra (2012); Gimenez and Sierra (2013); Harms <i>et al.</i> (2013); Sancha, Gimenez and Sierra (2016)
Monitoring	It seeks to guarantee hiring expectations, with audits or certification by an independent third party. It reports on success and the way in which agreed practices are being implemented.	Emmelhainz and Adams (1999); Mamic (2005); Handfield <i>et al.</i> (2005); Vachon and Klassen (2006); Carter and Rogers, 2008; Awayshe and Klassen (2010); Leire and Mont (2010); Grosvold, Hoejmose and Roehrich (2014); Marshall <i>et al.</i> (2015)

Collaboration	Better coordination with customers, suppliers and stakeholders to jointly improve results. May involve: membership / collaboration with NGOs; Collective initiatives (sectoral)	Bakker and Nijhof (2002); Seuring (2004); Mamic (2005); Pagelland Wu (2009); Foerstlet al.(2010); Leire and Mont (2010); Peters et al. (2011); Wu et al. (2012); Gimenez and Sierra (2013); Marshall et al. (2015); Sancha, Gimenez and Sierra (2016)
Development	Training and education; Joint development; Follow-up activities; Supplier diversity; Knowledge and shared assets; Knowledge transfer; Local Suppliers	Bowen et al. (2001); Carter and Jennings (2002); Maignan et al. (2002); Mamic (2005); Vachon and Klassen (2006); Krause et al.(2007); Cilibertiet al.(2008); Pagelland Wu (2009); Leire and Mont (2010); Gimenez and Sierra (2012); Wu et al.(2012); Formentini and Taticchi (2016)

Source: Akhavan and Beckmann (2017), Formentini and Taticchi (2016) and Gimenez and Sierra (2013)

Vurroet al. (2009) developed a taxonomy to differentiate governance models for collaborative improvements in SSCM, as shown in Table 02. Based on the density of the chain and focal company centrality, these models would be: transactional, dictatorial, condescending, and participatory. Classified into six criteria: scope of interaction with sustainability; depth of commitment to sustainability; purpose of collaboration; role played by the focal company; conditions for success; main benefits to the company. Each model would be indicated for a set of specific circumstances, and with different benefits and objectives.

**Table 02 – A Taxonomy for SSCM Governance Models**

	<b>Transactional</b>	<b>Dictatorial</b>	<b>Condescending</b>	<b>Participatory</b>
Scope Of Interaction With Sustainability	First link, upstream; First link, downstream	Integrated, upstream and downstream	First link, upstream; First link, downstream	Integrated, upstream and downstream
Depth Of Commitment To Sustainability	Short-term, instrumental	Long-term, commander	Short-term, compatible	Long-term, cooperative
Purpose Of Collaboration	License to cooperate	Configuration of rules	Maintenance of chain adhesion	Development of rules sets
Role Played By The Focal Company	Negotiator	Orchestrator	Executor	Conciliator
Conditions For Success	Stability in context and expectations with sustainability	Ability to monitor patterns and force rules	Availability of resources and competencies to meet requirements	Flexibility and adaptability for multiple voices
Main Benefits To The Company	Reputation gains	Control over collaboration	Access to markets and partners	Relational rents

Source: Vurroet al. (2009)

Different types of mechanisms, or combinations of mechanisms, would be more aligned to each of these models proposed by Vurro et al. (2009). As an example, the dictatorial model would be aligned with future suppliers' screening/selection, evaluation and monitoring mechanisms; while the participatory model, with mechanisms of incentive actions for improvement, collaboration and development of suppliers. From the application of these mechanisms, the focal firm would achieve a number of different outcomes, such as: reputation gains, greater control, access to new markets and partners, and new forms of income, based on more advantageous relationships with their suppliers.

#### 4 A Framework for Social Sustainability in Supply Chain Management

Toshed light in the SSCM field, this essay explored its origins, identified a series of social issues that compose the understanding of its underexplored dimension, i. e. social sustainability, and also identified a

series of governance mechanism through which the social sustainability can be implemented along supply chains. In this topic, three theoretical lenses are suggested to guide the understanding of social sustainability management in supply chains.

The search for theoretical depths represents a critical point in the current stage of SSCM research. Among several literature reviews, some analyzed specifically about the theoretical development applied in the field. In such reviews (e.g. Carter & Easton, 2011; Marques & Cousins, 2013; Touboulic & Walker, 2015; Quarshie, Salmi&Leuschner, 2016), a common point indicated is that most SSCM researches do not use a theoretical lens to examine the problems of interest in the area or, if does, do not present their theoretical choice explicitly.

There is a gap in the use of micro-theories, which could support the understanding of individual's importance in SSCM development. The interest in SCM with a behavioral bias has grown over the years (e.g. Harland, 1996; Tokar, 2010), which may be an indication that a similar direction should occur in SSCM (Touboulic & Walker, 2015). Perspectives at individual levels represent an unexploited potential for analyzing relationships or interdependencies within organizations or between various actors in the supply chain (Quarshie, Salmi&Leuschner, 2016).

Another tendency is the increase in multiple theoretical lenses within the same study (Carter & Eason, 2011; Touboulic & Walker, 2015; Dubey, Gunasekaran & Papadopoulos, 2016). For Carter and Easton (2011), when well done, the combination of complementary diverse, and even overlapping theories can help to develop hypotheses, add valuable information in interpreting the results, and even better understand the limits of where the theories apply. Some recent studies are highlighted. Varsei, Soosay, Fahimnia and Sarkis (2014) developed a conceptual and multidimensional framework to identify and evaluate indicators of sustainable performance in supply chains through the integration of concepts from four organizational theories: Resource Based Theory, Institutional Theory, Stakeholder Theory and Social Network Theory. Silvestre (2015) explored how sustainability of the supply chain can be implemented in emerging and developing economies and develop propositions based on a case study analyzed under the integration of Institutional Theory, Evolution Theory, Complexity Theory and Learning, Innovation and Organizational Strategy. Formentini and Taticchi (2016) conducted a multiple case study, under the lens of Contingency Theory, Strategic Alignment Perspective and Resource Based Theory.

Thus, considering the theoretical articulations developed recently in the SSCM literature and the indication to conduct research based on strong theoretical bases, the present study adopts as theoretical lens the integration of Stakeholder Theory, Contingency Theory and Behavioral Theory, as showed in Figure 01. The model adopts a holistic view, which takes into account indications of the literature (Ashby *et al.*, 2012). According to the authors, much of the studies that address the social dimension tend to focus on a specific area or practice, such as working conditions or human rights, and do not consider the perspective of the whole.

In this perspective, the adoption of social sustainability by the focal firm would result from a combination of drivers, enablers and barriers (Carter & Rogers, 2008; Seuring & Muller, 2008), prioritized according to the pressure of different stakeholders. Mitchell, Agle & Wood (1997) classify stakeholders based on the influence that each party would have on the company, considering three attributes: power of influence, legitimacy of the relationship, and urgency to claim. For the authors, a stakeholder would have power to the extent that he had or could have coercive access or normative means to impose his will on the relationship between him and the company. In turn, it would present legitimacy when there was a generalized perception that yours demands would be desirable, adequate or appropriate, in a given system of norms, values, and beliefs. Lastly, the urgency would exist when the degree to which the stakeholder demand requires immediate attention. The accumulation of such attributes would determine the relevance of stakeholders, which could be classified into up to seven types: three of them with only one attribute, called latent stakeholders; other three types with two attributes, designated as expectant stakeholders; and a type with the three attributes, called definitive stakeholders (Mitchell, Agle & Wood, 1997)

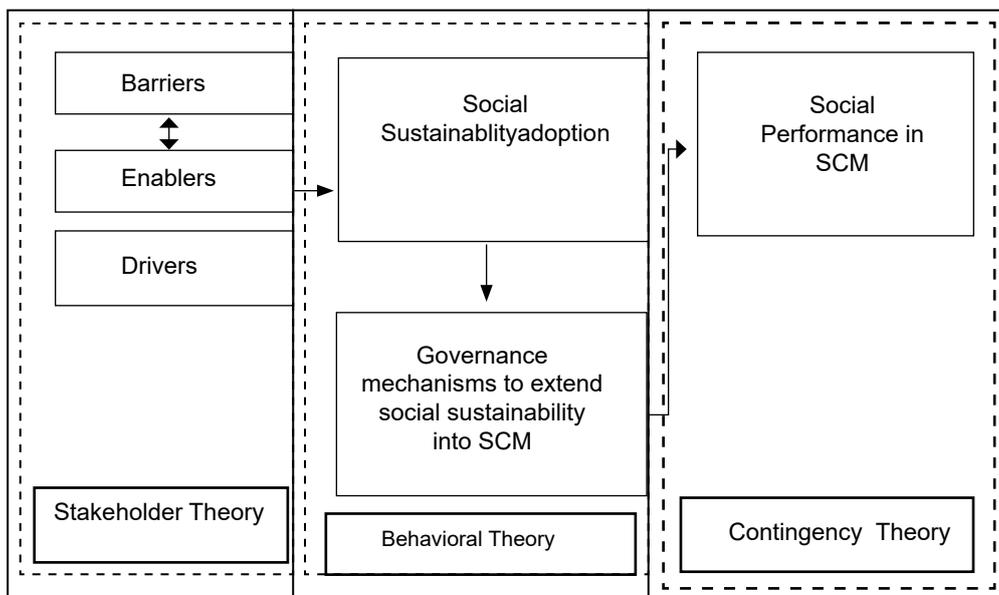


Figure 01 – SSCM Antecedents and Consequences

Source: Prepared by the Authors

The adoption of governance mechanisms to extend social sustainability would be carried out through decision-making processes, in which the responsible manager should choose the most appropriate mechanisms, among mechanisms that make up transactional, dictatorial, condescending or participatory governance models (Vurro *et al.*, 2009). This decision-making would be influenced by behaviours linked to near-resolution of conflicts, the tendency to avoid uncertainties, sequential search of problem solving, and organizational learning (Cyert & March, 1963).

In turn, the improvement in the social performance of the supply chain (Seuring & Muller, 2008), would be linked to the governance mechanisms adopted by the focal company, but would also be influenced by contingency factors of power, stakeholder pressure, sector, material criticality, dependence, distance and knowledge resources (Tachizawa & Wong, 2014). Table 04 summarizes the concepts described.

Table 04 – Predefined Categories to Analyze Adoption of Social Sustainability in SCM

Categories	Description
Drivers	Industry / market environment; Customer demands and stakeholder network; Legislation and compliance; Visibility of the company / product / brand; Media and NGOs; Search for Competitive Advantage; Commitment and support from top management; Risk Reduction; Internal Resources
Enablers	National culture; Confidence; Collaboration of the supply chain; Technological integration; Ability to innovate; Performance measurement systems; Quality management practices; Information management; Commitment and support from top management; Availability of resources / Size of the company; Strategic Role of the Purchasing Sector
Barriers	Reconciling multiple decision-makers / Difficulties of aligning strategies along the chain; Scarcity of 'standardized' metrics for the chain; Suppliers: reluctance to adopt standards; Lack of suitable and / or available supplier; Geographical dispersion of the chain; Training of the Purchasing Team; Increased dissemination of information / communication; Greater and more complex coordination effort; Increased costs; Bureaucracy and misaligned goals
Governance mechanisms	Integration and internal governance; Screening/selection; Incentives for improvement; Evaluation; Monitoring; Collaboration; Development
Social Issues	Philanthropy, security, equity, health and well-being; ethic; human rights; Working practices and decent working conditions; society; Product liability

Social Performance (Metrics)	Human rights; Working Practices and Decent Work Conditions; Society; Product liability; Social equality; Fair Trade; Socially Responsible Shopping; Health and safety; Wages, proportion of genders among employees; Individual requirement / requirement of the client; Social acceptance; Contribution to jobs; population growth; Working practices and decent work; human rights; society; Responsibility for the product; Participation in volunteer programs; Individual Volunteer Number; Risk of corruption; Health status and risks; Stakeholder Engagement; Stakeholder Empowerment; Relationship in the after-sales service; Missions and Available Values; Added value and community benefits; Institutional Efficiency (...).
StakeholdersTypes	Dormant; Discretionary; Claims; Dominant; Dangerous; Dependent; Definitive
Contingencyfactors	Power, stakeholder pressure, industry, material criticality, dependence, distance, and knowledge resources
BehaviorofDecisionMakers	Near-conflict resolution, the tendency to avoid uncertainties, the sequential pursuit of problem solving, and organizational learning

Source: Prepared by the Authors

Thus, this study establishes categories, described throughout the theoretical reference and summarized in Table 04, to guide the understanding of social sustainability adoption into supply chains. This represents an initial effort towards the development of a theoretical framework to be further analysed in empirical research.

## Conclusion

The present study sought to shed additional light about sustainable supply chain management, providing a preliminary theoretical explanation for social sustainability adoption into the supply chain. To guide this goal, the study was based on two main concepts: social issues and governance mechanisms. The concept of social sustainability in the SSCM was presented, considering different approaches to the understanding of social issues in the supply chain and a compilation of social issues pointed out in the literature. The second concept presented was governance mechanisms for SSCM, also presenting a compilation of governance mechanisms pointed out in the literature. Three theories were suggested to shed some light into the understanding of how focal companies adopt and extend social sustainability into their supply chain, each related to a specific aspect. The adoption of social sustainability would be related to pressures prioritized according to different stakeholder's demands, classified in definitive, expectant or latent. The extension of social sustainability into the supply chain would be carried out by means of governance mechanisms chosen through decision-making processes of managers, in accordance with behavioural aspects. In turn, social performance would be linked to the governance mechanisms adopted and influenced by critical contingency factors, such as sector, material criticality, supplier dependence and distance.

The model adopts a holistic view, which takes into account indications of the literature (Ashby *et al.*, 2012). According to the authors, much of the studies that address the social dimension tend to focus on a specific area or practice. Based on this preliminary reflexions, propositions could be developed to guide empirical studies. For instance, further analyses could investigate if social issues demanded by definitive stakeholders will be most adopted along the supply chain then social issues demanded by latent stakeholders, or if an advanced stage of integration and internal governance related to social issues must be implemented before social issues are adopted along the supply chain. Also, researches could explore if the nature of less tangibly of social issues tend to influence managers by leading them to avoid uncertainty and address more noticeable issues, as work conditions and child labour, then equity, gender, ethics. Other gaps related to the social side of SSCM are highlighted in the literature. It is being indicated to investigate more on topics like: how is the process of awareness of social objectives in the SSCM (Meixell & Luoma, 2015); how social sustainability in supply chains and issues related to the basis of the pyramid are intertwined (Seuring, 2013; Seuring & Gold, 2013); investigating impacts on suppliers located in developing countries where relevant social issues must be addressed (Yawar & Seuring, 2015). Also, as SCM still demands improvements in its theoretical development (Viana, Neto & Añez, 2014), SSCM shows similar demands. Specially about social issues, as investigating human aspects of SSCM, Touboulic and Walker (2015) highlight that authors could

lend organizational behaviour and psychology theories, such as Sensemaking Theory or even extend well-known theories such as Maslow's hierarchy of needs.

This study responds to the constant appeals explore the social side of sustainable supply chains and explores the concepts of social issues and governance mechanisms, besides presenting a framework for social sustainability adoption and management into supply chains. considering three guiding theories. In addition to providing gaps and directions for future research on this important but still overlooked SSCM theme. It is hoped to encourage the deepening of investigations on this important and yet neglected subject.

## References

- Ahi, P., & Searcy, C. (2013). A comparative literature analysis of definitions for green and sustainable supply chain management. *Journal of Cleaner Production*, 52, 329-341.
- Ahi, P., & Searcy, C. (2015). An analysis of metrics used to measure performance in green and sustainable supply chains. *Journal of Cleaner Production*, 86, 360-377.
- Akhavan, R. M., & Beckmann, M. (2017). A configuration of sustainable sourcing and supply management strategies. *Journal of Purchasing and Supply Management*, 23(2), 137-151.
- Alvarez, G., Pilbeam, C., & Wilding, R. (2010). Nestlé Nespresso AAA sustainable quality program: An investigation into the governance dynamics in a multi-stakeholder supply chain network. *Supply Chain Management: An International Journal*, 15(2), 165-182.
- Ashby, A., Leat, M., & Hudson-Smith, M. (2012). Making connections: A review of supply chain management and sustainability literature. *Supply Chain Management: An International Journal*, 17(5), 497-516.
- Awaysheh, A., & Klassen, R. D. (2010). The impact of supply chain structure on the use of supplier socially responsible practices. *International Journal of Operations & Production Management*, 30(12), 1246-1268.
- Bakker, F., & Nijhof, A. (2002). Responsible chain management: a capability assessment framework. *Business Strategy and the Environment*, 11(1), 63-75.
- Beamon, B. M. (1999). Designing the green supply chain. *Logistics information management*, 12(4), 332-342.
- Beske-Janssen, P., Johnson, M. P., & Schaltegger, S. (2015). 20 years of performance measurement in sustainable supply chain management—what has been achieved? *Supply chain management: An international Journal*, 20(6), 664-680.
- Brandenburg, M., Govindan, K., Sarkis, J., & Seuring, S. (2014). Quantitative models for sustainable supply chain management: Developments and directions. *European Journal of Operational Research*, 233(2), 299-312.
- Burritt, R., & Schaltegger, S. (2014). Accounting towards sustainability in production and supply chains. *The British Accounting Review*, 46(4), 327-343.
- Carter, C. R., & Carter, J. R. (1998). Interorganizational determinants of environmental purchasing: initial evidence from the consumer products industries. *Decision Sciences*, 29(3), 659-684.
- Carter, C. R., & Ellram, L. M. (1998). Reverse logistics: A review of the literature and framework for future investigation. *Journal of business logistics*, 19(1), 85.
- Carter, C. R., & Liane Easton, P. (2011). Sustainable supply chain management: Evolution and future directions. *International journal of physical distribution & logistics management*, 41(1), 46-62.
- Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: Moving toward new theory. *International Journal of Physical Distribution & Logistics Management*, 38(5), 360-387.

- Castro, L. A. (2017). Análise de diferenças de desempenho entre empresas participantes e não participantes do Índice de Sustentabilidade Empresarial da BM&FBOVESPA. *Revista Ciências Administrativas ou Journal of Administrative Sciences*, 23(1), 128-155.
- Cooper, M. C., & Ellram, L. M. (1993). Characteristics of supply chain management and the implications for purchasing and logistics strategy. *The International Journal of Logistics Management*, 4(2), 13-24.
- Cyert, R. M., & March, J. G. (1963). *A behavioral theory of the firm*. Englewood Cliffs, NJ: Prentice-Hall.
- Drumwright, M. E. (1994). Socially responsible organizational buying: environmental concern as a noneconomic buying criterion. *The Journal of Marketing*, 58(3), 1-19.
- Formentini, M., & Taticchi, P. (2016). Corporate sustainability approaches and governance mechanisms in sustainable supply chain management. *Journal of Cleaner Production*, 112, 1920-1933.
- Dubey, R., Dubey, R., Gunasekaran, A., Gunasekaran, A., Childe, S. J., Childe, S. J., ... Fosso Wamba, S. (2017). World class sustainable supply chain management: Critical review and further research directions. *The International Journal of Logistics Management*, 28(2), 332-362.
- Gimenez, C., & Sierra, V. (2013). Sustainable supply chains: Governance mechanisms to greening suppliers. *Journal of Business Ethics*, 116(1), 189-203.
- Gimenez, C., & Tachizawa, E. M. (2012). Extending sustainability to suppliers: A systematic literature review. *Supply Chain Management: An International Journal*, 17(5), 531-543.
- Gomes, M. (2014). Social Key Performance Indicators—Assessment in Supply Chains. Recuperado de <https://fenix.tecnico.ulisboa.pt/downloadFile/395146463038/resumo.pdf>
- González Benito, J., & González Benito, Ó. (2006). A review of determinant factors of environmental proactivity. *Business Strategy and the environment*, 15(2), 87-102.
- Guide, V. D. R., & Wassenhove, L. N. (2006). Closed-loop supply chains: An introduction to the feature issue (part 1). *Production and Operations Management*, 15(3), 345-350.
- Gungor, A., & Gupta, S. M. (1999). Issues in environmentally conscious manufacturing and product recovery: A survey. *Computers & Industrial Engineering*, 36(4), 811-853.
- Harland, C. M. (1996). Supply chain management: Relationships, chains and networks. *British Journal of management*, 7(Special Issue), S63-S80.
- Hassini, E., Surti, C., & Searcy, C. (2012). A literature review and a case study of sustainable supply chains with a focus on metrics. *International Journal of Production Economics*, 140(1), 69-82.
- Jørgensen, A., Le Bocq, A., Nazarkina, L., & Hauschild, M. (2008). Methodologies for social life cycle assessment. *International Journal of Life Cycle Assessment*, 13(2), 96.
- Klassen, R. D., & Vereecke, A. (2012). Social issues in supply chains: Capabilities link responsibility, risk (opportunity), and performance. *International Journal of Production Economics*, 140(1), 103-115.
- Krause, D. R., Vachon, S., & Klassen, R. D. (2009). Special topic forum on sustainable supply chain management: Introduction and reflections on the role of purchasing management. *Journal of Supply Chain Management*, 45(4), 18-25.
- Lee, K. H., & Kim, J. W. (2009). Current status of CSR in the realm of supply management: the case of the Korean electronics industry. *Supply Chain Management: An International Journal*, 14(2), 138-148.
- Lee, S. Y., & Klassen, R. D. (2008). Drivers and enablers that foster environmental management capabilities in small-and medium-sized suppliers in supply chains. *Production and Operations management*, 17(6), 573-586.
- Lippman, S. (2001). Supply chain environmental management. *Environmental Quality Management*, 11(2), 11-14.

- Luzzini, D., Brandon-Jones, E., Brandon-Jones, A., & Spina, G. (2015). From sustainability commitment to performance: The role of intra-and inter-firm collaborative capabilities in the upstream supply chain. *International Journal of Production Economics*, 165, 51-63.
- Mani, V., Agarwal, R., Gunasekaran, A., Papadopoulos, T., Dubey, R., & Childe, S. J. (2016). Social sustainability in the supply chain: Construct development and measurement validation. *Ecological Indicators*, 71, 270-279.
- Mani, V., Agrawal, R., & Sharma, V. (2015). Supply chain social sustainability: A comparative case analysis in indian manufacturing industries. *Procedia-Social and Behavioral Sciences*, 189, 234-251.
- Marques, L., & Cousins, P. (2009). *Sustainability, business and supply chain management: a systematic review of the literature (1960-2090)*. Recuperado de [https://www.researchgate.net/publication/258245164\\_Sustainability\\_business\\_and\\_supply\\_chain\\_management\\_a\\_systematic\\_review\\_of\\_the\\_literature\\_1960-2009](https://www.researchgate.net/publication/258245164_Sustainability_business_and_supply_chain_management_a_systematic_review_of_the_literature_1960-2009)
- Marshall, D., McCarthy, L., Heavey, C., & McGrath, P. (2015). Environmental and social supply chain management sustainability practices: Construct development and measurement. *Production Planning & Control*, 26(8), 673-690.
- Meixell, M. J., & Luoma, P. (2015). Stakeholder pressure in sustainable supply chain management: A systematic review. *International Journal of Physical Distribution & Logistics Management*, 45(1/2), 69-89.
- Meneghetti, F. K. (2011). O que é um ensaio-teórico? *RAC-Revista de Administração Contemporânea*, 15(2).
- Mentzer, J. T., DeWitt, W., Keebler, J. S., Min, S., Nix, N. W., Smith, C. D., & Zacharia, Z. G. (2001). Defining supply chain management. *Journal of Business Logistics*, 22(2), 1-25.
- Min, H., & Galle, W. P. (1997). Green purchasing strategies: Trends and implications. *Journal of Supply Chain Management*, 33(2), 10-17.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853-886.
- Murphy, P. R., Poist, R. F., & Braunschwig, C. D. (1994). Management of environmental issues in logistics: Current status and future potential. *Transportation Journal*, 34(1), 48-56.
- Neutzling, D. M., & da Silva, M. E. (2016). A Sustentabilidade em Cadeias de Suprimento a partir da visão de Recursos e Capacidades (Sustainable Supply Chain Management from resources and capabilities). *Revista Ciências Administrativas ou Journal of Administrative Sciences*, 22(1), 42.
- Pagell, M., & Wu, Z. (2009). Building a more complete theory of sustainable supply chain management using case studies of 10 exemplars. *Journal of Supply Chain Management*, 45(2), 37-56.
- Park-Poaps, H., & Rees, K. (2010). Stakeholder forces of socially responsible supply chain management orientation. *Journal of Business Ethics*, 92(2), 305-322.
- Quariguasi Frota Neto, J., & Bloemhof-Ruwaard, J. M. (2009). *The environmental gains of remanufacturing: evidence from the computer and mobile industry*. Recuperado de <https://ssrn.com/abstract=1410467>
- Rao, P. (2002). Greening the supply chain: A new initiative in South East Asia. *International Journal of Operations & Production Management*, 22(6), 632-655.
- Sancha, C., Gimenez, C., & Sierra, V. (2016). Achieving a socially responsible supply chain through assessment and collaboration. *Journal of Cleaner Production*, 112, 1934-1947.
- Sarkis, J. (2001). Manufacturing's role in corporate environmental sustainability-Concerns for the new millennium. *International Journal of Operations & Production Management*, 21(5/6), 666-686.

- Seuring, S., & Gold, S. (2013). Sustainability management beyond corporate boundaries: from stakeholders to performance. *Journal of Cleaner Production*, 56, 1-6.
- Seuring, S., & Müller, M. (2008a). From a literature review to a conceptual framework for sustainable supply chain management. *Journal of cleaner production*, 16(15), 1699-1710.
- Seuring, S., & Müller, M. (2008b). Core issues in sustainable supply chain management—a Delphi study. *Business strategy and the environment*, 17(8), 455-466.
- Silvestre, B. S. (2015). Sustainable supply chain management in emerging economies: Environmental turbulence, institutional voids and sustainability trajectories. *International Journal of Production Economics*, 167, 156-169.
- Srivastava, S. K. (2007). Green supply-chain management: A state-of-the-art literature review. *International Journal of Management Reviews*, 9(1), 53-80.
- Svensson, G. (2007). Aspects of sustainable supply chain management (SSCM): Conceptual framework and empirical example. *Supply chain management: An international journal*, 12(4), 262-266.
- Tachizawa, E., & Wong, C. (2014). Towards a theory of multi-tier sustainable supply chains: A systematic literature review. *Supply Chain Management: An International Journal*, 19(5/6), 643-663.
- Taticchi, P., Tonelli, F., & Pasqualino, R. (2013). Performance measurement of sustainable supply chains: A literature review and a research agenda. *International Journal of Productivity and Performance Management*, 62(8), 782-804.
- Tokar, T. (2010). Behavioural research in logistics and supply chain management. *The International Journal of Logistics Management*, 21(1), 89-103.
- Touboulic, A., & Walker, H. (2015). Theories in sustainable supply chain management: A structured literature review. *International Journal of Physical Distribution & Logistics Management*, 45(1/2), 16-42.
- Uysal, F. (2012). An integrated model for sustainable performance measurement in supply chain. *Procedia-Social and Behavioral Sciences*, 62, 689-694.
- Varsei, M., Soosay, C., Fahimnia, B., & Sarkis, J. (2014). Framing sustainability performance of supply chains with multidimensional indicators. *Supply Chain Management: An International Journal*, 19(3), 242-257.
- Viana, F. L. E., Neto, J. D. P. B., & Añez, M. E. M. (2015). Gestão da cadeia de suprimento e vantagem competitiva: um modelo de análise a partir da teoria baseada em recursos. *Revista Ciências Administrativas ou Journal of Administrative Sciences*, 20(1).
- Vurro, C., Russo, A., & Perrini, F. (2009). Shaping sustainable value chains: Network determinants of supply chain governance models. *Journal of business ethics*, 90(4), 607-621.
- Walker, H., Di Sisto, L., & McBain, D. (2008). Drivers and barriers to environmental supply chain management practices: Lessons from the public and private sectors. *Journal of purchasing and supply management*, 14(1), 69-85.
- Wu, Z., & Pagell, M. (2011). Balancing priorities: Decision-making in sustainable supply chain management. *Journal of Operations Management*, 29(6), 577-590.
- Yawar, S. A., & Seuring, S. (2017). Management of social issues in supply chains: A literature review exploring social issues, actions and performance outcomes. *Journal of Business Ethics*, 141(3), 621-643.
- Zhu, Q., Crotty, J., & Sarkis, J. (2008). A cross-country empirical comparison of environmental supply chain management practices in the automotive industry. *Asian Business & Management*, 7(4), 467-488.

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